



Republic of the Philippines  
**Regional Development Council**  
Cordillera Administrative Region

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8 June 2023

**DR. EDGAR G. CUE**

Mountain Province State Polytechnic College  
Bontoc, 2616 Mt. Province

Dear **Dr. Cue**:

Greetings from RDC-CAR!

We are pleased to invite you to the Regional Launching of the Cordillera Regional Development Plan 2023-2028 on June 15, 2023, at 1:00 PM at the General Dumol Hall, BENECO Compound, South Drive, Baguio City. The RDP is the region's roadmap under the administration of His Excellency President Ferdinand R. Marcos, Jr.

The event, with the theme, "Together toward socioeconomic transformation for a prosperous, inclusive, resilient Cordillera Region", will gather key players and representatives that will affirm everyone's crucial role in the development process within the frame of a whole-of-government and whole-of-society approach.

Attached is the program of activities, for your reference. For inquiries and clarifications, we may be reached through telephone numbers (074) 442-3232 or (074) 424 1422, and please look for Mr. Victor Eugene Caccam.

Thank you and we shall be honored with your presence.

Very truly yours,

**SUSAN A. SUMBELING**

Vice-Chairperson, RDC-CAR  
(Regional Director, NEDA-CAR)



The round metal gong of the Cordillera known locally as "gangsa" is a symbol of the upland people's culture that has been passed on from generations to another.  
The profile of a person blowing a "tangguyob" represents a community being called for an important matter or action.  
The lines that shape the mountains, the rice terraces, clouds and rivers symbolize the connectivity and flow of human interaction in a geographic area such as the Cordillera.  
All the symbols combined represent unity and harmony of the people with culture and environment in beating the gong for self-determination.



## Watershed and Environmental Management

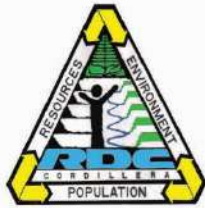
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DILG	IPMR-Benguet	NEDA	UPB
DOH	IPMR-Kalinga	NHA	UPB CSC
DOLE		NIA	



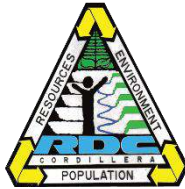
# CORDILLERA

## REGIONAL DEVELOPMENT PLAN

2023 - 2028







**CORDILLERA ADMINISTRATIVE REGION  
REGIONAL DEVELOPMENT PLAN  
2023 - 2028**



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Cordillera Regional Development Plan 2023 – 2028

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# Message



The National Economic and Development Authority or NEDA, in close coordination with other government agencies, sectoral experts, development partners, and stakeholders, completed the Philippine Development Plan (PDP) 2023-2028 in December 2022. The PDP serves as the country's medium-term blueprint to reinvigorate job creation and accelerate poverty reduction by steering the economy back to its high-growth path.

The formulation of the PDP 2023-2028 took place in a socioeconomic landscape that presented several setbacks, including the scarring effects of the COVID-19 pandemic as well as the impacts of other global trends and challenges such as geopolitical conflict, increasing use of automation and accelerating digitalization, and greater weather volatility and uncertainty owing to climate change. These challenges shaped the formulation of the Plan we have today. Now, as we move forward from our focus on post-pandemic recovery, the challenges at hand are on enabling economic transformation and inclusive development.

In the short term, these challenges include addressing inflationary pressures and protecting the vulnerable sections of society, especially people experiencing poverty, from economic shocks and natural hazards. For the medium term, the Plan contains strategies focused on addressing the binding constraints to economic growth and inclusion by generating more higher-quality jobs. The Plan is aligned with the *AmBisyon Natin 2040* or our long-term vision for a *matatag, maginhawa, at panatag na buhay* for all Filipinos.

In turn, the Regional Development Plans (RDPs) are expected to cascade and lay out the strategies for attaining our development objectives at the local levels of governance, especially as we aim to transform the lives of our people and ensure that economic growth is inclusive. The RDPs, in line with our country's long-term vision and the goals of the PDP 2023-2028, shall address the challenges specific to each region's socioeconomic context.

President Ferdinand R. Marcos, Jr. has recognized the need to strengthen NEDA's presence and role in local government units (LGUs). Proactive engagement requires aligning national and local policies to ensure that government plans and programs appropriately reflect local development priorities. With this in mind, the RDPs 2023-2028 are formulated with a comprehensive perspective of critical LGU attributes that would inform regional sectoral strategies. The RDPs highlight major local initiatives that can significantly contribute to attaining regional development objectives and targets. This approach enhances the connection between regional and local planning, promotes greater local ownership of the RDPs, and provides guidance to the LGUs in formulating their local development strategies and programs.

I thank the Regional Development Council of the Cordillera Administrative Region for its commitment to formulating the CAR Regional Development Plan for 2023 – 2028 and directing various regional development initiatives to achieve our desired socioeconomic outcomes.

Finally, we call for the cooperation of our LGUs, regional agencies, private institutions, non-government organizations, and members of civil society to participate in this joint effort. Together, let us work hard towards achieving a prosperous, inclusive, and resilient society in the Cordillera Administrative Region and throughout the country.



ARSENIO M. BALISACAN

Secretary

National Economic and Development Authority



# Message



The Regional Development Council, as the highest policy-making body in the region, spearheaded the formulation of the Cordillera Regional Development Plan (RDP) 2023-2028. The Cordillera RDP is anchored on the nation's socio-economic agenda and the country's long-term collective vision embodied in Ambisyon 2040. It is also guided by the principle of rights-based environmental governance that advocates greater local ownership, control, and management of the region's resource wealth.

Sustainable development takes the central theme of the Cordillera RDP recognizing the region's integral role as the Watershed Cradle of the North. We echo the administration's focus on renewable energy as we advocate harnessing the hydropower potential of our rivers and accelerate the growth of the energy industry in CAR. As the region's natural resources form the base of its development, we also underscore the protection of our environment for sustainable progress. This is especially critical in the Cordillera being home to indigenous peoples with strong spiritual ties to their ancestral lands and domains.

Good governance shall enable the attainment of our desired development outcomes spelled out in the RDP. I would like to enjoin local government units and all our development partners to help realize the Plan's implementation by using it as a guide in the formulation of policies, programs, and projects aligned to the region's development thrusts. Strategies for both the public and the private sector are laid down in our Plan, which resulted from various multi-stakeholder engagements in the region. The RDC, through its sectoral committees under the leadership of Cordillera Local Chief Executives, will do its part in pushing for required legislation that will facilitate the achievement of the targets set in the RDP. Let us all adopt a whole-of-society approach towards our aspiration of a prosperous, inclusive, and resilient Cordillera and bring closer every Cordilleran towards a "matatag, maghinawa, at panatag na buhay".

A handwritten signature in black ink, appearing to read 'E. Bulut Jr.', written over a horizontal line.

**ELIAS C. BULUT JR.**  
RDC Chairperson 2022-2025  
(Governor, Province of Apayao)

# Preface

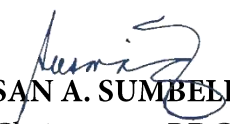


This Cordillera Regional Development Plan 2023-2028 was prepared by the Regional Development Council, with National Economic and Development Authority (NEDA) as the plan secretariat, to set forth regional development priorities and strategies for the next six years.

While it is aligned with the current administration's 8-point agenda and the Philippine Development Plan (PDP) 2023-2028, our Cordillera RDP contains localized development strategies to address the region's unique development concerns and challenges towards achieving the region's vision. Specifically, our RDP has a special chapter on culture-sensitive governance and development which underscores the region's overarching goal of pursuing autonomy in recognition of the diverse indigenous culture in the Cordilleras and the need for appropriate policies for the region to attain progress for all. A whole-of government and whole-of-society approach to plan formulation was endeavored through ensuring the meaningful participation of regional line agencies, local government units, the academe, the private sector and civil society organizations as members of the planning committees who participated in the series of planning workshops and consultations.

An assessment workshop was conducted on October 25-26, 2022 followed by a scenario planning workshop on November 23-24, 2022. The plan was also subjected to review through a regional RDP consultation conducted on December 16, 2022 and through the various sectoral committees under the Regional Development Council (RDC) which reviewed and endorsed the plan to the RDC which approved it on March 9, 2023. Technical soundness and consistency with the PDP and inter-regional development directions were ensured by the NEDA Plan Secretariat through the conduct of a RDP Conference and peer review on February 22-24, 2023.

We now call on all regional development actors to align with the priorities and strategies set forth in the RDP towards achieving our development targets. Specifically, we hope that all sectoral and local development plans as well as priority proposed programs and projects for funding will be aligned to the RDP so to achieve our vision of a *matatag, maginhawa at panatag na buhay* for all Filipinos and Cordillerans by 2040.

  
**SUSAN A. SUMBELING**  
Vice Chairperson, RDC-CAR  
Regional Director, NEDA-CAR

PART I

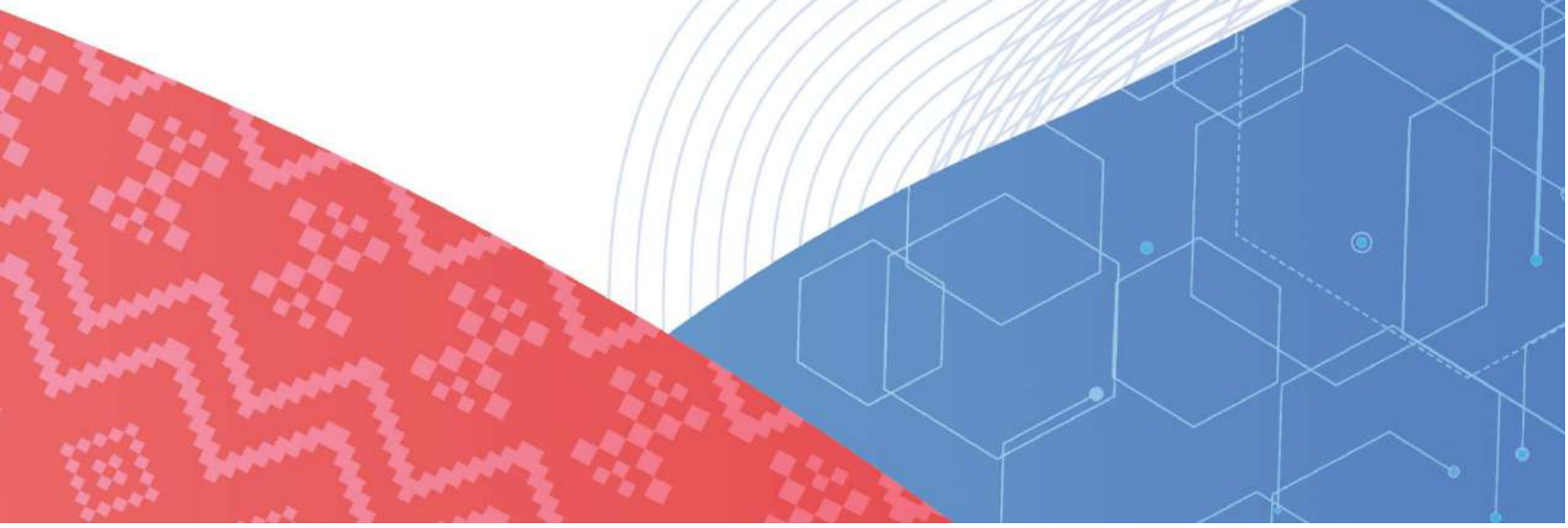
# Introduction



# 01

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## **Overview of the Regional Economy, Development Context and Trends**





## Chapter 1

# 1 Overview of the Regional Economy, Development Context and Trends

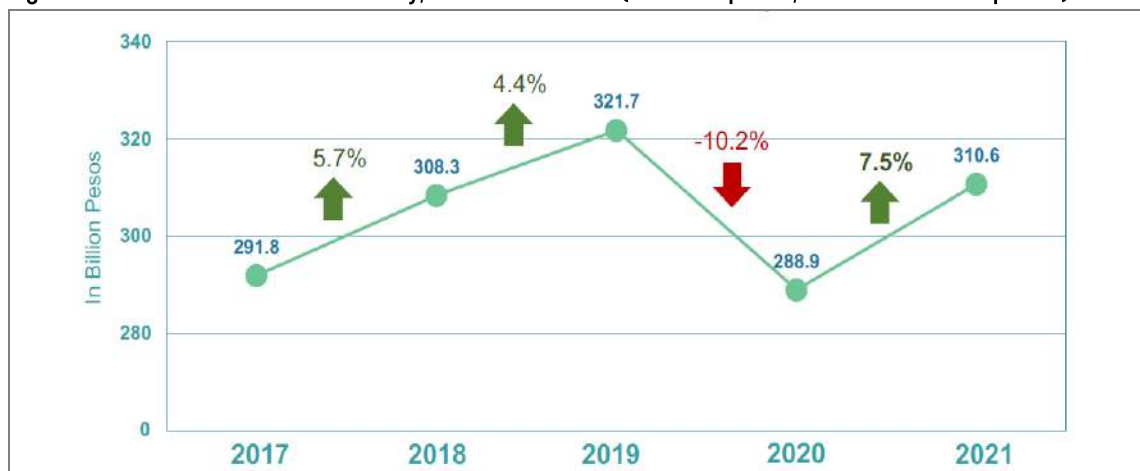
Trends in the Cordillera economy before and after the COVID-19 pandemic point to the region's potential to contribute to the Philippine Development Plan's (PDP) 2023-2028 goal to reinvigorate job creation and accelerate poverty reduction for deep economic and social transformation. Development trends also signal the need for the region to undertake the Philippine Development Plan's key transformational strategies of: digitalization, servicification, dynamic innovation ecosystem, enhanced connectivity, greater collaboration between local and national government, and partnership with the private sector.

## Economic Trends

**Economic Recovery.** The economy of Cordillera was among the regional economies hardly hit by the COVID-19 pandemic and its effect resulting to a 10.2 percent contraction in 2020. However, it also belongs to the regional economies with highest growth rate at 7.5 percent in 2021. This GRDP growth rate

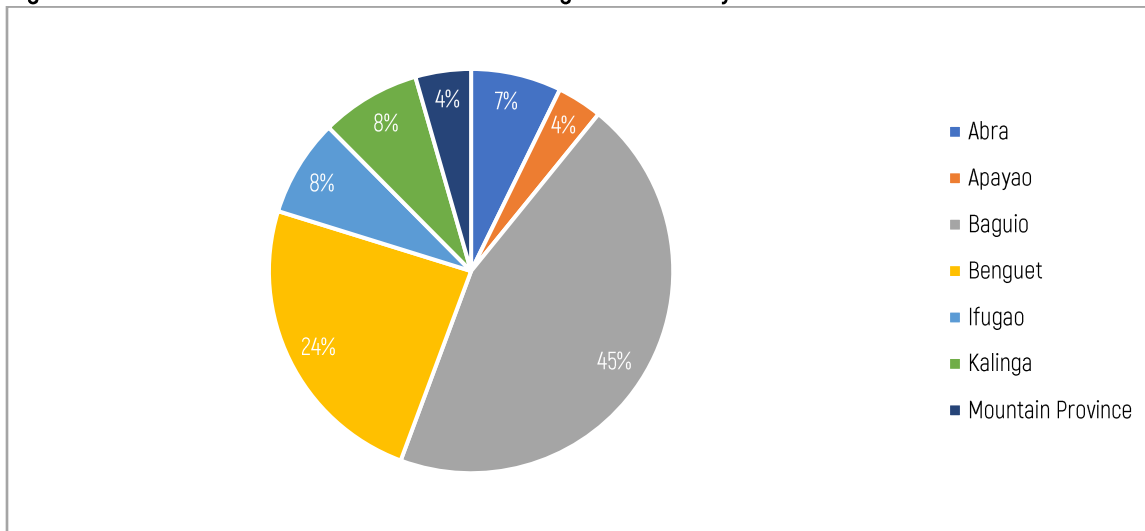
exceeded the 5.5 to 6.5 percent target growth rate of the region for 2021 and even surpassed the 7 percent target for 2022. The regional economy-estimated at 321.7 billion Pesos in 2019 declined to 288.9 billion Pesos in 2020, and rebounded to 310.6 Billion Pesos in 2021 at constant 2018 prices.

Figure 1 Performance of the Economy, CAR: 2017 to 2021 (in billion pesos, at constant 2018 prices)



Source: Philippine Statistics Authority (PSA) – CAR

**Figure 2 Percent Share of CAR Provinces to the Regional Economy**

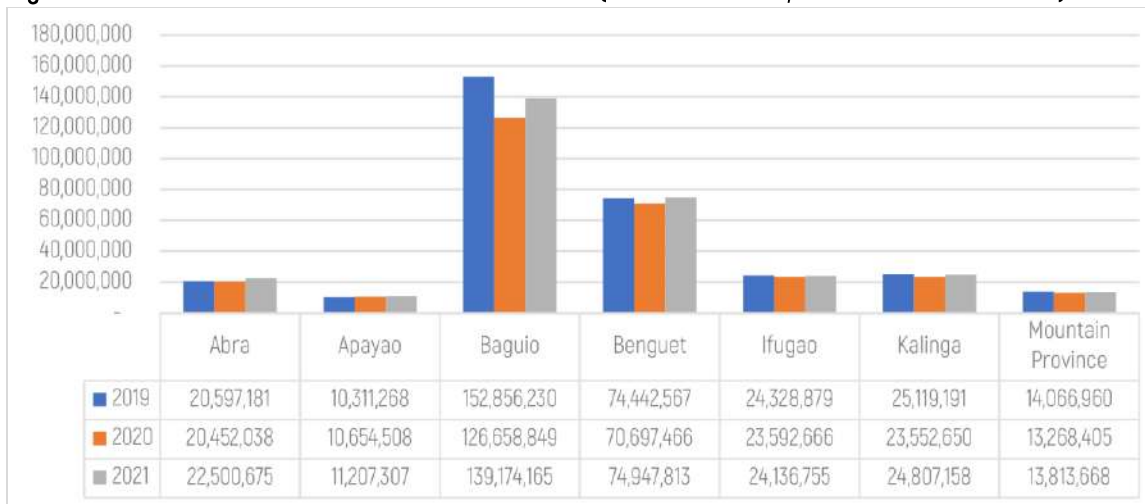


Source: PSA-CAR

Among provinces and cities, Baguio City accounted for forty-five percent of the regional economy as of 2021. This is followed by the Province of Benguet accounting for twenty-five percent, Ifugao and Kalinga contributing eight percent each, Abra at seven percent, and Apayao and Mountain Province at four percent each.

However, only the Provinces of Abra, Apayao and Benguet had economic output equal to or above pre-pandemic levels. Baguio City and the Provinces of Ifugao, Kalinga and Mountain Provinces have lower gross output in 2021 compared to 2019.

**Figure 3 CAR Provincial Product Account: 2019 to 2021 (in thousand PHP, at Constant 2018 Prices)**



Source: PSA-CAR

Among the sectors of the economy, the gross value added of the Industry and Services Fishing continued to contract. Industry as a

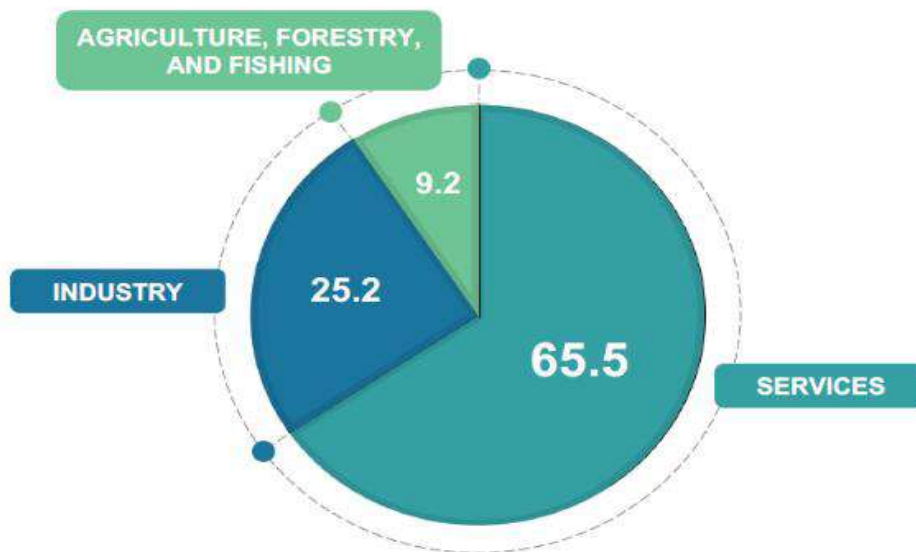
exhibited growths in 2021. Meanwhile, Agriculture, Forestry, and whole expanded by 16.3 percent, Services



grew by 5.9 percent while Agriculture, Forestry, And Fishing contracted by 1.7 percent in 2021. The region’s economy remains services-driven with services accounting for more than half of the region’s total economic output at 65.5 percent share, followed by the industry sector with 25.2 percent share and agriculture, forestry, and fishing with 9.2 percent share. Key drivers of

the sector include: wholesale and retail trade including repair of motor vehicles and motorcycles (26%); financial and insurance activities (18%); and real estate and ownership of dwellings (11%). However, services are mainly concentrated in Baguio City (49%) and the Province of Benguet (22%).

Figure 4 Percent Share of Industries to the CAR Regional Economy in 2021, at Constant 2018 Prices



Source: PSA-CAR

The PDP 2023-2028 identifies servicification as one of transformational strategies. Servicification will build ecosystems around economic clusters identified as potential sources of high growth, to attract more investments and expand its demand for higher productivity jobs.

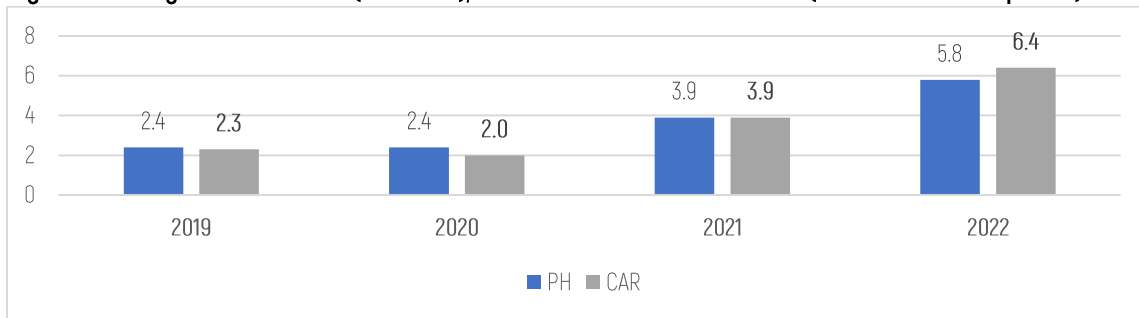
More recently, services are also seen as value-creating with the potential to create value all along the GVC propelling the shift towards more productive and more customer-centric production models where value can be seen as co-created with consumers.

Priority servicification can be targeted towards the industries of information and communications technology (ICT), creatives, tourism, and logistics to move up the global value chain.

**Soaring commodity prices.** Annual average prices of goods and services in CAR accelerated faster than the national rate in 2022 at 6.4 percent. The regional economy remains affected by the rise of global oil prices, particularly diesel, and the subsequent supply chain bottlenecks as transport costs record the highest inflation rate among

commodity groups.

**Figure 5 Average Inflation Rate (All Items), CAR vis-à-vis PH: 2019 to 2022 (at constant 2018 prices)**



Source: PSA - CAR

## Demographic Trends

The Philippines' population reached 109,035,343 as of May 1, 2020 based on the 2020 Census of Population and Housing (2020 CPH). CAR's population of 1,797,660 accounts for about 1.6 percent of the Philippine population.

CAR's 2020 population is higher by 75,654 compared with the population of 1.72 million in 2015 and by 180,793 compared with the population of 1.62 million in 2010.

**Figure 6 Total Population of CAR: 2010,2015 and 2020**



Source: PSA-CAR

Among the six provinces comprising CAR, Benguet had the biggest population in 2020 with 460,683 persons, followed by Abra with 250,985 persons, Kalinga with 229,570 persons, Ifugao with 207,498 persons, and Mountain Province with 158,200 persons. Apayao had the smallest population with 124,366 persons. The City of Baguio registered a population of 366,358 persons.

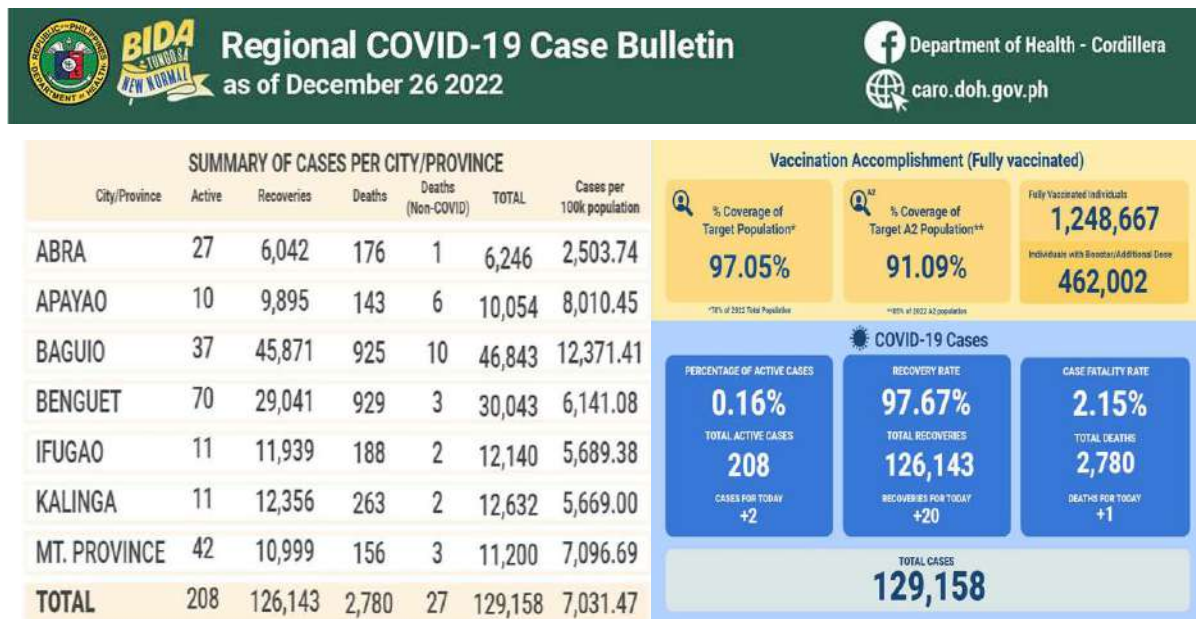
A study conducted by the University of the Philippines in 2020 reveals that of the 13 regions studied, three regions are in the

process of reaching demographic dividend. These are the National Capital Region, CALABARZON and CAR. CAR had a support ratio of 0.49 or 100 working age adults supporting 204 dependents.

Demographic dividend refers to the economic opportunity created when the proportion of working age population increases significantly as a result of reduced proportions of dependent children, resulting in direct and indirect opportunities to increase per capita output.

## Health Trends

Figure 7 Summary of COVID-19 Cases per CAR Provinces as of December 26, 2022



Source: DOH-CAR

**Continued impact of COVID-19.** The Cordillera Region remains challenged by the effects of the COVID-19 pandemic with a

total of 208 active cases and a total of 129, 158 cases as of December 26, 2022.

Ninety-seven percent of the target population are fully vaccinated.

**High Mortality from Non-Communicable Diseases.** The World Health Organization

(WHO) reports that non-communicable diseases are the global top causes of death. For the Philippines, preliminary data shows that heart diseases, COVID-19, neoplasm or cancer, diabetes, and hypertension are the top

leading causes of deaths. Compared to 2020, the number of deaths due to these diseases, except for cancer, further increased in 2021.

**Table 1 Top Ten Causes of Mortality per 100,000 Population in CAR by Sex, CY 2021**

ICD-10 Categories	Number			Rate per 100,000 population
	Male	Female	Total	
1 Pneumonia	389	283	672	37
2 Complications and ill-defined descriptions of heart disease (cardiovascular, heart disease, cardiovascular accident)	330	243	573	31
3 Respiratory failure	274	180	454	25
4 Acute myocardial infarctions	201	168	369	20
5 Covid-19, virus identified	195	172	369	20
6 Essential (primary) hypertension	192	166	358	20
7 Stroke (cerebrovascular accident)	144	128	272	15
8 Cancer, all forms	92	117	209	11
9 Cerebrovascular diseases	99	100	199	11
10 Chronic kidney disease	101	73	174	10
Hypertensive heart disease	81	93	174	10

Source: 2021 Field Health Services Information System (FHSIS), DOH-CAR

## Social Trends

**Sustained decrease in regional poverty rates amid the pandemic.** CAR is among the four regions having the lowest poverty incidence among families in 2021. The other regions are the National Capital Region or NCR, Region III or Central Luzon, and Region IV-A or CALABARZON.

At the provincial level, almost all of the CAR provinces, except for the Province of Abra, exhibited improvements in terms of poverty incidence and subsistence. The factors that contributed to the downtrend include the following: strong regional economy, steady employment rate, single-digit inflation, stable income, and well-targeted stimulus package.

**Table 2 Poverty and Subsistence Incidence among Families by Region, Province, and HUC (in percent), 2018 and 2021**

Province	Poverty Incidence		Subsistence Incidence	
	2018	2021	2018	2021
CAR	8.6	6.9	2.2	1.4

Province	Poverty Incidence		Subsistence Incidence	
	2018	2021	2018	2021
Abra	14.7	15.8	4.4	3.4
Apayao	16.0	4.7	4.2	0.8
Benguet	6.6	6.2	2.1	1.2
Baguio City	1.5	1.0	0.2	0.1
Ifugao	9.9	6.0	1.1	1.1
Kalinga	9.2	5.6	1.5	1.1
Mountain Province	17.1	15.3	5.6	3.4

Source: PSA – CAR

## Political Trends

One of the major developments in the governance landscape of the Philippines is the Mandanas-Garcia ruling of the Supreme Court in 2018. EO No. 138, s. 2021 was issued to strengthen the autonomy and empowerment of local government units (LGUs) through the full devolution of certain functions of the Executive Branch to the LGUs as defined in the Local Government Code. The ruling also meant devolution of capacity and budget allocation to the LGUs to fully undertake devolved functions. CAR LGUs are among the first to complete their Devolution Transition Plans nationwide. However, full implementation is currently being slowed down by misalignments in NGA and LGU DTPs and current limitations by the LGUs in undertaking the devolved functions.

Capacitation and technical assistance towards strengthening the LGUs as equal and collaborative partners of the national government in the development agenda is a key strategy towards transforming institutions and development sectors.

Partnership with the private sector to deliver more services to the people is another key strategy. The government will provide the enabling environment for private investments and services towards the delivery of basic services. This will also free up the government’s tight fiscal space and enable the government to focus its resources on critical public good and services.

Unique to the Cordillera Administrative Region is its sustained pursuit for regional autonomy enshrined in the 1987 Constitution. The Cordillera Regional Development Council (RDC-CAR) adopted regional autonomy as its overarching theme of development for the region and is pursuing such through the Social Preparation for Cordillera Autonomous Region program to intensify Information Education Campaign (IEC), alliance building and capability building.

House Bill 3267: An Act Establishing the Cordillera Autonomous Region has been filed in the 19<sup>th</sup> Congress. All efforts of the CAR

Congressmen, the Regional Development Council, and civil society organizations

resurrect the aspiration of an autonomous region within the plan period.

## Environmental Trends

**Climate Change.** The Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) projects that climate change effects such as heavy daily rainfall will continue to become more frequent. Extreme rainfall is projected to increase in Luzon and Visayas only, but number of dry days is expected to increase in all parts of the country in 2020 and 2050<sup>1</sup>.

The region experienced increased occurrence, intensity and length of rainfall as well as more extreme temperatures. The effects of these are more pronouncedly manifested by losses in the agriculture sector and crop susceptibility to diseases. Increased rainfall also increased susceptibility of the region to rain-induced landslides.

To increase climate resiliency of Cordilleran farmers, the Department of Agriculture institutionalized climate risk and vulnerability assessments, strengthened early warning advisories, and built on indigenous knowledge, systems and practices combined with appropriate technologies towards a more resilient agriculture sector. Investments in infrastructure projects which mitigate rain-induced landslides and flooding were also prioritized.

**CAR is the watershed cradle of North Luzon**, hosting 13 river basins, that supply water needs of Regions 1, 2, and 3 for irrigation, power generation, recreation, etc. As the headwaters, the region sustains and protects the watershed. This geographic uniqueness imposes land use limitations to the region's agriculture, settlement development and built up areas.

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<https://www.pagasa.dost.gov.ph/information/climate-change-in-the-philippines>

## Technological Trends

Three of the key drivers for transforming the economic and social sectors, and institutions spelled out in the Philippine Development Plan are digitalization, dynamic innovation ecosystem, and enhanced connectivity. These were also adopted in the Cordillera RDP.

Digitalization is key in transforming the government towards more efficient, transparent, and accountable public service. Digitalization can also help the government establish better database and management systems which are crucial for evidence-based plans, policies and program designs. Seamless interfaces with the government through digitalization also potentially increases compliance to regulations such as business registrations, and payment of taxes.

The Cordillera also needs to build on its existing efforts towards establishing dynamic innovation ecosystems. The region already established research and innovation bodies in the region such as the Regional Research, Development and Innovation Committee (RRDIC); the Regional Inclusive Innovation Center (RIIC); and various innovation hubs/ technology business incubators (TBIs). The RDC through the RRDIC also formulated the Cordillera Regional Research, Development and Innovation Agenda (CRRDIA) 2023-2028 which provides the focus and direction for research and development efforts.

Enhancing connectivity is also a key transformational strategy for the Cordillera as the only land-locked region of the country with challenging topography and road right of way issues and concerns. This calls for innovative mountain engineering solutions such as alternative transport systems and satellite internet.





# 02

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## **Regional Spatial Development Framework**





## Chapter 2

# 2 Cordillera Regional Spatial Development Framework

The 2019-2049 Cordillera Regional Spatial Development Framework (RSDF) supports CAR's regional development goals and the 2023-2028 Philippine Development Plan's (PDP) objective of economic transformation for a prosperous, inclusive, and resilient society towards AmBisyon 2040, by guiding land use management as an integral component of economic and social development. It adopts the sub-strategies of concentration, connectivity, and vulnerability reduction in the National Spatial Strategy and the 2015-2045 Luzon Spatial Development Framework (LSDF), in identifying the Regional Spatial Strategy (RSS) referred to as the North and South Clusters Plus, that seeks to disperse regional development through primary, secondary, and tertiary regional growth centers spread across the six provinces of CAR.

## Physical and Demographic Characteristics

The Cordillera Administrative Region, a landlocked region with an estimated land area of 1,865,660 hectares, is situated north of Luzon, bordered by Ilocos Region in the west and Cagayan Region in the east. It has six provinces namely, Abra, Apayao, Benguet, Ifugao, Kalinga, and Mountain Province, one highly urbanized city, Baguio City, and one component city, the City of Tabuk in the Province of Kalinga. The region also has 75 municipalities and 1,176 barangays.

CAR is characterized by steep mountains and high elevation terrain that endow it with cool climate, especially in Benguet and Mountain Province, and render its peaks as biodiversity conservation areas, but these characteristics also make the region highly vulnerable to rain-induced landslides and limit the intensity and type of land development in the region. Based on slope, CAR has the second

smallest A&D land area among the regions, preceded only by NCR. CAR is also located in a seismically active area, lying on active faults along the branches of the northern segments of the Philippine Fault Zone (see Map 7), and is on the path of typhoons originating from the Northwestern Pacific Ocean, what is referred to as “the most active tropical cyclone basin in this planet.” This, combined with CAR's mountainous topography, makes many of the region's production and settlement areas vulnerable to natural hazards. While CAR makes up 6.6 percent of the country's total land area, its population of 1,797,660 (2020 Census of Population) is only 1.65 percent of the country's total population, and is the lowest among the regions. A total of 460,683 persons, 22 percent of the total population of CAR, reside in Benguet, where 85 percent of the total land area has slope of more than 30 percent.

**Table 3 Population and Population Density, CAR Provinces and Growth Centers, 2020 Census of Population**

Province/ City/ Growth Center	Population	Land Area (Square Kilometers)	Population Density
<b>CAR</b>	<b>1,797,660</b>	<b>19,818.12</b>	<b>91</b>
Abra	250,985	4,199.72	60
Apayao	124,366	4,502.33	28
Baguio City	366,358	57.51	6,370
Benguet	460,683	2,769.08	166
Ifugao	207,498	2,618.01	79
Kalinga	229,570	3,282.04	70
Mountain Province	158,200	700.25	173
<b>Primary Growth Centers</b>			
BLISTT	644,589	1,081.43	596
Eastern Kalinga Growth Center	183,608	2,033.15	90
<b>Secondary Growth Centers (Capital Towns)</b>			
Bangued, Abra	50,382	136.40	369
Kabugao, Apayao	16,215	935.12	17
La Trinidad, Benguet	137,404	70.04	1,962
Lagawe, Ifugao	18,876	208.91	90
Tabuk City, Kalinga	121,033	700.25	173
Bontoc, Mountain Province	24,104	396.10	61
<b>Tertiary Growth Centers</b>			
Manabo, Abra	11,611	81.08	143
Luna, Apayao	21,297	606.04	35
Buguias, Benguet	44,877	175.88	255
Alfonso Lista, Ifugao	34,061	347.46	98
Lubuagan, Kalinga	9,323	234.2	40
Bauko, Mountain Province	32,021	170.37	188

Source: Philippine Statistics Authority – CAR

Given its low population and relatively vast land area, CAR also has the lowest population density at 91 persons per square kilometer (see Table 3). Densities across municipalities, including the identified growth centers of CAR and the City of Tabuk, generally do not deviate far from this figure. However, Baguio City and the capital town of La Trinidad in Benguet have population densities exceeding 1,000, at 6,370 and 1,962, respectively. Abra which has the largest share of land with less

than 18 percent slope has the second smallest population density at 60 persons per square kilometer.

Around 85 percent of CAR’s total land area or approximately 1,583,117 hectares is classified as forest land, having slopes of 18 percent and above. Almost three-fourths of the region have steeper slopes of 30 percent or more, mostly in the Province of Benguet, the western portion of Mountain Province,

Ifugao, Kalinga, and Apayao, and the eastern portion of Abra. In terms of land cover, 46 percent of the region is made up of closed and open forest in 2020, including forest plantations.

This increased from only around 43 percent in 2010. (See Map 6 CAR Land Cover 2020 and 2010) As of January 2018, there were 46 major proclaimed forest and watershed reservations in CAR with a total land area of approximately 1,540,914 hectares,<sup>2</sup> thus its title “Watershed Cradle of the North.” CAR hosts 13 major river systems serving not only the six provinces of CAR, but also provinces from neighboring regions. (Refer to Map 15 CAR Sub-watersheds in Chapter 16).

Only 15 percent of the region’s total land area, approximately 282,543 hectares, is classified under flat rolling landscape, considered suitable for agriculture, settlements, and institutions (see Map 4 CAR Slope Map). These are mostly in Abra, Apayao, and Benguet. Built-up areas and other land cover accounts for 0.88 percent of the region’s total land area in 2010, but this has increased to 1.43 percent in 2020 (See Map 5).

With only 15 percent of its total land area with slope of below 18 percent, areas in the region used for agriculture are limited. But CAR specializes in the production of temperate

vegetables, and is the top supplier of cabbage, broccoli, carrots, habitchuelas, Chinese pechay and potato nationwide. It is also the third largest producer of Arabica coffee among all the regions in 2021.<sup>3</sup> Characteristic of mountainous regions, CAR is rich in mineral resources. The region is the fourth largest contributor to total mining and quarrying output in 2021, accounting for six percent. Benguet, the region’s mineral capital, is a repository of primary gold, copper, pyrite, and limestone, and is the source of around 96.5 percent of the region’s total mineral output (PSA, 2021). The rest of the region also boasts of non-metallic mineral reserves, including sand and gravel, limestone, quicklime, and slaked lime.

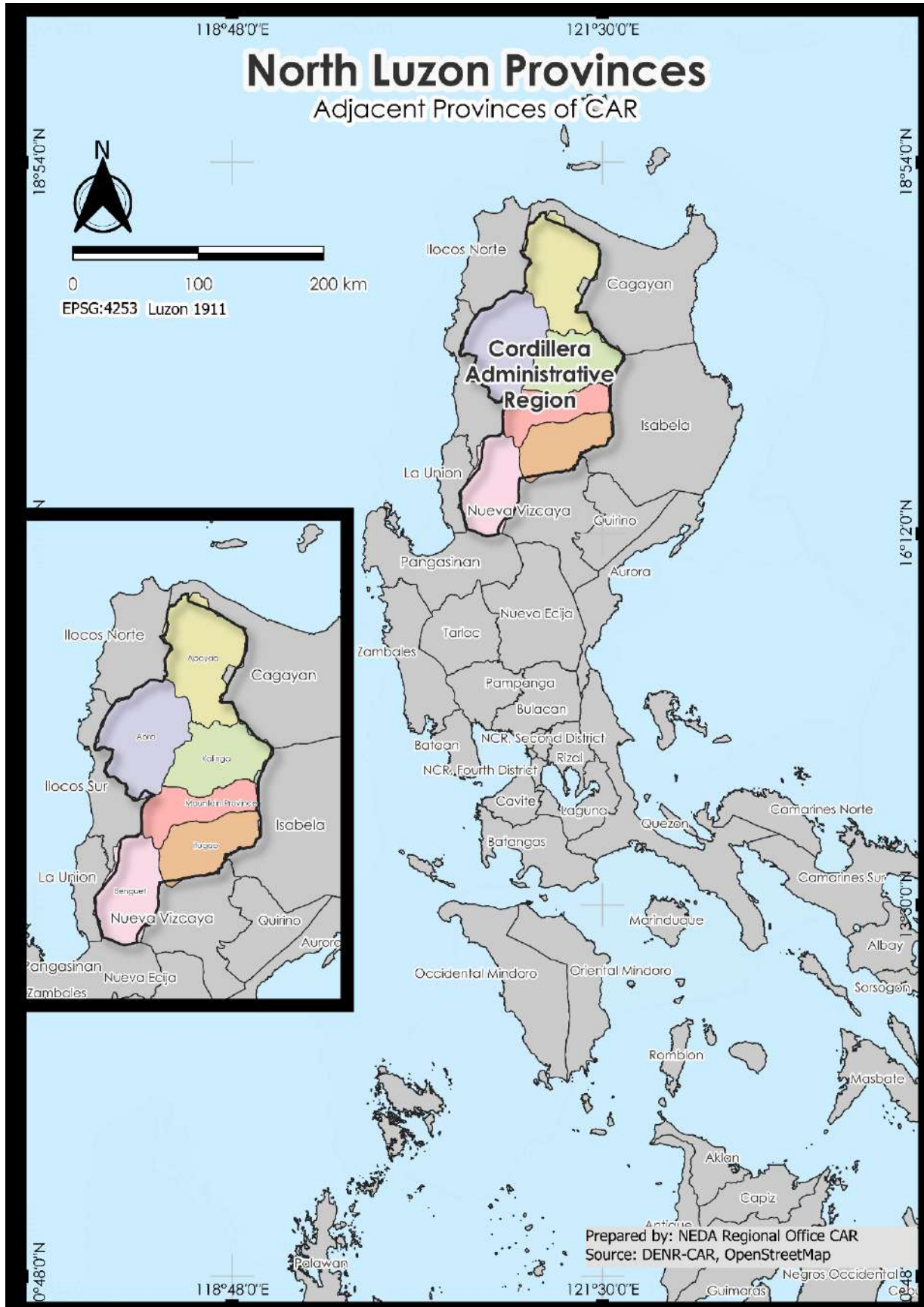
As of 2021, CAR has an existing national road network of approximately 2,265.23 kilometers, 2,195.15 kilometers (97%) of which is concreted (see Map 14 Cordillera Roads Improvement Project Map in Chapter 13) . Meanwhile, the region’s road network continues to be expanded through convergence programs and the BLISTT Outer Circumferential Road Project that added an aggregate of 502.654 kilometers of local roads, and the Department of Agriculture’s farm to market road program that contributed a total of 232.176 kilometers of local roads as of 2021.

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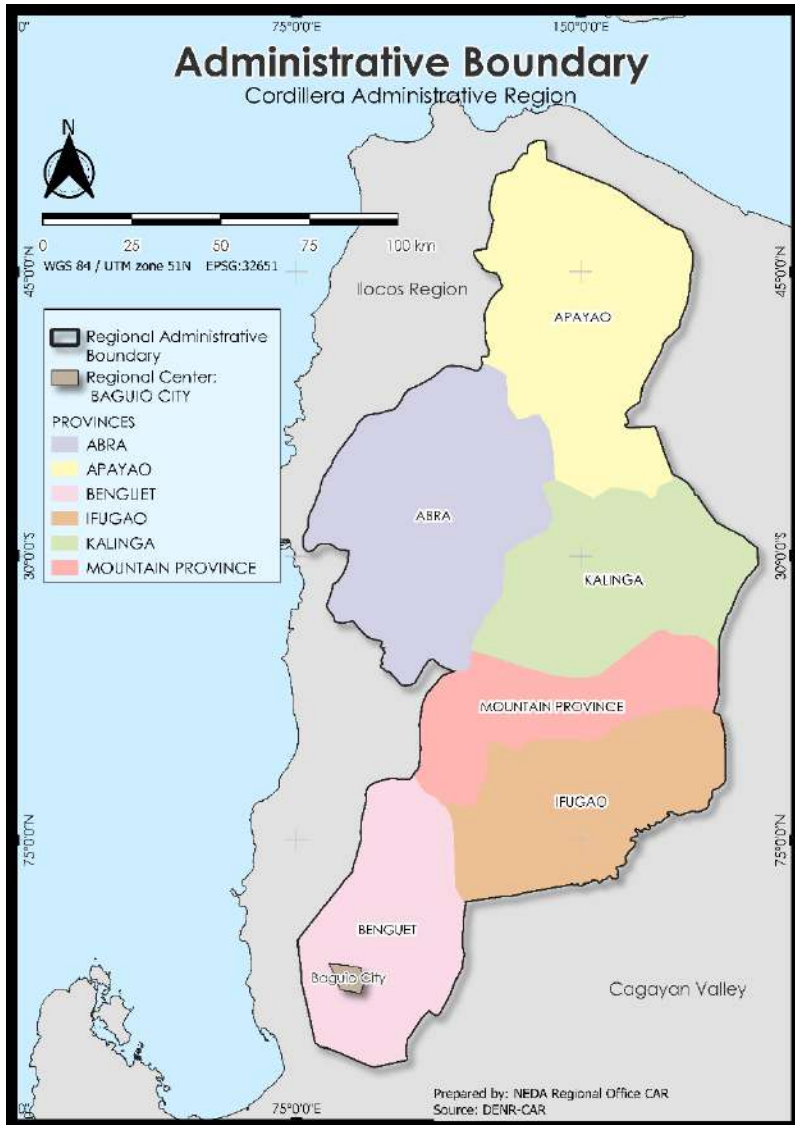
<sup>2</sup> 2022 CAR Regional Social and Economic Trends

<sup>3</sup> 2017-2021 Crops Statistics of the Philippines

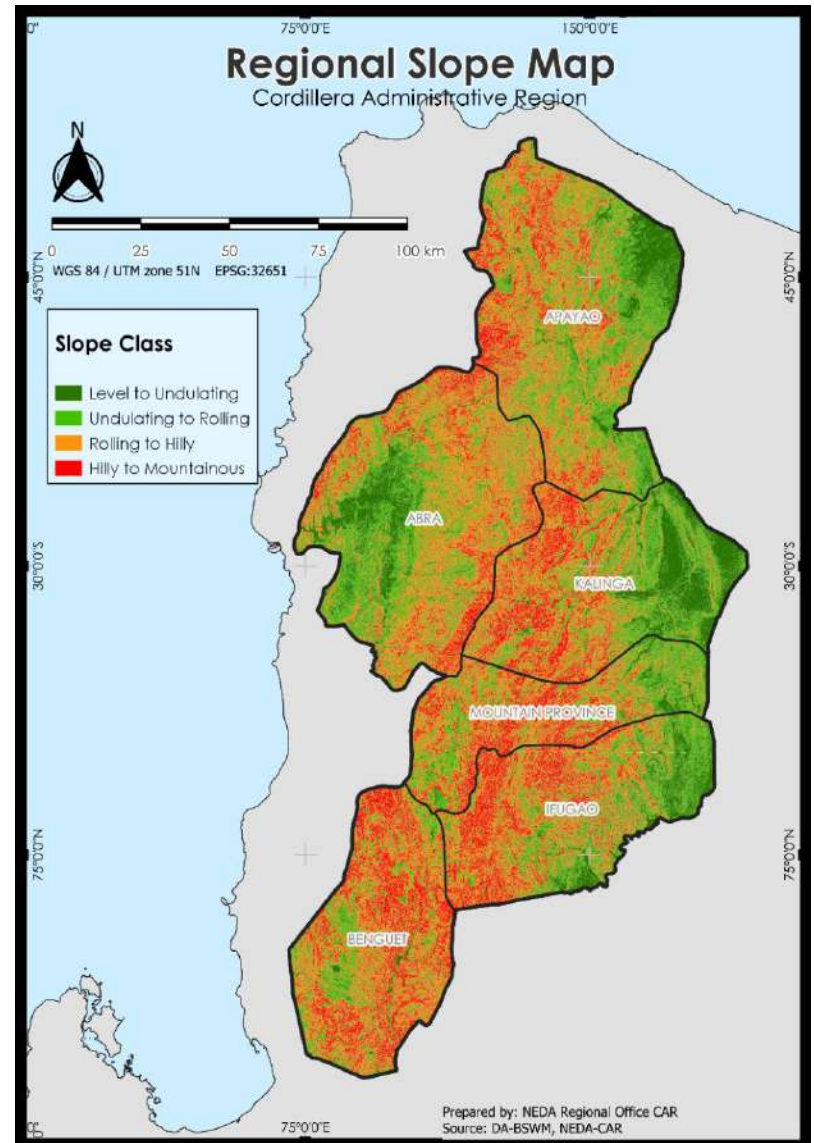
Map 1 CAR and adjacent provinces



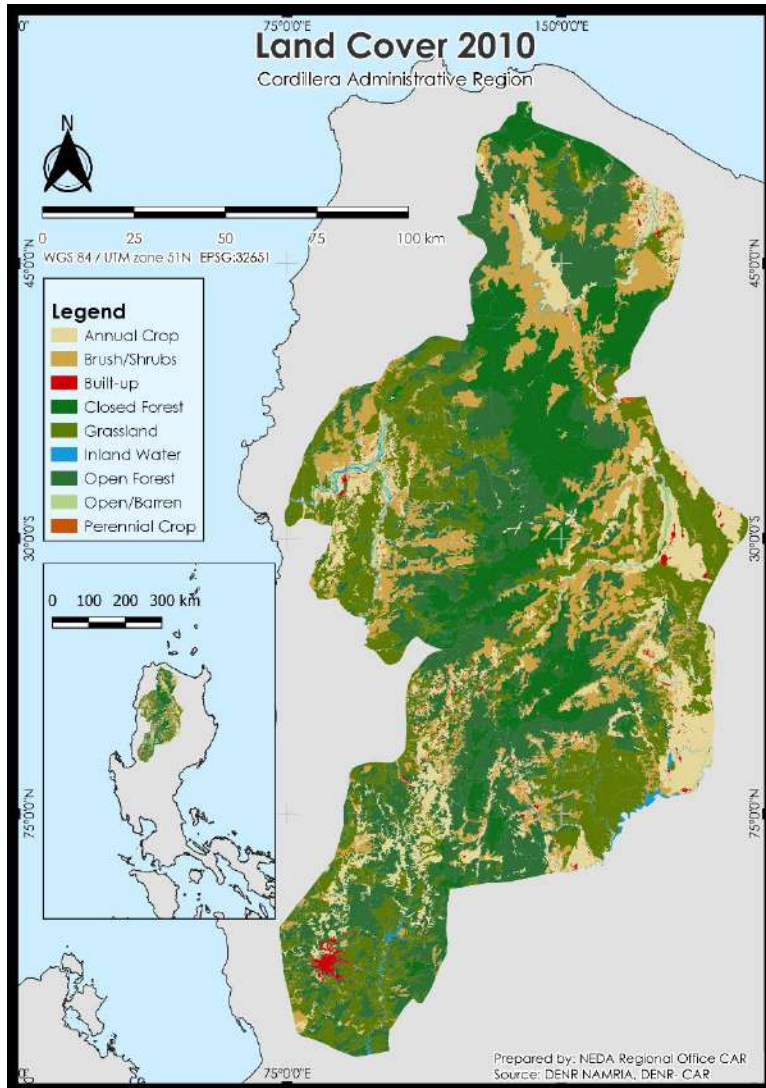
Map 2 CAR Administrative Boundary



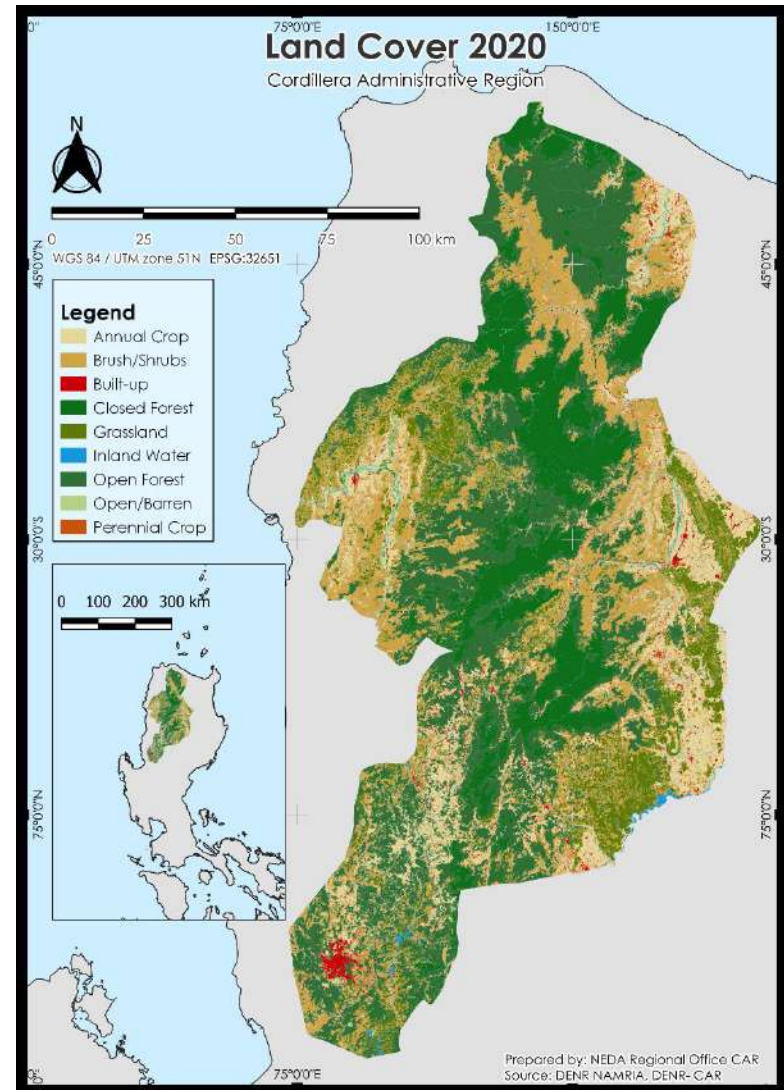
Map 3 CAR Slope Map



Map 4 CAR Land Cover 2010

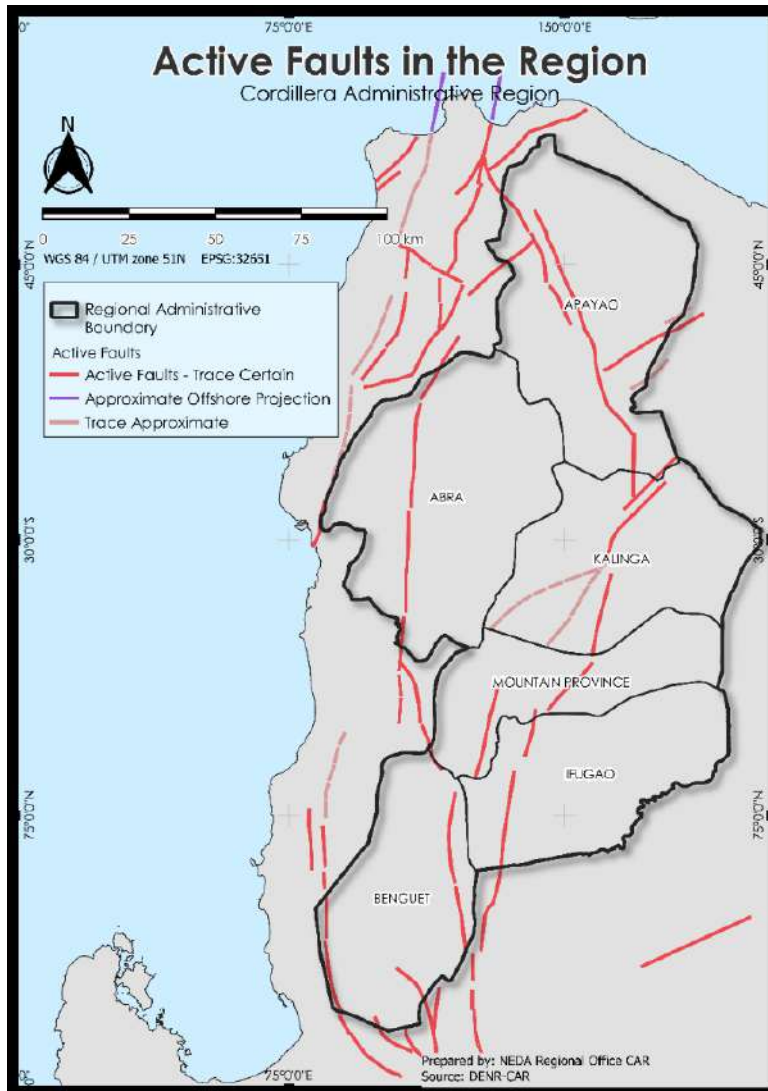


Map 5 CAR Land Cover 2020

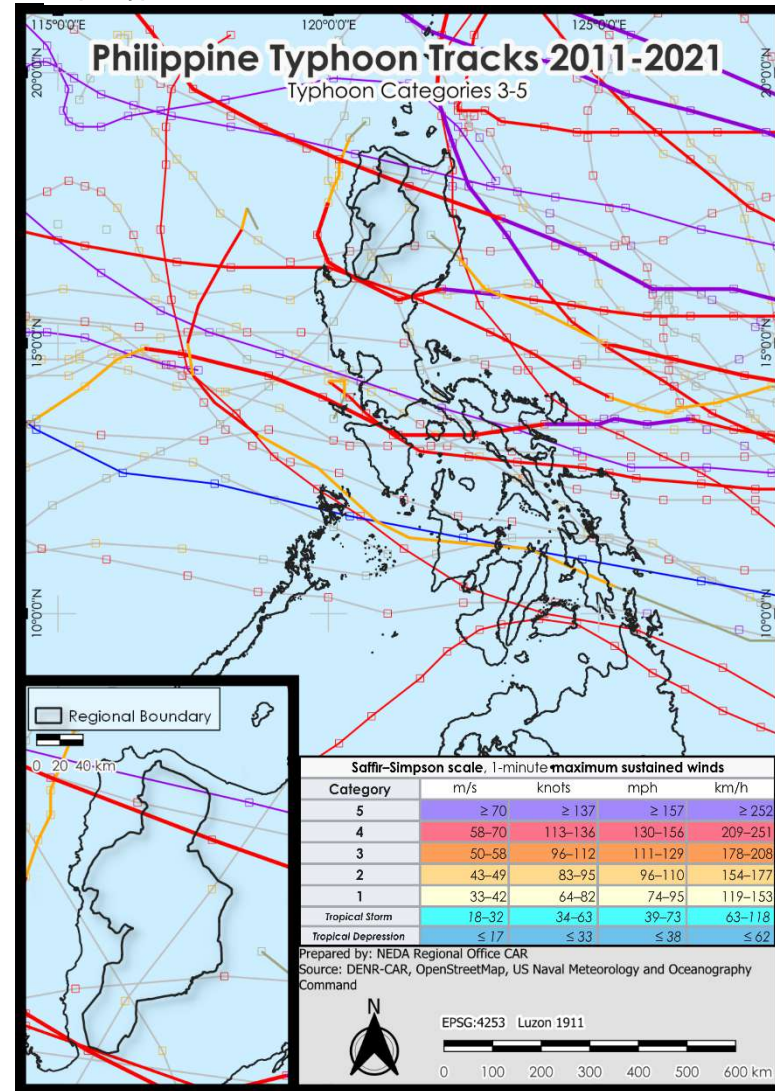




Map 6 Active Faults in CAR



Map 7 Typhoon Tracks Cat. 3 to 5 from 2011-2021



# Assessment and Challenges

Assessment of the performance of CAR with reference to the three sub-strategies of the RSDF shows that while the region has made headway in managing urban development, enhancing intra and inter-regional connectivity, and reducing vulnerability, new challenges have emerged, and some persistent ones have yet to be resolved.

## Assessment of Performance

### Sub-strategy 1: Concentration

The sub-strategy of concentration in the 2019-2049 RSDF refers to higher densities and increased access to benefits associated with urbanization, such as increased innovation and economic activity, higher variety and levels of services, and reduced encroachment into agricultural and protected areas.

***The number of persons residing in urban areas is approaching one-third of the total population of CAR.*** A total of 598,688 persons out of CAR's total population of 1,797,660 (PSA, 2022) reside in urban areas. This number comprises 33.3 percent of the total population of the region, and represents an increase of 14 percent from 524,672 persons in 2015. However, with CAR having the lowest population among all the regions, and the definition of urban areas anchored on barangay population<sup>4</sup>, most of the region's municipalities and barangays are still considered rural.

In the Baguio – La Trinidad – Itogon – Sablan – Tuba – Tublay (BLISTT) area, the regional primary growth center south of CAR, the urban population of the individual city and municipalities increased, except for Tuba, where it decreased, and Sablan, where there is no urban population. Meanwhile, in the Eastern Kalinga Growth Center (EKGC), the regional primary growth center in the north composed of the City of Tabuk and the municipalities of Rizal, Pinukpuk, and Tanudan, the urban population all reside in Tabuk City, which experienced an increase in urban residents in 2020. As for the capital towns, considered the secondary regional growth centers, all registered higher urban population in 2020, except for Kabugao in Apayao, which does not have urban barangays.

In addition, some municipalities with no urban population in 2015, such as Calanasan in Apayao, Bokod in Benguet, and Kiangan

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<sup>4</sup> NSCB Resolution No. 9, series of 2003, defines urban areas as: (1) a barangay that has a population size of 5,000 or more; (2) a barangay with at least one establishment with a minimum of 100 employees, and; (3) a barangay that has five

or more establishments with a minimum of ten employees, and five or more facilities within the two-kilometer radius from the barangay hall, even if said facilities are not located within said barangay. Based on these qualifications, 57 municipalities in CAR have no urban barangays in 2020.

and Alfonso Lista in Ifugao, recorded persons residing in urban areas in 2020. Alfonso Lista is the tertiary growth center identified in the Province of Ifugao. Aside from Alfonso Lista, Buguias in Benguet is the only tertiary growth center that has an urban population. Other

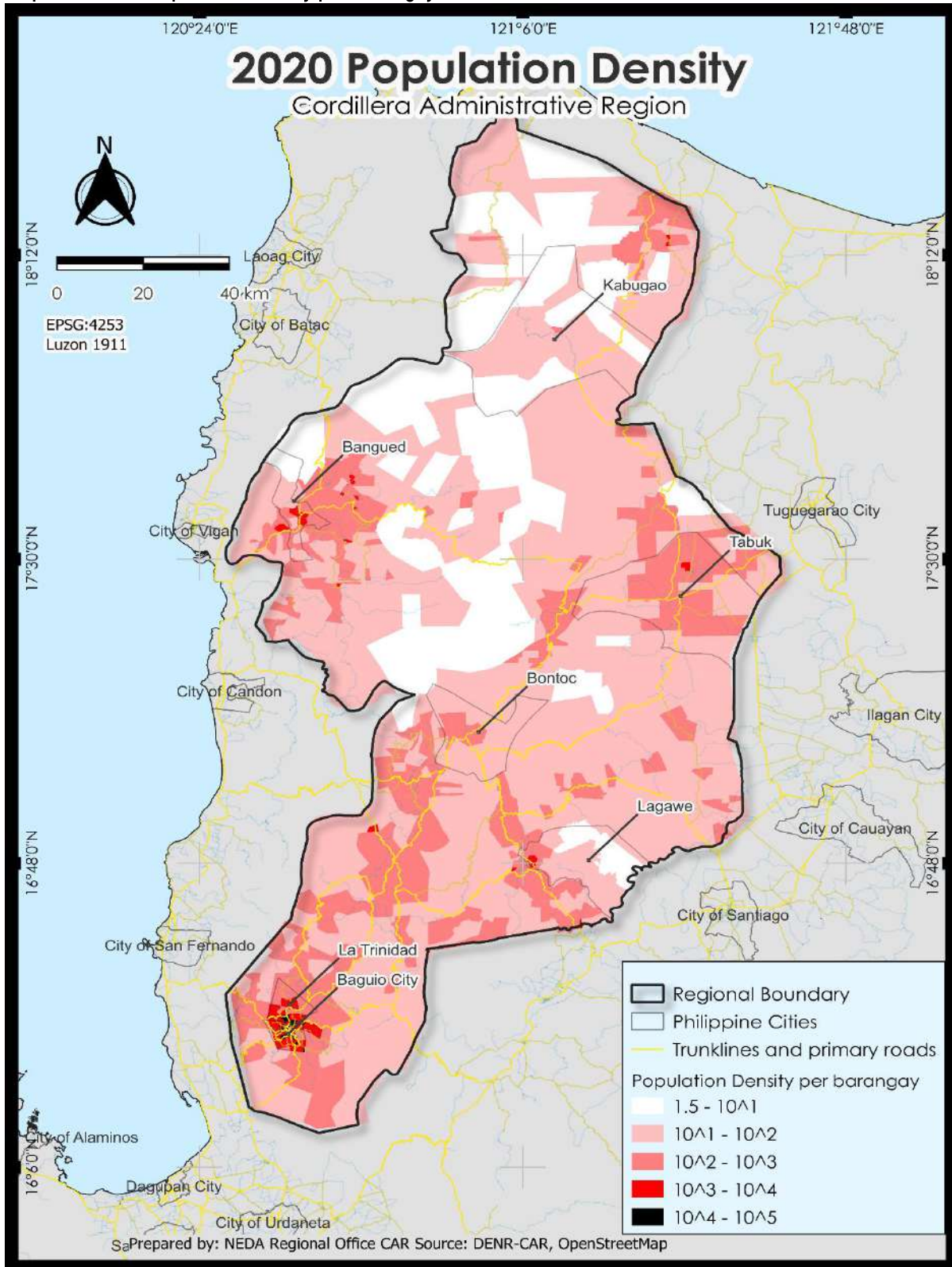
identified tertiary growth centers in the RSDF, particularly Manabo, Abra; Luna, Apayao; Lubuagan, Kalinga, and; Bauko, Mountain Province, are still purely rural.

**Table 4 Total Population and Urban Population of CAR (2020)**

Province/ City	Total Population	Urban Population	Share of Urban Population to Total	Remarks
Abra	250,985	16,186	6.4%	Only Bangued has an urban population.
Apayao	124,366	1,063	0.9%	Only Calanasan has an urban population. The capital town of Kabugao, and Luna, the identified tertiary growth center of the province, are entirely rural.
Baguio City	366,358	236,926	64.7%	
Benguet	460,683	260,130	56.5%	La Trinidad is almost completely urban with 93.8% of its population residing in urban areas.
Ifugao	207,498	16,691	8%	
Kalinga	229,570	48,601	40.2%	Only Tabuk City has an urban population.
Mountain Province	158,200	19,091	12.1%	Paracelis has a higher urban population than the capital town of Bontoc.
CAR	1,797,660	598,688	33.3%	

Source: PSA

Map 8 2020 CAR Population Density per Barangay



Referring to the Map 2.8, it can be noted that barangays bordering adjacent regions, particularly Eastern CAR alongside Region II, have higher population densities than those in inner CAR. The concentration of settlements in these areas takes advantage of the accessibility of urban services in the growth centers of Region II located in the westernmost portion of the region. This positions the EKGCC and the municipalities of Alfonso Lista and Lagawe in Ifugao at an advantageous position in developing inter-region growth center networking and collaboration.

In terms of town size, the number of medium towns in CAR with population of 20,000 or more increased to 16 in 2020 from 14 in 2015, as the population of Luna in Apayao and Aguinaldo in Ifugao surpassed 20,000. Majority of the region's municipalities are still considered small towns in 2020, and only Baguio City, La Trinidad in Benguet, and Tabuk City in Kalinga qualify as large towns with populations exceeding 100,000.

***Higher percent change in population density was observed for Tabuk City compared to Baguio City in 2020.*** While Baguio City still has the highest population density in the region with 6,370 persons per square meter (PSA, 2020), change in its population density decelerated from 8.4 percent between 2010 and 2015 to 6.1 percent between 2015 and 2020. Meanwhile, Tabuk City, with population density of only 173 persons per square meter during the same period, had a higher population density change of 9.4 percent between 2015 and 2020, after

registering only 6.5 percent change between 2010 and 2015, indicating development and increasing availability of income-earning opportunities that engender migration to cities. The population growth rate of Tabuk City during the same period is also slightly higher at 1.91 percent, compared to the growth rate of Baguio City at 1.25 percent.

***The BLISTT firmed up its role as the center of industry, commerce, and services through key developments, including the passage of Republic Act (RA) 11932.*** One major development that will advance the BLISTT as one of the two regional primary growth centers is the passage of RA 11932 creating the Metropolitan BLISTT Development Authority (MBLISTTDA) in the early days of the current administration. This law institutionalizes the BLISTT inter-local cooperation that seeks to consolidate development efforts in contiguous city and municipalities of Baguio, La Trinidad, Itogon, Sablan, Tuba, and Tublay, and will reinforce the BLISTT area's strengths as the center of industry, commerce, education, health, and tourism.

References prepared earlier, like the Sustainable Urban Infrastructure Development (SUID) Master Plan for the BLISTT, and the study on the Urban Carrying Capacity of Baguio City, will ease area-wide planning and policy development for the BLISTT area under the MBLISTTDA.

Baguio City, the only highly urbanized city (HUC) in the region, took the lead in promoting digital governance by establishing

the Baguio Smart City System in 2019, the first of its kind in the country that integrates city services, surveillance, and emergency response. Also, Baguio City's declaration as a UNESCO Creative City in 2017 triggered the alignment of development thrusts with culture and the arts, and further boosted local tourism and encouraged innovation in cultural expression.

***The passage of key legislations will allow the region to enjoy advantages emanating from higher densities and urbanization.*** Still towards the development of growth centers, the creation of the Department of Human Settlements and Urban Development (DHSUD) will allow better integration of settlements and urban development, and the Supreme Court decision upholding the Mandanas-Garcia position will further empower local governments in implementing physical and development plans and programs better suited to their local environment.

***Facilitative agreements were signed to create more employment and income-generating opportunities in CAR, starting with the regional growth centers.*** The Philippine Economic Zone Authority endeavored to strengthen its presence in CAR by signing individual memoranda of agreement with the BLISTT city and municipalities to develop economic zones in 2020, and requested the different provinces to identify areas for possible economic zone development outside of Baguio City and the Province of Benguet. Review of proclaimed non-operational economic zones within the region for possible

revival is also being undertaken by PEZA, in efforts to establish at least one economic zone per province. These non-operational economic zones are the Kelly Special Economic Zone in Itogon, Benguet, and Abra Agro-Industrial Zone in Tayum, Abra, both manufacturing economic zones.

***Updating of Network of Protected Areas for Agricultural and Agro-Industrial Development (NPAAAD) and Strategic Agriculture and Fisheries Development Zones (SAFDZ) maps will aid in monitoring land use conversions vis-à-vis protection of prime agricultural land.*** The updated agricultural maps released by the DA and its Bureau of Soils and Water Management (BSWM) in December 2022 will serve as valuable inputs to planning towards food security and strengthening the agriculture sector by ensuring that prime agricultural lands are protected from conversion. Likewise, formulation of the National Agriculture and Fisheries Modernization and Industrialization Plan 2021-2030 that integrates the NPAAAD and SAFDZ seeks to increase agricultural productivity by transforming ineffective traditional practices and promoting urban agriculture (More details are in Chapter 6.1.).

## Sub-strategy 2: Connectivity

With the implementation of the sub-strategy of connectivity in the 2019-2049 RSDF, the regional spatial strategy seeks to increase transportation and communication linkages among settlements, key production areas, including tourism areas, and health, education and other essential services. The sub-strategy also works towards enhancing physical and virtual connectivity between and among provinces, growth centers, and CAR and other regions.

***The Baguio City Airport reopens for commercial flights.*** One major development in December 2022 opens access to CAR through air for the first time in more than a decade with the opening of the Baguio City Airport to commercial flights to and from Cebu City.

***The Cordillera Roads Improvement Project and paving of national roads approach completion at improved completion rates.*** Accessibility is facilitated through the paving of national roads, which is almost complete at 96.91 percent (2021), and the high completion rates of other major CAR roads, including the Cordillera Roads Improvement Project (CRIP) and the BLISTT Outer Ring Road, following the lag brought about by mobility restrictions during the COVID-19 pandemic.

***Local roads are almost fully paved at 92.6 percent.*** Latest data shows that 92.6 percent of provincial roads have already been paved, from only 54 percent in 2017.

***Convergences for the implementation of other road programs have improved accessibility in CAR.*** The inclusion of areas in CAR in key convergence programs, specifically the DOT-DPWH (Tourism Road Improvement Project or TRIP) and the DTI-DPWH (Roads Leveraging Linkages of Industry and Trade or ROLLIT) road convergence programs, improved access to tourism destinations, production sites and markets for local products, and, along with other road projects, connected settlements to an increasing number of education and health facilities. Through the TRIP and ROLLIT convergences, a total of 465.478 kilometers of road have been completed per latest data.

***The Tarlac-Pangasinan-La Union Expressway (TPLEX) considerably shortened travel time to and from Benguet and neighboring provinces south of CAR.*** While not located in CAR, the TPLEX and the Subic Clark Tarlac Expressway (SCTEX) further down south benefitted the region by shortening travel from Metro Manila to Baguio City and vice versa from six to eight hours to around four to six hours. The TPLEX opened to the public in 2013, and opened more exits towards the north in succeeding years. The Pozorrubio and Rosario exits that were opened in 2020 further reduced the distance between Benguet and its neighbor towns in Pangasinan. The expressways also accelerated travel from the north to Clark International Airport, making the region more accessible to foreign tourists and visitors from the south.

***The implementation of the Public Utility Vehicle Modernization Program (PUVMP) resulted to the operation of modernized public utility jeepneys (PUJ) in CAR.*** The PUVMP, launched in 2017 aims to transform public transportation into a more efficient and eco-friendly system and professionalize the public transport sector. As of December 2022, a total of 25 routes in Baguio City, Mountain Province, and Kalinga-Cagayan area are served by modernized public utility vehicles (PUVs). Efforts to consolidate at least 5,028 authorized PUV units in the region continues, in order to ensure the convenience and safety of commuters in CAR.<sup>5</sup>

***CAR is among the regions with the highest percentage of LGUs with submitted Local Public Transport Route Plans (LPTRP).*** As of December 2022, 66 LGUs in CAR were able to submit their LPTRPs to the LTFRB, and 10 LGUs were issued notice of compliance. The LPTRPs, a component of the PUVMP, will guide demand-driven identification of transport routes and optimal number of PUV units, resulting to improved intra and inter-LGU connectivity.

***Digital connectivity also continues to be improved with the expanding Regional Government Network (GovNet) and RA 10929 (Free WiFi for All Program).*** The Department of Information and Communications Technology's Free WiFi for All program broadened the region's digital reach by activating 320 WiFi for All sites all

over CAR in 2021. It was also able to put up 72 GovNet sites in Baguio City and La Trinidad which currently host the regional offices of CAR, through the Regional GovNet program. Most of these installations are in the region's urban areas.

***Service delivery in geographically isolated and disadvantaged areas (GIDA) is prioritized.*** Convergence and complementation programs towards equitable access to and delivery of basic services continue to prioritize the 385 GIDA barangays<sup>6</sup> in CAR. Through the Support to Barangay Development Program of the National Task Force to End Local Communist Armed Conflict (NTF-ELCAC), 48 communist terrorist group (CTG) – cleared barangays in Abra, Ifugao, Kalinga and Mountain Province, including GIDA barangays, were recipients of funds for farm to market roads, school buildings, and water and sanitation systems. Also, a total of 2,187 households were served through the Modified Conditional Cash Transfer (MCCT) modality of the Pantawid Pamilyang Pilipino Program (4Ps), which targets GIDAs.

***Preparation of the North Luzon Growth Cluster Strategic Plan harmonizes development thrusts of Regions I, II and CAR.*** In efforts to align development goals and strengthen collaborative development planning between and among neighboring regions, Regions I, II and CAR endorsed the North Luzon Growth Cluster Strategic Plan

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<sup>5</sup>“87 Modern Public Transport units now operating in Cordillera” (gurupress-cordillera.com, updated 9 January 2022).

<sup>6</sup> DOH data (2022)



(NLGCSP) in 2021. A stronger partnership between CAR and its neighbor regions will harness the complementarity of the three regions' offerings and comparative advantages, and ease the identification of

areas of inter-region support, like in exporting CAR products through ports, to which the region has no direct access.

### Sub-strategy 3: Vulnerability Reduction

The last sub-strategy of the 2019-2049 RSDf focuses on reducing vulnerability by minimizing interaction between the general population and areas that need to be protected, and controlling development in environmentally-constrained or disaster-prone areas. This sub-strategy also guides the role of the regional growth centers in reducing the region's vulnerability to disaster through strategic undertakings that secure the safety of settlements, enhance inter-region connectivity, and ensure the sustainable operation of production and value chain processes and availability of infrastructure lifelines during times of disaster.

***Regreening efforts resulted to a 10.34 percent increase in forest cover in 2022.*** The region's forest cover increased between 2017 and 2022 through the National Greening Program, exceeding the program target of 5 percent. This brings the total area reforested to 24,417 hectares. Regular surveillance activities are also conducted to prevent timber poaching and other violations of ENR laws and policies, resulting to 311 cases filed in court. Air quality was also maintained within standard level through enabling policies that include carless day declarations and total ban on fireworks. Meanwhile, water quality of three

water quality management areas in CAR continues to be monitored (More details are in Chapter 16.).

***Vulnerability of CAR to disaster continues to be mitigated through collaborative undertakings.*** The CAR RDC ensured that this remained a regional priority in sustaining the Regional Watershed and Environmental Management Committee and the BLISTT Airshed Council, and organizing the Regional Sub-Committee on Agriculture. As the region experienced major weather-related disasters during the previous term, suffered from the COVID-19 pandemic in 2020, and was affected by the Northern Luzon earthquake in July 2022, strong inter-agency collaboration was demonstrated in CAR with the prompt completion of three RRP that contain regional programs and projects aimed at accelerating economic and social recovery. Other notable initiatives include the institutionalization and full operationalization of Disaster Risk Reduction and Management Offices (DRRMO) in 56 LGUs (2021), mainstreaming of Disaster Risk Reduction and Climate Change Adaptation (DRR-CCA) in the six 2017-2022 Provincial Development and Physical Framework Plans (PDPFP), and completion of relevant studies,

such as the Study on the Urban Carrying Capacity of Baguio City.

The CAR Regional Disaster Response Plan (RDRP) for Earthquakes (2016) provided for the creation of the Engineering and Clearing Management Cluster. The cluster, which is unique to the region, ensures the expedited opening of roads during earthquake-induced landslides. The cluster worked during the July 2022 North Luzon earthquake to facilitate delivery of assistance to affected municipalities. The RDRP for Earthquakes is currently being updated to address gaps that emerged during its implementation in 2022.

***Legislation towards the protection of the region's natural resources were passed.***

Protection of critical habitats in CAR was legislated through Republic Acts 11685 and 11688, declaring Mt. Pulag and Banao,

respectively, as protected landscapes under the National Integrated Protected Areas System (NIPAS). These laws will ensure that use of these areas for economic and leisure purposes are consistent with the principles of biodiversity and sustainable development.

***The declaration of Minahang Bayan in selected mining areas in CAR will help ensure responsible small-scale mining.***

Thirteen Minahang Bayan applications were approved during the previous planning period. The declaration of Minahang Bayan aids in monitoring small scale mining operations and ensuring their compliance to regulations. In addition, 57 mining permits and contracts are currently being monitored by the MGB.

## Challenges

***CAR's limited A&D land continues to result to unsustainable land conversion and encroachment of settlements and institutions on production and protection and hazard-prone areas.***

Lack of A&D land constrains settlements, agriculture, and institutional development in the region, and, combined with the absence of an overarching national land use policy, has led to conflicting land uses and poorly managed conversion of production and protection lands, and encroachment of settlements in hazard-prone areas. Comparing data between 1999 and 2018, built-up areas increased from 15,604

hectares to 23,348.7 hectares, increasing by 407.6 hectares on average yearly, with built-up areas observed to be encroaching on agricultural lands.<sup>7</sup>

While CAR has the lowest population across all regions and has one of the lowest average population growth rates (2020), it is not spared by the increasing demand for housing and food production. As of December 2022, the housing backlog for CAR, while reduced by 19 percent, is still overwhelming at 46,812.

Lack of A&D land has also resulted to and weak land banking among LGUs, which in

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<sup>7</sup> CAR Land Asset Account

turn resulted to lack of resettlement sites during disasters, as in the July 2022 Northern Luzon earthquake, and Typhoon Ompong, which claimed the lives of more than 100 persons in Itogon, Benguet in 2018.

Mineral lands in CAR, particularly in Itogon, Benguet, are being used for settlements, indicative of lack of land for the purpose. To this end, the local government is pursuing the reclassification of abandoned mineral lands in the municipality, to provide security of tenure for their long-term occupants.

***Critical legislative agenda towards better land use management in the region not yet legislated.*** The CAR Regional Development Council (RDC) continued to advocate for the reclassification of non-conforming forest lands<sup>8</sup> into alienable and disposable (A&D) land in CAR and to delineate and protect remaining forest lands for protection, based on DENR's Forest Land Boundary Delineation (FLBD) assessment completed in 2012. However, such proposed policies have not progressed to law.

***Forest fires have resulted to depleted forest cover, negating continuing reforestation efforts.*** A total of 2,344.36 hectares of natural forest, plantations and grasslands in CAR was devastated by forest fires in 2022 alone, mostly in the Province of Benguet (78 percent). The cost of the damage to forest resources during the year was estimated at

Php 57.892 million. Forest fires that naturally occur take place during the dry season usually in the first and fourth quarters of the year, while others are human-induced forest fires resulting from kaingin activities. Forest fire prevention in the region is challenged by lack of fire-fighting tools and equipment, lack of training, and non-involvement of the community.<sup>9</sup>

***Agricultural land was also observed to be expanding and encroaching on forest lands.***

Crop or agricultural land in the region is also expanding, from 228,794 hectares in 1999 to 245,371.9 hectares in 2018, averaging at an increase of 972.5 hectares annually.<sup>10</sup> Forest conversion was observed to be rampant in the region, especially in the highland vegetable-producing provinces of Benguet, Mountain Province, and Ifugao. More than half of the mossy forests of Mt. Data National Park, a watershed serving at least eleven municipalities in the three provinces, had been unsustainably converted to vegetable gardens.

But despite the growing crop lands in CAR, the difficulty of producing food in sloping terrains is evidenced by low agriculture gross value added (GVA) in the region, which continues to shrink in terms of contribution to gross output. In 2021, the GVA of Agriculture, Forestry and Fisheries (AFF) is down to 9 percent of the Gross Regional Domestic Product (GRDP) from 10.1 percent

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<sup>8</sup> Classified as Forest Land but are actually already built-up in actual use

<sup>9</sup> DENR presentation on the Inter-Agency task Group for the Prevention of Fire Incidents and Effects of El

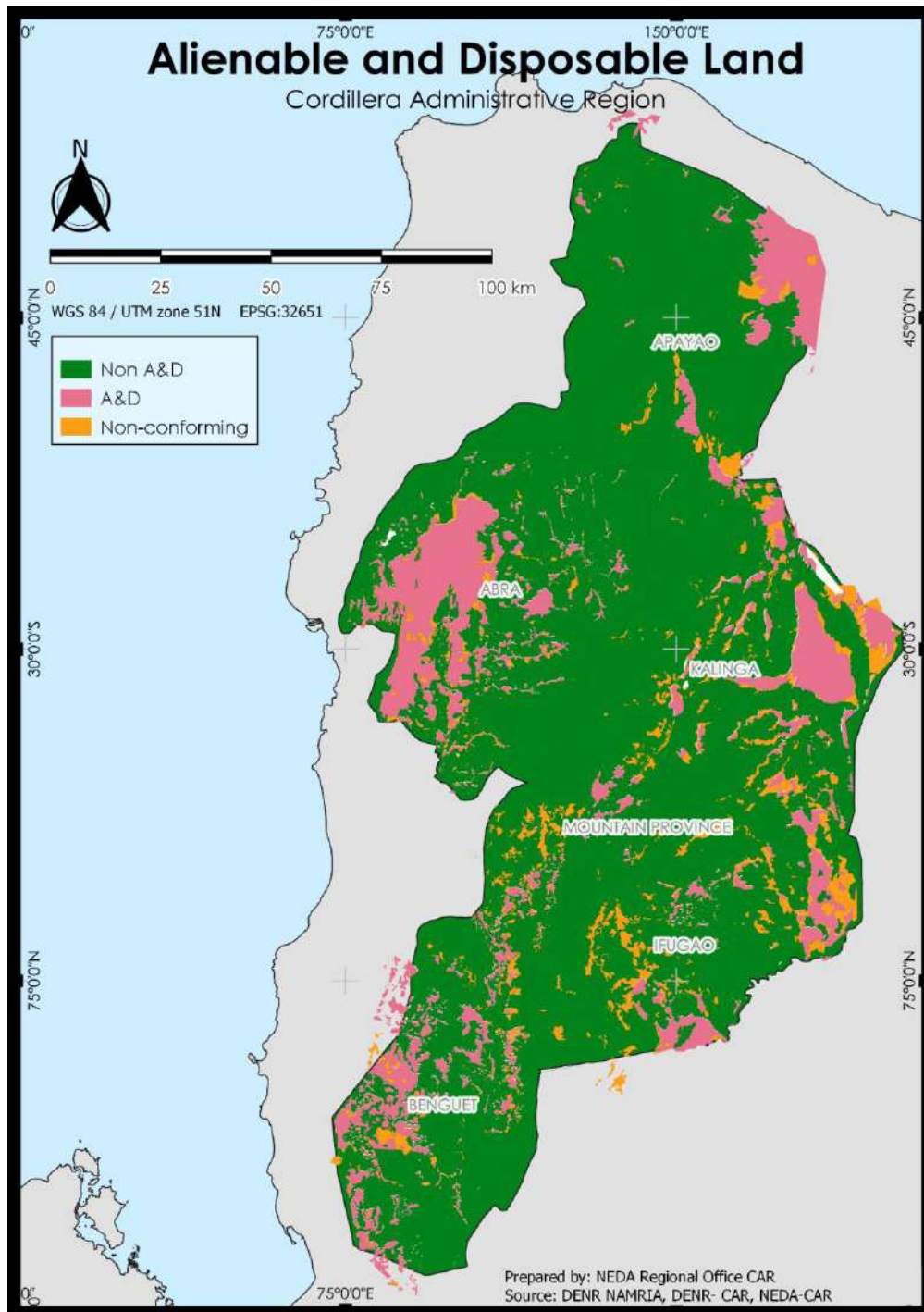
Nino Phenomenon in CAR, CAR RDRRMC Meeting, 23 March 2023

<sup>10</sup> CAR Land Asset Account

at the start of the previous planning period, and 15.2 percent in 2000. (PSA, at 2018 base prices) Map 9 shows the encroachments of agriculture, settlements, and institutions into

forest lands, identified as non-conforming in the FLBD assessment.

Map 9 Non-Conforming Forest Lands Based on the DENR's Forest Land Boundary Delineation Assessment, 2012



***The region's cropland area declined in 2020.*** Despite cropland extending towards forestland, the region's total cropland area was observed to have shrunk by around 47 percent, from 247,213 hectares in 2015 to 133,804 hectares in 2020. About eight percent of the total area in 2015, approximately 19,566 hectares, was converted to built-up areas in 2020. Decreased annual crop production areas also redounded to increased forest cover by around 62,279 hectares.<sup>11</sup> (*More details are in Chapter 6.1.*)

***Economic development remains concentrated in Baguio City and Benguet.*** Economic opportunities and public and private infrastructure investments continue to be concentrated in the Baguio-Benguet area, particularly the BLISTT, while the rest of CAR lag behind. In the 2021 Provincial Product Accounts (PPA), Baguio and Benguet contributed 69 percent of the region's gross output, accounting for 45 and 24 percent, respectively. The concentration of population in the BLISTT, which comprises only 5 percent of the total land area of CAR, but where 644,589, or 36 percent of the region's total population (2020) reside, has resulted to disproportionate volume of business establishments, service facilities, and public and private infrastructure in the area.

Moreover, at the height of the COVID-19 pandemic, it was urban BLISTT that benefitted from food delivery and errand industries, which experienced unprecedented growth when mobility restrictions and

physical distancing were strictly implemented. Baguio City also accounts for an average of 75 percent of annual tourist arrivals in the region. Lack of access to income opportunities and essential services factored in the relatively higher poverty incidences in rural provinces in 2021, except for Apayao, which fared better than all CAR provinces during the period, despite it being the most rural province in CAR in terms of urban population. Baguio City has the lowest poverty incidence among population regionwide at 1.7 percent, an improvement from 2.3 percent in 2018 despite halted economic activity due to the COVID-19 pandemic.

***The region's mountainous topography and landlocked nature limit its physical connectivity options.*** The region's topography limits widening and expansion of narrow roads, and the presence of critical watersheds hinders the development of alternate routes that will connect remote areas in CAR to major road networks. Added to this, road projects are delayed by road right of way problems.

Furthermore, while the Baguio City airport has recently provided access to the region through air, CAR, being a landlocked region, remains disadvantaged compared to other regions that can conduct international trade through ports, and have access to the country's marine resources. The Cities and Municipalities Competitiveness Index (CMCI) also recognizes distance to ports as

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<sup>11</sup> National Agriculture and Fisheries Modernization and Industrialization Plan (NAFMIP) 2021-2030

one indicator for competitiveness under its Infrastructure Pillar, and most CAR LGUs understandably score low in this indicator.

***Development of disaster-resilient infrastructure is more challenging in mountainous CAR.*** Completing physical infrastructure projects in CAR that will weather challenges that come with its mountainous landscape entail more resources, as slope stabilization technologies and other erosion-mitigating measures need to be intrinsic in project designs. In line with this, issues related to CAR's terrain that are commonly reported to the Regional Project Monitoring Committee (RPMC) include use of inappropriate (slope protection) technologies, higher hauling or delivery costs, difficulty of access to project sites, and construction of government buildings in landslide-prone areas. The region's topography also challenges physical accessibility during disasters, as roads along mountainsides are commonly eroded or blocked by landslides.

***Acceptance of the PUVMP among stakeholders in the public transport sector is low.*** Concerns on the ability of existing modernized PUVs to navigate the region's challenging terrains hinder the implementation of the PUVMP in the region. Also, the conventional e-jeepney being promoted as a mitigation measure against the impacts of climate change needs to be modified to be suitable for mountain roads.<sup>12</sup>

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<sup>12</sup> "E-jeepneys, e-cars, can't run in Baguio, Cordillera yet" (inqmobility.com, 1 December 2022)

***Urban infrastructure in CAR remains inadequate.*** The inadequacy of urban infrastructure facilities, such as water supply, sewerage and drainage, solid and liquid waste management, and health and education facilities, have also resulted from poor regional connectivity and lack of land suited for the purpose. Also, with information, communication and technology (ICT) operating on demand, many of the region's sparsely populated barangays suffer from lack of ICT services.

***Ancestral domain boundaries compound problems on encroachment, project implementation, and political boundary and land use conflict in CAR.*** Overlaps in land use and political boundaries in CAR are further complicated by the character of the region as an ancestral domain area. Claims over lands purported to be part of ancestral domains have stalled development projects in CAR, as in the case of the proposed run-of-hydroelectric power project utilizing water from Amburayan River in Kapangan, Benguet,<sup>13</sup> proposed expansion of the Baguio City Economic Zone, and a number of road and school building projects. Some claimants have also been issued titles that are later disputed in the courts, as in the titles issued by the NCIP covering parcels of land in Session Road, Baguio City, that were nullified

<sup>13</sup> G.R. No. 208538 (Amburayan Ancestral Land Owners' Association v. Cordillera Hydro Electric Power Corporation, 7 September 2022)

by the Supreme Court in 2019.<sup>14</sup> Also, while planning guidelines recently implemented by the DHSUD strengthens integration of Ancestral Domain Sustainable Development and Protection Plans (ADSDPP) in local plans, 70 of the 149 ancestral domains in CAR

still need to formulate their ADSDPP. In light of the complications resulting from conflicts between existing land use laws, including RA 8371, the passage of a harmonizing land use law remains compelling.

## Targets

Table 5 CAR Regional Spatial Development Targets 2023-2028

Outcome Indicators	Baseline		Targets							Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	EOP	
<b>Alignment of spatial plans with the thrusts of the 2023-2028 Philippine and CAR Regional Development Plans</b>										
RFPF updated	2022	0/1			1				1	RLUC
Number of DRR-CCA enhanced PDPFPs updated	2022	5/6		6					6	LGUs, RLUC
Number of CLUPs updated	2022	59/77							77	LGUs, DHSUD, DILG for all CAR cities and municipalities; RLUC for Baguio City only
Number of ADSDPPs integrated in local plans	2022	0			50%				75%	LGUs, DHSUD, NCIP, RLUC
<b>Benefits associated with concentration and urbanization leveraged</b>										
<i>Targets for development of settlements and production (agriculture, industry, services) are in Chapters 7, 8, 9</i>										
<b>Mobility and digital connectivity increased</b>										
<i>Targets for physical (roads) and digital (virtual) connectivity are in Chapter 13</i>										

<sup>14</sup> G.R. No. 208480 (RP vs. NCIP Register of Deeds - Baguio City, LRA, heirs of Cosen Piraso, heirs of Josephine Molintas Abanag, 25 September 2019)

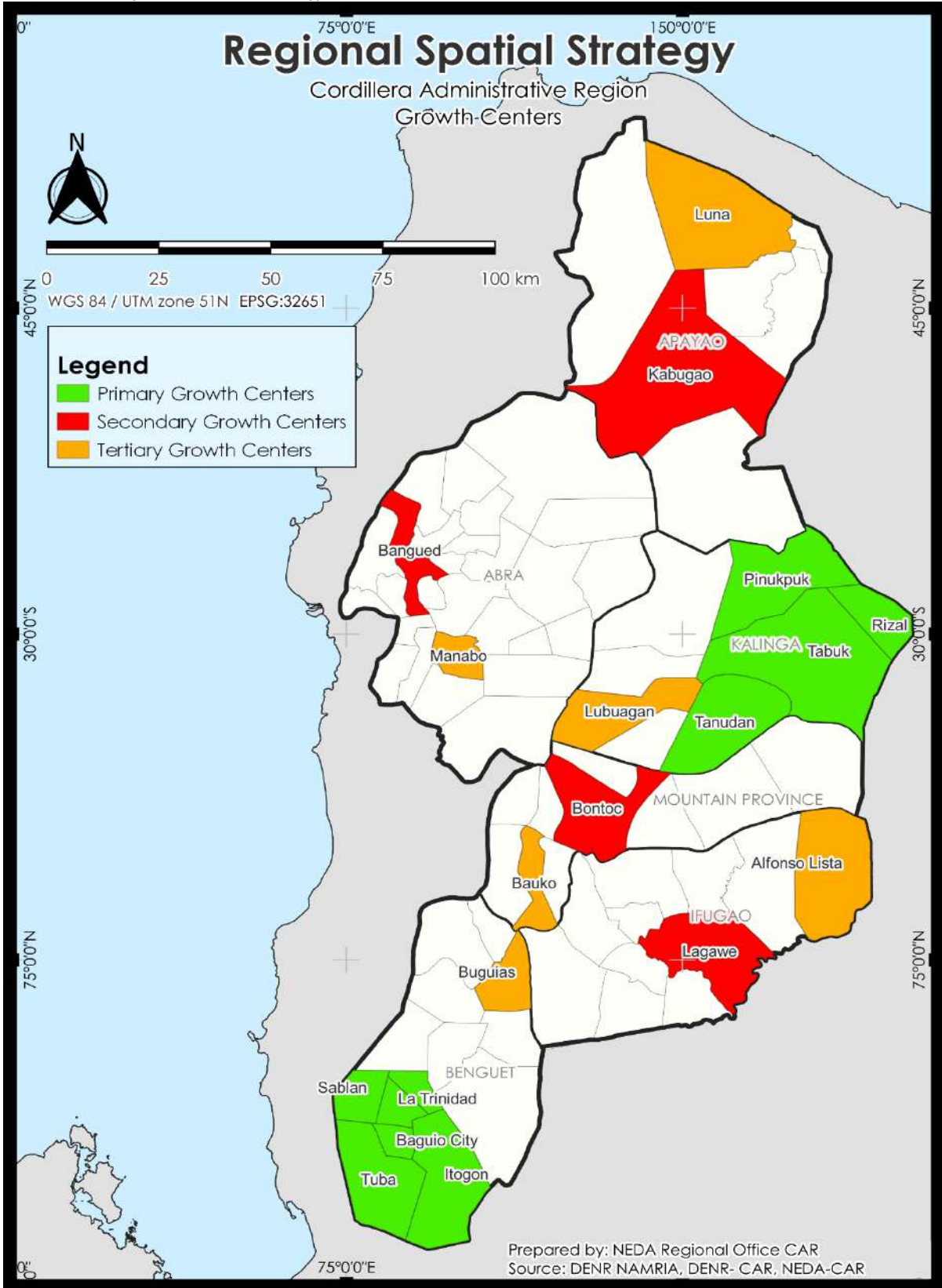
Outcome Indicators	Baseline		Targets							Lead Agency	
	Year	Value	2023	2024	2025	2026	2027	2028	EOP		
Number of LPTRPs with notice of compliance	2022	4/83								83	
<b>Vulnerability reduction measures integrated to programs and projects maximizing hierarchy of settlements and enhancing connectivity</b>											
<i>Targets for vulnerability reduction through climate change mitigating and resiliency-enhancing measures are in Chapters 16</i>											

## Strategy Framework

The 2019-2049 Cordillera Regional Spatial Development Framework (RSDF) serves as a blueprint for integrating physical and sectoral development in CAR. The RSDF, which is aligned with the National Spatial Strategy and the 2015-2045 Luzon Spatial Development Framework, espouses the sub-strategies of concentration, connectivity, and vulnerability reduction in ensuring sustainable and efficient management of land resources through the four land uses of settlements, production, protection, and infrastructure. It is also anchored on the region’s six development goals and the aspirations captured by AmBisyon 2040.



Map 10 CAR Regional Spatial Strategy



The RSDF builds on the 2004-2034 Regional Physical Framework Plan (RPF), by enhancing the regional spatial strategy into the “North and South Clusters Plus,” that retains the Eastern Kalinga Growth Center (EKGC) and Baguio – La Trinidad – Itogon – Sablan – Tuba – Tublay (BLISTT) as the region’s two primary growth centers, and introduces secondary (capital towns) and tertiary growth centers that will facilitate

dispersed and equitable growth in CAR. The BLISTT serves as the regional center for industry, commerce, and services, the tourism gateway of CAR, and host to the regional government offices pending the creation of the Autonomous Region of the Cordillera (ARC), while the EKGC functions as the regional agro-industrial center.

## **Benefits associated with concentration and urbanization leveraged**

*Adopt the concentration strategies in the 2019-2049 RSDF.* The 2019-2049 RSDF sets forth strategies that will promote development based on the proposed hierarchy of settlements that maximizes the potentials for innovation and economies of scale in high-density areas, and assigns significant roles to low-density but strategically positioned settlement clusters. These include alignment of economic activities according to the suggested roles of the growth centers; redevelopment of existing urban central areas; pursuit of science, technology, and innovation (STI) endeavors towards efficient use of resources, and; consideration of the development areas’ urban carrying capacities. These strategies, if employed, will ensure efficient planning and location of key programs and projects that will stimulate growth in all areas of CAR and optimally distribute basic services, and allow programming of hazard vulnerability mitigation measures (See discussion in Chapters 4.3, 6.1, 8, 9, and 11).

*Pursue the passage of legislation that will increase A&D land in CAR at sustainable levels.* The FLBD assessment completed in 2012 that proposes the reclassification of 104,621.12 hectares of forest land to A&D land underwent rigorous review that took into account geohazard susceptibility, slope, and existing proclamations, resulting to the approval of only 17,651.82 hectares, or 17 percent of the total forest land proposed. Despite the significant reduction, pursuit of reclassification will still redound to increased A&D land in CAR for settlements, agriculture, and institutional development. One other option that may be considered is the exemption of other CAR provinces to PD 705, which restricts A&D land to areas with slope of less than 18 percent, from which Benguet is exempted through PD 1998.

*Ease mainstreaming of sectoral concerns, including DRR-CCA and gender and development, in physical plans, through an updated set of plan formulation guidelines.* The updating of guidelines for the

formulation of physical plans is necessary, especially with the creation of the DHSUD, which is mandated to oversee settlements and urban development. An updated set of guidelines that also harmonizes guidelines for the mainstreaming of sector-specific concerns into local physical plans will facilitate their integration and ensure alignment of their thrusts. The region may also need to pursue the formulation of localized guidelines that will take account the region's needs and characteristics, while adhering to standards and requirements set at the national level, as well as the 2023-2028 PDP's thrusts.

***Prioritize development of secondary and tertiary growth centers and areas with increasing density.*** In order to pursue settlements development in the identified secondary and tertiary growth centers in CAR, economic opportunities, accessibility, the availability and affordability of essential goods and services, and quality of life need to be assured (See discussion in Chapter 4.3). This will also encourage settlements in areas where land is available but underutilized. The roles in provincial and regional development of municipalities not identified as growth centers, but exhibiting higher population and population density growth, may also need to be highlighted or expanded, especially in opening economic opportunities and bringing services closer to the remotest parts of CAR. These include the Tayum – Dolores – La Paz – San Juan cluster in Abra northeast of the provincial capital, and Bucay, Abra adjacent to Manabo, the tertiary growth center; Flora and Conner, Apayao, whose

population densities exceed that of the provincial capital and the tertiary growth center of Luna; the mining town of Mankayan, Benguet and Lamut, Ifugao, bordering Regions I and II, respectively; and the PANABA (Paracelis, Natonin, Barlig) cluster identified as the agro-industrial development area of Mountain Province. It may also be necessary to assess the performance of the secondary and tertiary growth centers to identify measures that will harness their advantages and potentials as key contributors to economic and social transformation towards regional development.

***Strengthen the EKGCC as the primary regional growth center north of CAR.*** Stronger regional growth centers apart from the BLISTT will disperse regional development, especially in far-flung areas in CAR. The EKGCC in particular leads the region in terms of agro-industry, and enjoys other advantages, including Kalinga's declaration as a Tourism Development Area through RA 10561. While Baguio City has long been the region's center of government, the EKGCC is also poised to take on the role of the regional government center with the creation of the Autonomous Region of the Cordilleras.

***Adopt the strategies in the National Agriculture and Fisheries Modernization and Industrialization Plan (NAFMIP) 2021-2030.*** The plan outlines transformative strategies that will maximize the regions' advantages in terms of agricultural production and enhance its integration into

value chains. The plan proposes commodity systems for possible adoption that take into account the region's geographic location, topography, and climate (See discussion in Chapter 6.1).

***Support the MBLISTTDA in accelerating development of the BLISTT and the Province of Benguet.*** RA 11932 creates the MBLISTTDA shall implement high-impact area-wide projects that will benefit not only the BLISTT city and municipalities and the Province of Benguet, but possibly the whole of CAR, especially the adjacent provinces of Ifugao and Mountain Province. The

development authority, which will operate directly under the Office of the President, is a potential partner of the CAR RDC in facilitating regional development, by reinforcing the BLISTT's strengths in the areas of innovation, health, education, and tourism, playing on its advantages of physical and digital connectivity and availability of essential services, and cascading good practices to the rest of CAR. The MBLISTTDA shall also put CAR on the map as one of only a handful of regions with an inter-local development authority, and provide a sustainable model for inter-local cooperation.

## Mobility and digital connectivity increased

***Adopt the connectivity strategies in the 2019-2049 RSDF.*** The connectivity strategies in the 2019-2049 RSDF include completion of the Cordillera Roads Improvement Project (CRIP), development of alternative modes of transportation that will work with the region's topography, establishment and upgrading of airports and ICT infrastructure, pursuit of research and development on design of disaster-resilient infrastructure, and higher private sector engagement (See discussion in Chapter 13). The connectivity strategies also promote public access to goods and services, especially of geographically isolated municipalities, linkages of production areas to markets, and access to tourist destinations.

***Pursue modernization of the Baguio City Airport.*** The region's lone airport offers and alternative access to landlocked CAR, but will

need to be modernized in order for its utility to be maximized, and to ensure flight safety, as well as the safety of residents in its peripherals. Modernization may also result to the opening of flights to more destinations aside from Cebu City that will lead to better tourist access and increased investments.

***Ensure completion and implementation of the Local Public Transport Route Plans (LPTRP) of CAR LGUs.*** CAR needs to aim for 100 percent compliance of its LGUs' LPTRPs towards enhancing regional connectivity and commuter mobility, through the availability of public transportation where it is most needed.

***Ensure availability of PUV models that are suitable to the region's terrain.*** While there are four classes of modernized vehicles to choose from, only the Class 4 modernized

vehicle, which is shorter, is suited to the sharp curves of the region's roads.<sup>15</sup> Concerns on its availability needs to be allayed to encourage acceptance by and consolidation of the CAR's public transport sector.

***Pioneer transit-oriented development.*** CAR, with its unique topography and accessibility challenges, is ripe for innovations that will enhance mobility through alternative or unconventional means, including transit-oriented development (TOD), which

promotes pedestrian mobility, energy-efficient communities, and reduced dependence on private vehicles. The promotion of walkable communities, which will be complemented by the region's scenic topography and the cool climate of the uplands, will also help address congestion in urban BLISTT and climate change, as well as pave the way towards transforming living spaces to cater to an aging population.

## **Vulnerability reduction measures integrated to programs and projects maximizing hierarchy of settlements and enhancing connectivity**

***Adopt the vulnerability reduction strategies in the 2019-2049 RSDF.*** The RSDF's vulnerability reduction strategy mainstreams disaster resilience in settlements and infrastructure development, and promotes a collaborative and ridge-to-reef approach in watershed management and protection through whole of society engagement and inter-region cooperation. Strategies in this area include strengthening of institutional capacities; promotion of sustainable integrated development and inter-regional collaboration in the preservation of watershed areas; improvement of land, air and water quality, and; implementation of measures to mitigate incidence of soil erosion, degradation, or denudation (See discussion in Chapter 16).

***Strengthen advocacy and implementation of the Principles of Environmental Governance.*** The Declaration of Principles on Environmental Governance (DPEG) signed in 2014 embodies CAR's aspirations towards regional development that does not compromise environmental integrity. The DPEG aligns with strategies towards accelerating climate action and strengthening disaster resilience in CAR, while it continues to pursue its development goals and perform its role as the "Watershed Cradle of the North" (See discussion in Chapter 16). Advocacy on the DPEG will ensure that it is considered in local plans, and that Cordilleran traditional culture and values are upheld in guiding the use and management of the region's natural resources.

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<sup>15</sup> "LTO admits difficulty of consolidation in Cordillera" ([baguioheraldexpressonline.com](http://baguioheraldexpressonline.com), 21 December 2019)

***Leverage indigenous knowledge systems and practices (IKSP) in forest conservation efforts, including forest fire prevention.*** The region continues to benefit from community-based forest management practices towards forest conservation, protection and management that have been sustained by the different indigenous communities, such as the lapat in Abra and Apayao, and muyong in Ifugao. Integration of these practices in government and private sector programs will assure greater community participation towards this end (See Chapters 16 and 17 for further details).

***Explore and develop the region's potentials for renewable energy.*** With the looming energy crisis in the coming years, development of renewable energy sources has emerged at the forefront of national priorities. CAR, as the watershed cradle of the north,

only produces 5 percent of its potential 3,600 megawatts of electricity through hydropower alone<sup>16</sup>. Solar, wind and geothermal energy production can also be sourced from the region. One initial endeavor towards harnessing the potentials of CAR in this area is the proposed establishment of a waste to energy facility in the BLISTT, which has earned the interest of big-ticket investors (See Chapter 13 for further details).

***Pursue payment for environmental services (PES).*** CAR, as the watershed cradle of the north, supplies water to other regions through its thirteen major river basins, but inter-region efforts to conserve its watersheds remain wanting, and use of its water resources in particular is not compensated. The PES may be a fund source for watershed preservation, as well as development projects that will benefit host communities.

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<sup>16</sup> Direction Setting of Governor Elias C. Bulut, Jr., RDC-CAR Chairperson (9 December 2022)

# Legislative Agenda

Regional development cannot move forward without addressing persisting land use issues and conflicts in CAR, which have implications on its role as the watershed cradle of the north and the protection of the rights of its predominantly indigenous population. CAR needs enabling laws and policies that will address challenges peculiar to the region and guide efficient and sustainable management of its land resources.

**Table 6 Cordillera Regional Spatial Development Framework Legislative Agenda**

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>National Land Use Act</b>	The CAR RDC supports the enactment of a National Land Use Act (NaLUA) that considers CAR's unique concerns, particularly on slope and ancestral domains, and resolves conflicts between land use laws that affect CAR more than other regions by virtue of its topography and indigenous population.	NLUC/ Congress
<b>Regional Autonomy</b>	Regional autonomy will allow CAR to benefit from extractive industries that use its land and other natural resources, improve implementation of disaster-resilient infrastructure projects, and better manage land use in the region.	CAR congressmen, RDC
<b>Reclassification of Non-Conforming Forest Lands to A&amp;D Based on the FLBD Assessment</b>	Reclassification of the forest lands approved in the FLBD assessment completed in 2012 will prevent further encroachment in forest lands.	CAR Congressmen
<b>Exemption of other CAR provinces to PD 705</b>	CAR provinces, all of which are mostly composed of land with slope of 18 percent and above, will benefit from the exemption to PD 705 enjoyed by Benguet and Cebu through PD 1998. This exemption will allow development in more areas in the region.	Congressmen of Abra, Apayao, Ifugao, Kalinga, Mountain Province, RDC
<b>Institutionalization of Payment for Environmental Services (PES)</b>	CAR will benefit from sharing its resources to other regions by receiving PES, which may be used for watershed conservation and development programs.	CAR congressmen, RDC





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## Overview of the RDP 2023-2028 Strategy Framework





### Chapter 3

# 3 Overview of the RDP 2023-2028 Strategy Framework

The regional framework largely adopts the Philippine Development Plan (PDP) strategy framework which takes off from the Marcos administration’s 8-point Socioeconomic Agenda seeking to reinvigorate job creation and accelerate poverty reduction while addressing the issues brought to light by the COVID-19 pandemic.

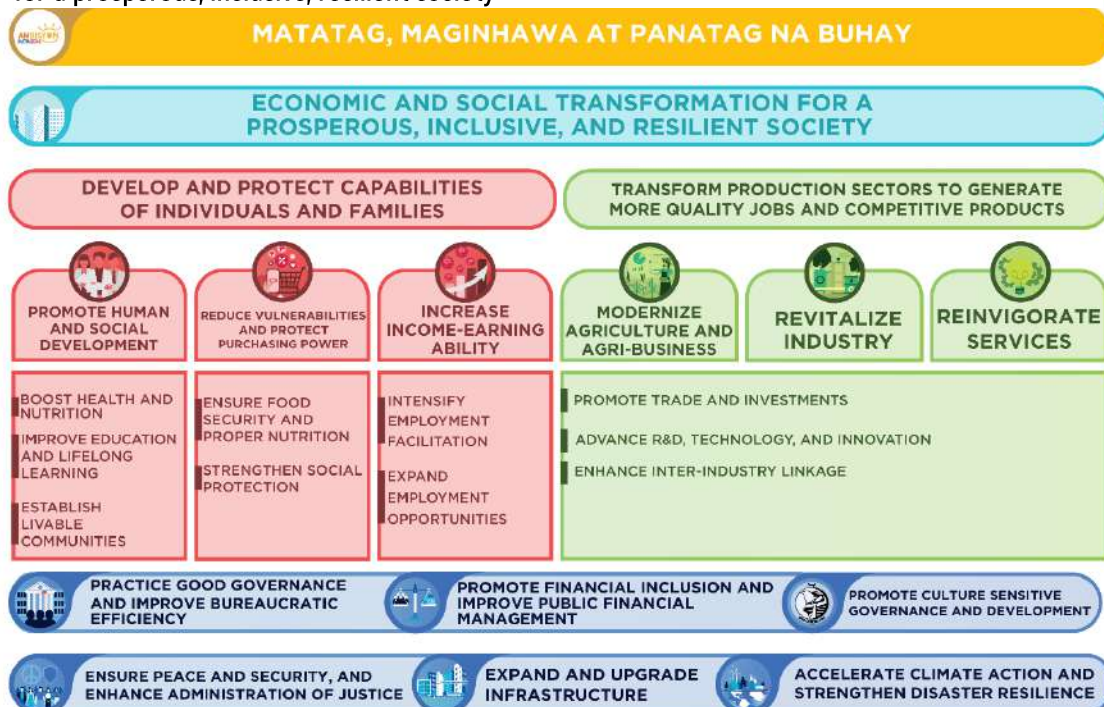
Reflective of the national thrust, RDP strategies are geared towards helping bring the country to its high growth path and begin economic transformation for a prosperous, inclusive, and resilient Cordillera. This transformation is in line with the Sustainable Development Goals and critical for achieving the country’s long-term vision of providing a “matatag, maginhawa at panatag na buhay para sa lahat”.

## CAR Development Vision

*“We, the people of the Cordillera, proud of our culture and heritage rooted in spirituality shall have a truly autonomous region of a united, enlightened and empowered citizenry who shall pursue sustainable development where responsibilities and benefits are shared by all.”*

## Regional Development Outcomes

Figure 8 Cordillera Regional Strategy Framework to achieve Economic and Social Transformation for a prosperous, inclusive, resilient society



In line with the national development thrust, the overarching goal of the Cordillera Regional Development Plan 2023-2028 is economic transformation for a prosperous, inclusive, and resilient Cordillera. The medium-term Plan shall facilitate the attainment of the long-term collective vision of a strongly rooted, comfortable, and secure life by 2040.

### **The focus is on individuals and families...**

Capabilities of individuals and families shall be developed through promoting human and social development under the key sectors of education, health, and housing; reducing vulnerabilities and protecting purchasing power as the region recovers from the pandemic and the recent surge in commodity prices; and increasing income-earning ability to facilitate inclusive growth.

***Promote Human Capital and Social Development.*** Health and nutrition will be boosted (Chapter 4.1). Learning from the COVID-19 pandemic, access to efficient and quality health care and strengthening health systems especially among local government units (LGUs) are adopted as strategies. Mental health in basic health services shall be emphasized. Healthy choices and behavior will be promoted through relevant policy push and health literacy initiatives. Nutrition across all ages will be improved through strengthened nutrition governance especially in LGUs.

Education and lifelong learning will be improved (Chapter 4.2). Basic education shall be made adoptive, inclusive, quality, and

Strategies are organized corresponding to the sectoral outcomes namely: (i) develop and protect capabilities of individuals and families, (ii) transform production sectors to generate more quality jobs and competitive products, and (iii) foster an enabling environment encompassing institutions and physical and natural environment that promotes the overall Plan outcome.

future-ready as higher education shall be made globally competitive. Catch-up programs shall be developed and implemented to address learning losses. The trifocalized structure of education in the region which involves the DepEd, TESDA, and CHED shall be harmonized to support learners advance towards industry immersion and employment.

Livable communities will be established (Chapter 4.3). The region aims to plan and upgrade human settlements to promote human wellbeing and contribute to the community's economic vitality while taking into consideration the preservation of the environment. The unique topography of the region is taken into consideration in providing communities equitable and integrated access to necessities of life including housing, transport, resettlements, social services, and green spaces.

***Increase Income Earning Ability.*** Employment facilitation will be intensified and employment opportunities will be expanded (Chapter 5). Access to employment

opportunities and facilities for upskilling shall be increased through government policies that support emerging trends such as digital careers and green industries. Training and education shall be aligned with international standards to ensure employability of the workforce locally and abroad. Mechanisms shall be enhanced to ensure inclusive participation and equitable access to education and skills development programs especially for women, youth, migrants, marginalized, and vulnerable sectors. Labor information systems, and employment facilitation services shall be strengthened and integrated to improve the capacity of relevant government instrumentalities in providing assistance and information to jobseekers.

**Protect Purchasing Power.** Food security will be ensured (Chapter 6.1). Food inflation in the region challenges the administration's priority of ensuring food security. To address this, the region will diversify food supply sources, strengthen buffer stocking in preparation for emergencies, optimize digital platforms for the marketing and delivery of food, and proactively monitor the supply and demand for key commodities.

Social protection will be strengthened (Chapter 6.2). There will be focus on strengthening the implementation of and/or support to the government's social protection policies at the regional and local levels. Digital transformation of the social protection system shall also be sought as the Plan envisions access of all Cordillerans to programs covering all types of risks in their lifetime.

### **The production sectors will be transformed...**

More quality jobs (i.e., high-quality, high-skill, and stable) and competitive products shall be generated through the transformation of the production sectors. This particular sectoral outcome is crucial in the region to maximize its demographic window of opportunity where a greater proportion of the adult population are in the labor force and less segments of the population are dependent.

Agriculture and agribusiness will be modernized (Chapter 7). The role of agriculture in development is significant in CAR where almost a third of the labor force are skilled agricultural, forestry, and fishing

(AFF) workers. The region shall maximize its advantage in the production of temperate vegetable crops by enhancing productivity, expanding access of AFF-based enterprises to markets, and improving the resiliency of AFF value chains. To ensure the competitiveness of Cordillera products in the local, domestic and export markets, agricultural labor and land productivity as well as food safety and quality standards shall be improved. These must be coupled with the improvement of agriculture physical and digital infrastructure support facilities to provide an enabling environment for farmers and fisherfolk towards the modernization of the region's agri-fisheries sector.

Industry will be revitalized (Chapter 8). This can be achieved through the three-fold outcome of expanding market production and supplier base, moving up the value chain, and enhancing inter-sectoral linkages. Priority actions for implementation in the region include updating of the Regional Micro, Small, and Medium Enterprises Development Plan, promotion of Regional Inclusive Innovation Center, and strengthening partnerships amongst government agencies, and with the private sector, in regulating small- and large-scale mining, enhancing the CONSUMERNET, and formulating the successor CAR Investment Priorities Plan. The Plan shall lay the groundwork for the region to gradually shift to Industry 4.0.

Services will be reinvigorated (Chapter 9). The region's services sector shall be improved through the provision of higher value-adding and differentiated services enabled by market expansion and digital transformation by both private and public institutions. A dynamic ecosystem of technology, talent and skills development, intellectual property rights protection, and competition for creativity and innovation, and strong public-private-social partnership shall also be pursued.

### **An enabling environment shall be fostered to facilitate transformation...**

The transformation agenda of the RDP shall be enabled by facilitative institutions and physical and natural environment. Several bedrock strategies are identified in the RDP

Research, Development, Technology, and Innovation will be advanced (Chapter 10). The COVID-19 pandemic accelerated innovations across key sectors in health, education, and industry. CAR shall continue on strengthening R&D and knowledge creation, improving innovation infrastructure in the region, and scaling-up technology adoption, utilization and commercialization while ensuring that R&D outputs are responsive to the needs of its users. These shall foster the region's innovation ecosystem that will entice entry of new enterprises and industries, create more quality jobs, accelerate poverty reduction, and improve the overall quality of life.

Trade and Investments will be promoted (Chapter 11). Promoting trade and investments in goods and services is imperative to improve product quality through innovation. This enhances competitiveness in the export industry and allows the region to reap the benefits from the opportunities of the Global Value Chain (GVC) and Foreign Direct Investments (FDIs).

such as the region's overarching development goal of regional autonomy.

***Promote Financial Inclusion and Improve Public Financial Management*** (Chapter 12).

Strategies to expand the access of Cordillerans to a wide array of financial services and products shall be enabled to address inequality and financial shocks. With full devolution, local government units shall be capacitated on revenue generation and budgeting processes to maximize and expand their financial resources. Sustainable development in the sector shall be advocated through the implementation of appropriate tax regime for extractive industries and pollution and institutionalizing Payment for Environmental Services (PES) in CAR.

***Expand and Upgrade Infrastructure***

(Chapter 13). CAR aims to contribute to national growth by focusing on developing its energy and water resource potentials. The region is envisioned to become the renewable energy powerhouse of the North. Network of high standard roads that incorporates sustainable design, suitable for the mountainous terrain of the region shall be broadened. Individuals shall be provided with easy access to efficient, high-speed and reliable broadband connectivity and households shall have access to clean and safe water with adequate treatment facility and sanitation services. Resilient and modern social infrastructure facilities shall be made accessible to all Cordillerans.

***Ensure Peace and Security and Enhance Administration of Justice*** (Chapter 14).

Transformative growth cannot be sustained without ensuring lasting peace and security. The gains of the Cordillera region in

advancing peace and security will be sustained. The efficient administration of justice will be enhanced including the advocacy on the recognition of courts of the indigenous practice of settling disputes as alternative resolution.

***Practice Good Governance and Bureaucratic Efficiency*** (Chapter 15).

The desired future of governance in the region is characterized by meaningful participation of the governed as well as transparency and accountability of the government. It is also characterized by an efficient bureaucracy that is rational, fast, and adaptive to risks supported by competent, motivated, agile, and resilient public servants.

***Accelerate Climate Action and Strengthen Disaster Resilience*** (Chapter 16).

By 2028, communities, institutions, and natural and built environment in the Cordillera are more resilient to the impacts of natural hazards and climate change. The government will strengthen cross-sectoral convergence and implement a comprehensive risk management approach to reduce vulnerabilities to climate change across different sectors. As the Watershed Cradle of North Philippines, the Cordillera will continue to accelerate the rehabilitation and protection of natural resources to sustain the provision of ecosystem goods and services. Green economy will be promoted and developed to optimize contribution to livelihood and employment generation while improving environmental and social well-being.

**Promote Culture Sensitive Governance and Development** (Chapter 17). Cordillera’s priority cultural agenda include respecting, recognizing and valuing its diverse culture, advancing indigenous innovation and creativity, inculcating values for the common good, and strengthening culture-sensitive governance and development in the region.

Regional autonomy is pursued as a strategy to enhance Cordillera identity, effect responsive policies for the region and attain progress for all Cordillerans. CAR intends to take the lead in advocating and promoting the important role of indigenous peoples in nation building, and in promoting environmental protection and cultural diversity as sound development strategies towards transformative growth.

## Regional Headline Targets

Table 7 Regional Headline Targets

Indicator	2022	2023	2024	2025 (Midterm)	2026	2027	2028 (EoP)
GRDP	5.0-6.0	5.0-6.0	5.5-7.0	5.5-7.0	5.5-7.0	5.5-7.0	5.5-7.0
Unemployment Rate	5.0	5.0	5.0	4.5	4.5	4.5	4.5
Percentage of wage and salaried workers in private establishments to total employment	37.5-38.0	38.0-38.5	38.5-39.0	39.0-40.0	40.0-41.0	41.0-42.0	41.0-43.0
Food inflation	5.9 (baseline)	2.5-4.5	2.0-4.0	2.0-4.0	2.0-4.0	2.0-4.0	2.0-4.0
Poverty incidence among population		8.0-8.3		5.6-6.0		5.6-6.0	5.6-6.0



The achievement of the Plan outcome rests on the attainment of key short-term and medium-term macroeconomic targets<sup>17</sup> over the next six years. The headline targets prioritize poverty reduction and inclusive growth as the region recovers from pandemic and disaster losses.

***Spur economic growth in the region towards End-of-Plan.*** CAR posted the second highest economic growth rate in the country in 2021, recovering from its 10.2 percent contraction in 2020 at the height of the COVID-19 pandemic. After the growth surge in 2021 due to increased consumer confidence and government financial and fiscal policy adjustments, the growth rate is assumed to taper down over the short-term with global supply chain challenges and uncertain consumer behavior. Thereafter, the regional economy is expected to be reinvigorated as the administration moves towards its medium-term priorities and as the region regains its pre-pandemic growth trajectory with the transition towards a fully reopened economy. The regional economy will still continue to recover from the pandemic and the July 2022 Magnitude 7.0 Northwestern Luzon earthquake in the short-term.

***Maintain the low level of unemployment in the region through sustained job creation and reinvigoration.*** From 2017 to 2019, unemployment rate in CAR had been on average 4.1 percent. Based on this performance, the region projects

unemployment rate to be at its peak at 5 percent, and to go down to its pre-pandemic levels towards end-of-plan. This is supported by the current administration's thrust towards job creation over the medium-term which the Plan adopted under the strategy on increasing income-earning ability. While unemployment remains low, the region shall pursue measures to ensure better quality jobs to similarly reduce underemployment and jobs-skill mismatch. This is to maximize the region's attainment of the demographic dividend.

***Keep food prices low and stable.*** Average food inflation in CAR from 2016 to 2021 was 3.08 percent which is within the 2.0-4.0 percent national target. However, recent challenges such as the surge in global oil prices and supply bottlenecks can drive higher food inflation which is expected to affect the region in the short-term. The administration's focus on agriculture can ease food inflation especially over the medium-term until end-of-plan.

***Improve percentage of wage and salaried workers in private establishments to total employment.*** As the regional economy re-opens, the region's workforce is expected to shift to wage and salary workers in private establishments especially as the industry and services sectors pick up. Over the medium term, the administration's focus on job creation will encourage more salaried workers as unpaid family workers especially

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<sup>17</sup> Growth rate based forecasting was used to approximate the annual performance of the region for select headline indicators. Forecasted values were adjusted based on past actual performances, recent

events, and assumed probable scenarios that could affect the region's attainment of targets. The annual targets are also based on the national end-of-Plan targets and previous regional targets.

those engaged in the agriculture sector in CAR wanes.

***Reduce poverty incidence to 6 percent by 2028.*** CAR was able to sustain its decrease in poverty incidence even with the lockdowns and loss of jobs during the height of COVID-19. As the GRDP growth rate is targeted to increase in the next six years, poverty incidence in the region is likely to lower further to 6 percent by end-of-Plan.

Well-targeted and strengthened social protection programs shall also help towards the attainment of this target strengthened by the administration's thrust towards more quality jobs over the medium-term. With full devolution, LGUs are expected to prioritize social development services.

PART II

**Develop and  
Protect  
Capabilities  
of  
Individuals  
and Families**



# 04

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## Promote Human Capital and Social Development

- 4.1 Boost Health and Nutrition**
- 4.2 Improve Education and Lifelong Learning**
- 4.3 Establish Livable Communities**



## Chapter 4.1

# 4.1 Boost Health

The region envisions every Cordilleran having access to quality, efficient, and improved health service delivery through increased health awareness and strengthened health systems. This is enabled by responsive health policies and programs and adequate health care and social workers who are committed, fairly compensated and given opportunities for professional development in healthy working environment.

## Assessment and Challenges

The COVID-19 eroded many of the gains in key health outcomes; created substantial scarring with both immediate and longer-term effects; and exacerbated existing fundamental social inequalities due to fragmented and inequitable service delivery systems, hampered information flows, and data analysis, healthcare financing, and governance.

***Child and maternal health outcomes deteriorated.*** The neonatal mortality rate increased from 5.53 percent in 2016 to 7.37 percent in 2021. Mortality rate among infants increased from 8.47 per 1,000 live births (LB) in 2016 to 10.54 in 2021. Meanwhile, mortality among children under-five also increased from 10.99 to 13.27 per 1,000 LB during the same period.

The City of Baguio recorded the highest under-five mortality rate at 23.88 percent in

2021. Among the provinces, Abra has the least mortality rates in all indicators. The increased mortality rate shows that the LGUs need to improve the equipping of health centers for the provision of basic diagnostic tests needed in the health assessment of neonatal, infants, and under-five children.

The recorded maternal mortality rate increased from 50.45 percent in 2017 to 58.08 percent in 2021. The indirect cause of maternal death in 2021 is due to COVID-19. Pregnant mothers go to medical professionals when they were already in labor.

Culturally, Cordillerans believed in home deliveries and traditional healers.<sup>18</sup> While the top cause of maternal deaths among women under 15 and 15-19 years old is postpartum hemorrhage as their bodies are not yet ready in giving birth.

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<sup>18</sup>The Curious Case of CAR (Cordillera Administrative Region): Healthcare Workers Are Key to Improving Maternal Health Outcomes

**Table 8 Neonatal, Infant, Under-Five Mortality per 1,000 Live Births by province, CAR: 2017-2021**

Province	Neonatal Mortality Rate		Infant Mortality Rate		Under-five Mortality Rate	
	2016	2021	2016	2021	2016	2021
<b>CAR</b>	5.53	7.37	8.47	10.54	10.99	13.27
Abra	11.36	2.59	12.4	4.07	15.5	4.44
Apayao	6.62	9.41	9.6	7.05	10.6	10.58
Benguet	4.25	4.33	5.06	6.93	8.4	7.8
Baguio City	5.55	12.63	8.13	18.0	11.3	23.88
Ifugao	4.15	3.96	7.41	7.56	9.2	9.73
Kalinga	0.19	4.64	9.09	8.01	10	11.38
Tabuk City	0.23	2.33	n.d.	5.77	n.d.	7.57
Mountain Province	11.74	11.09	14.21	15.2	16.4	16.33

Source: Department of Health (DOH)-CAR

**Target of fully immunized children remains unachieved.** In 2015, 72.45 percent of one-year-old children were fully immunized. This is 4.83 percentage points higher than the 67.62 percent of Fully Immunized Child (FIC) in 2021. The region is still short in achieving the 95 percent FIC national program target. For 2020, Kalinga had the

highest FIC with 92.53 percent and the lowest was the City of Baguio with 50.22 percent. Discontinuation of vaccination due to transfer of residence and vaccine hesitancy of some parents due to personal and/or religious beliefs are some factors for not achieving the target. Full immunization of children is one way of reducing the morbidity and deaths of infants and children due to common diseases.



**Table 9 Proportion of Fully Immunized Children, 2017-2021**

Province	Baseline		Actual				
	Year	Value	2017	2018	2019	2020	2021
<b>CAR</b>	2015	72.50	61.06	61.27	66.74	67.91	67.62
Abra	2015	62.01	49.99	54.69	73.28	75.49	64.82
Apayao	2015	70.70	51.25	62.76	64.96	71.64	65.02
Benguet	2015	90.40	58.74	56.20	66.00	62.68	66.68
Baguio City	2015	64.10	85.18	67.80	56.41	50.22	61.39
Ifugao	2015	70.70	55.39	60.24	64.48	70.66	66.23
Kalinga	2015	80.40	59.87	72.22	78.38	92.53	84.48
Tabuk City	2015	87.08	65.37	85.31	86.98	104.66	98.02
Mountain Province	2015	64.40	50.30	56.39	73.28	70.03	67.12

Source: DOH-CAR

**Progress was made in combatting communicable diseases.** A decrease in tuberculosis (TB) incidence per 100,000 population was recorded from 181 cases in 2017 to 108 cases in 2021. The province of Apayao showed a significant increase in TB incidence, from 45 cases in 2017 to 178 cases in 2021. The recorded data on TB is a result of the presence of non-government organization (NGO) funding, thus the increased incidence with the continuous conduct of case-finding activities<sup>19</sup> through caravans; the presence of community volunteers to conduct contact tracing; and the availability of free x-ray vouchers.

There was also a slight reduction in the number of newly diagnosed Human

Immunodeficiency Virus (HIV) from 98 cases in 2017 to 91 cases in 2021. The COVID-19 restrictions on the movement of the target population which limited the testing of the target population is one contributing factor to the decrease in diagnosed HIV cases. Moreover, it limited the conduct of HIV screening to complement HIV testing services by laboratories as face-to-face activities and community outreach activities were imposed by LGUs at various times in 2021.

Alternative methods were adopted such as the use of online methods for demand generation. In addition, the dissemination of an HIV adaptive plan to LGUs serves as a reference to improve implementation amidst the COVID-19 pandemic.

<sup>19</sup> Active Case Finding, Enhanced Case Finding and Intensified Case Finding

**Table 10 Number of Newly Diagnosed Human Immunodeficiency Virus (HIV) Infection Cases, 2017-2021**

Province	Baseline		Actual				
	Year	Value	2017	2018	2019	2020	2021
<b>CAR</b>	2017	98	98	94	52	67	91
Abra	2017	13	13	14	4	9	5
Apayao	2017	1	1	3	1	4	2
Benguet	2017	14	14	17	14	7	18
Baguio City	2017	57	57	47	27	38	54
Ifugao	2017	4	4	6	4	1	5
Kalinga	2017	7	7	7	7	7	7
Tabuk City	2017	6	6	3	2	NDA	NDA
Mountain Province	2017	6	6	4	0	3	3

Source: DOH-CAR

An increase in premature mortality attributed to these non-communicable diseases (NCDs): cardiovascular disease, pneumonia, cerebrovascular disease, cancer, heart disease, diabetes, and chronic respiratory diseases in the region was also recorded. From 121<sup>20</sup> deaths in 2017, the number increased to 162 deaths in 2021. Among the adults who were risk-assessed due to non-communicable diseases share common lifestyle-related risk factors such as cigarette smoking, hypertension, hyperglycemia, obesity, physical inactivity, unhealthy diet, and the harmful use of alcohol. These modifiable behaviors increase the risk for NCDs.

***Households’ access to safe water and sanitation was achieved.*** The proportion of households with access to safely managed drinking water services approximated the 95 percent target in 2021 at 94.87 percent and 90.89 percent for households with sanitary ***Reduction in the prevalence of malnutrition among children under-five showed***

toilets. According to DOH-CAR’s data, there are 238,189 households with access to safe drinking water and 359,217 households can avail of sanitation services of the 425,062 projected households in the region.

Full access to safe water and sanitation is sustained if microbiological testing of drinking-water sources is affordable and dedicated funding for the labor and procurement of needed resources is ensured. In addition, water projects such as *Salintubig* and the *PAMANA* program of other government agencies should also consider expanding it to all LGUs regardless of income classification. With the implementation of full devolution, the LGUs should prioritize the improvement of their drinking-water sources in their Annual Investment Program (AIP).

***significant improvements.*** From 2017 to 2021, prevalence of stunting among this age

<sup>20</sup> Number of deaths per 100,000 population aged 30-70 years old (Source: DOH-CAR)

group decreased from 12.07 percent to 9.72 percent; wasting from 2.34 percent to 1.47 percent; overweight from 2.64 percent to 2.63 percent; and underweight from 3.55 percent to 3.19 percent. Disruptions in the delivery of nutrition services at the beginning of the COVID-19 pandemic threatened to exacerbate the prevalence of malnutrition in the region. To mitigate the pandemic's impact and other challenges such as absence of permanent Nutrition Action Officers (NAOs) and insufficient funding, the LGUs ensured the presence of local funding resources for the implementation of Local Nutrition Action Plans (LNAP), sustained activities on the First 1000 Days, and employed permanent local nutrition focal points. These resulted to the continuation of nutrition service delivery and provision of food packs for families.

***Prior to the COVID-19 pandemic, gains were achieved in key legislation and plans.*** Landmark reforms, and plans were institutionalized to boost health, including among others are the following: RA 11223 (Universal Health Care for All Filipinos Act), RA 11148 (*Kalusugan at Nutrisyon ng Magnanay* Act), RA 11036 (Mental Health Act), Philippine Health Facilities Development Plan (PHFDP 2020-2040), National Human Resources for Health Master Plan (NHRHMP 2020-2040), and RA

11037 (*Masustansyang Pagkain para sa Batang Pilipino* Act).

The full implementation of the RA 11223 became instrumental in the immediate eligibility of registered PhilHealth members in the region. However, the registration rate does not equate to the premium contribution paid. In 2022, the PhilHealth CAR registered 1, 971, 509 members and dependents. This is a 107.33 percent registration rate per 2022 Philippine Statistics Authority (PSA)-CAR projected population of 1, 836,857.

***COVID-19 cases declined while the vaccination program is in full swing.*** The Cordillera Department of Health (DOH-CAR) reported that the region has already achieved 97.05 percent coverage rate of the 70 percent CAR's total population or 1,248,667 fully vaccinated individuals in December 2022. However, there is a need to exert extra effort to convince the unvaccinated population to have their 1<sup>st</sup> booster doses. Out of the 600 thousand targeted for booster doses, health workers were able to vaccinate 462,002 individuals or 35.91 percent for 1<sup>st</sup> booster doses. This number is far from the 50 percent target of the entire target population.<sup>21</sup>

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<sup>21</sup> The President has included in his administration's First 100 Days directives to employ all enabling actions in the different levels of government to achieve 90

percent fully vaccinated coverage for 60 years old and above and 50 percent coverage of first booster doses for the general population.

**Table 11 Number and Percentage Coverage of Fully Vaccinated Individuals (Cumulative Age Group) in CAR, December 2022**

Province	Target	1 <sup>st</sup> Dose	Coverage (%)	Fully Vaccinated	Coverage (%)	1 <sup>st</sup> Booster	Coverage (%)	2 <sup>nd</sup> Booster	Coverage (%)
<b>CAR</b>	1,286,637	1,137,409	88.4	1,248,667	97.05	462,002	35.91	68,481	5.32
Abra	176,360	194,046	110.03	211,029	119.6	114,065	64.68	10,863	6.16
Apayao	86,720	88,315	101.84	88,570	102.13	30,088	34.70	4,982	5.74
Benguet	346,301	223,392	64.51	254,170	73.40	65,293	18.85	9,169	2.65
Baguio City	268,022	334,419	124.77	342,593	127.82	159,080	59.35	29,208	10.90
Ifugao	146,630	83,154	56.71	97,752	66.67	28,332	19.32	3,943	2.69
Kalinga	153,326	125,578	81.90	155,502	101.42	38,121	24.86	5,619	3.66
Mountain Province	109,278	88,505	80.99	99,051	90.64	27,023	24.73	4,697	4.30

Source: Department of Health-Center for Health Development-CAR

***Compliance of health facilities and services to regulatory policies sustained.***

In 2019, 335 health facilities were monitored. Of these, only 322 were compliant. In 2020, 357 health facilities in the region were monitored and found compliant with regulatory policy requirements. These were issued with certifications and authorizations such as remote collection permit, site suitability clearance, operational permit, license for embalmers and massage therapist, and permit to construct.

In 2021, out of a total of 987 health facilities in the region, 923 are functional which include 12 government hospitals; 31 government infirmaries; 12 private hospitals; 89 regional health units, and 779 Barangay Health Stations; while 44 are partially functional and 20 are non-functional. DOH-CAR provided technical assistance on HFEP

for the municipalities of Bontoc, Atok and Flora; the city of Baguio; and province of Benguet in 2021 to ensure equitable access to quality health facilities.

***Digitalization of the health sector has started.***

In 2021, the DOH Central Office issued a directive to disseminate the procedures manual of the integrated Hospital Operations and Management Information System (iHOMIS) for all government hospitals. Ninety-one hospitals nationwide use the system; 52 are DOH hospitals while the rest are LGU hospitals. In the Cordillera, Benguet General Hospital, Baguio General Hospital and Medical Center (BGHMC), and Luis Hora Memorial Regional Hospital have access to the system. The IHOMIS is still being rolled-out in DOH hospitals and some interested and ready hospitals managed by

LGUs. Through the IHOMIS, the BGHMC was able to provide faster and more efficient health services through “E-Prescription”. The E-Prescription is a Medicine and Information Technology project that prescribes, dispenses, and delivers medications through a database called Computerized Doctor’s Orders Entry (CDOE). The CDOE is a paperless transaction that easily prescribes the daily medication of the patients. This project is the

first in the Philippines. To sustain a more inclusive healthcare service delivery in the mountainous terrain of the region, the Department of Science and Technology (DOST)-CAR provided telehealth devices in some municipalities. Three municipal health offices in Ifugao received a telemedicine device that can capture medical signals through built-in medical sensors.

## Targets

Table 12 Plan Targets to Boost Health

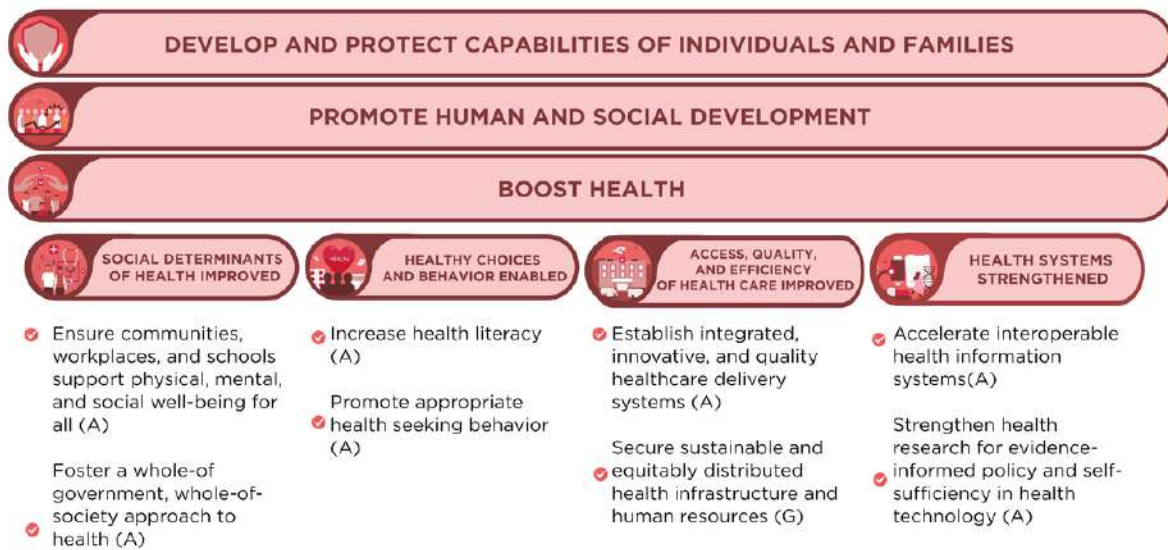
Outcome Indicators	Baseline		Targets						Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	
<b>Outcome 1: Social determinants of health improved</b>									
Proportion of households using safely managed drinking-water services	2021	61.40	64.88	67.19	69.30	72	74.38	76.75	DOH
Proportion of Households using safely managed sanitation services	2021	80.90	55.94	58.88	61.81	64.75	67.69	70.63	DOH
Percentage of targeted communities, schools, and workplaces recognized as Healthy Settings increased	2022	0	10	20	30	40	50	60	DOH
<b>Outcome 2: Healthy choices and behavior enabled</b>									
Percentage of Filipinos with functional health literacy increased	2021	25.02	29	36	43	50	62	69	DOH

Outcome Indicators	Baseline		Targets						Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	
Prevalence of women aged 15-49 years who make their own informed decisions regarding contraceptive use and reproductive health care increased	2021	59.07	69.4	71.6	73.8	76.1	78.3	80.5	DOH
<b>Outcome 3: Access, quality, and efficiency of health care improved</b>									
Percentage of provinces with adequate bed-to-population ratios increased	2022	42.86	57.14	71.42	71.42	85.71	85.71	100	DOH
Percentage of provinces with adequate primary care facilities increased	2022	86.60	100	100	100	100	100	100	DOH
Percentage of P/CWHS at Level 3 Maturity Index (Functioning) increased	2021	0	10	20	30	40	50	60	DOH
Percentage of priority areas supplemented with Human Resources for Health (HRH) from DOH deployment program	2022	100	100	100	100	100	100	100	DOH
<b>Outcome 4: Health systems strengthened</b>									
Percentage of health facilities that have functioning electronic medical record (EMR) systems and regularly submit data increased	2022	85	90	100	100	100	100	100	DOH

Outcome Indicators	Baseline		Targets						Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	
Percentage of functional Epidemiology and Surveillance Units	2021	7	51	59	67	75	83	100	DOH

# Strategy Framework

Figure 9 Strategy Framework to Boost health



The following strategies will be implemented to boost health in the region:

## Outcome 1: Social determinants of health improved

*Ensure communities, workplaces, and schools support physical, mental, and social well-being for all.* LGUs and RLAs will be promoting safe and conducive working and learning spaces for all. The DOH-CAR has initiated the development of module and

capacity building on the Foundations of Barangay Health Workers as on-the-ground Health Education and Promotion Officers (HEPOs). The module aims to capacitate and enhance the skills and competencies of BHWs

on their roles and functions in the full implementation of UHC in the Cordillera.

To ensure access to safe drinking water, basic sanitation, and nutritious food choices, the conduct of periodic monitoring on intensified IEC on water-borne diseases, influenza, leptospirosis, and dengue (WILD) diseases that usually come with the rainy season shall be pursued in every barangay. All concerned agencies and institutions shall strengthen the environmental and occupational program and regulation of water sources.

Households' full access to safe water and sanitary toilet will be improved by conducting capability activities for sanitary inspectors on the formulation of the Water Safety Plan and by making water testing, quality monitoring, and surveillance more affordable to LGUs.

Healthy eating environments and healthy lifestyles shall be promoted and strengthened through the *Pinggang Pinoy*-Based Menu. Agency cafeterias, canteens, snack houses/stores, and food kiosks will also be encouraged to provide more choices of fruits, vegetables, and healthier food for their employees and clients. With the help of local government units, private restaurants will also be encouraged to adopt the *Pinggang Pinoy*-Based Menu for healthier government workers in the region.

Mental health is a concern of all individuals. Considered a significant factor in maintaining one's well-being, DOH-CAR and DSWD-CAR will emphasize mental health in basic health services through

psychosocial counseling and support. The DepEd shall also continue developing socio-emotional learning strategies, mental health, and psychosocial support for students and teachers. Along with the institutionalization of continuous provision of psychological first aid (PFA) to learners and school personnel affected by disasters.

***Foster a whole-of-government, whole-of-society approach to health.*** Concerted efforts of the different stakeholders (RLAs, LGUs, CSOs, NGOs) in ensuring an improved health and nutrition status for all and reducing teenage pregnancy in the region will be sustained. Good health starts from good nutrition (Cross Reference Ch. 6.1.).

Through inter-agency coordination and collaboration, the budget for the implementation of programs and projects in reducing teenage pregnancy will be addressed. These programs may include increased resilience and protection, better fertility rates management, data statistics evidence, and the use of media and communications in advocating the rights and well-being of adolescents.

Advocate for vaccine acceptance in the community. Hiring additional personnel who will help in the information campaign and vaccination in the farthest places in all the municipalities in the region. Vaccination is a whole of nation approach because it is contributory to the attainment of the protection of all people.



The DOH-CAR will implement the Unified Resource Allocation Framework (URAF), a framework developed by DOH to identify areas with high gap and low capacity. The GIDA barangay to be chosen will be the recipient of the project. It will focus on maternal and child

health, nutrition, sanitation, and immunization. The Adopt-a-GIDA Barangay Project, is an inter-agency convergence project that will follow the scheme of the Convergence initiatives introduced by the Regional Social Development Committee or RSDC.

## Outcome 2: Healthy choices and behavior enabled

**Increase health literacy.** Conduct of health literacy assessment, knowledge, attitudes, and practices capacity development orientation for LGUs shall be carried out.

Full implementation of the Social Protection Program for Adolescent Mothers and their Children (SPPAMC) and integrated intervention to reduce teenage pregnancies backed up by EO 141 “Adopting as a National Priority the Implementation of Measures to Address the Root Causes of the Rising Number of Teenage Pregnancies”. This will enable adolescents and young mothers to prevent unintended pregnancies and be protected from their negative consequences.

Full implementation of the *Sulong Kalusugan*, Public Engagement Grid (PEG), and Health Promotion Playbook in the region will be led by DOH. The PEG is composed of three campaigns “Health is Life Campaign”, “*KonsulTayo*” Campaign, and *PINASLAKAS* Campaign.

The health and life campaign will focus on the seven priority areas of the DOH Health Promotion Strategic Framework (mental health, maternal health care, sexual and reproductive health, violence and injury prevention against women and children). The

*KonsulTayo* campaign will encourage Cordillerans to get the care they need to avoid negative health outcomes. It will also promote awareness on the various health services under primary care and its providers. Lastly, the *PINASLAKAS* campaign encourages Cordillerans to get vaccinated and assures them that the vaccine is an important ally in the fight against communicable diseases including coronavirus.

**Promote appropriate health-seeking behavior.** Advocating good nutrition and empowering all Cordillerans to take action and make necessary changes in their diet and lifestyle for their health and well-being through the “move more, eat right” behavioral campaign of DOH for a healthy Cordillera will be sustained. Promote cancer awareness relating to betel nut chewing among Indigenous Cultural Communities/ Indigenous Peoples (ICCs/IPs) through the provision of culture-sensitive IECs.

## Outcome 3: Access, quality, and efficiency of health care improved

***Establish integrated, innovative, and quality healthcare delivery systems.*** The DOH-CAR and the LGUs will continue to improve epidemiological and surveillance capacities by conducting outbreak and epidemiologic investigations, disseminating Epidemiologic and Public Health Strategic Report, and capability building on data management training, disease surveillance, and hiring of disease surveillance officers.

The establishment and strengthening of the mechanism for data gathering and data utilization on persons with disabilities is considered in the public health program of DOH-CAR. Encoders in the LGUs are oriented in the collection, validation, updating and encoding of the persons with disabilities' registry. To ensure quality and inclusive health care services from primary to rehabilitative care, training on sign language for primary care providers and an advocacy forum/summit for the development of disability-inclusive health agenda for the province-wide and city-wide health systems will be conducted.

With the implementation of the UHC Act and the DOH Devolution Transition Plan (DTP), DOH will conduct a research survey on the impact of health promotion activities in the GIDA areas. The research survey will evaluate and assess the strategies and efforts of DOH in its health promotion framework. It will also document its impact on the behavior of people in the community, and good practices, identify bottlenecks and

reinforce strategies for the preventive and promotive aspects of public health, especially in economically-struggling areas. DOH has four PAPs that will be devolved into LGUs namely, Health Facilities Enhancement Program, HRH Deployment Program, Epidemiology and Surveillance Program, and Procurement of Health Commodities.

### ***Secure sustainable and equitably distributed health infrastructure and human resources.***

The DOH-CAR and other agencies will strengthen and sustain the monthly monitoring of LGU-implemented health facilities infrastructure projects, regular monitoring and surveillance of identified health facilities/ service providers, and on-site monitoring and evaluation of ICT Equipment in the health facilities.

The first super health center was launched in the City of Baguio. The Aurora Hill Health Center is the biggest and most modern health center in the region that will provide primary health care services, a birthing clinic, a function hall that may be converted into an isolation area if needed, a pharmacy, a clinical laboratory, X-ray services and ambulatory services. It can cater to 13 barangays with 21,000 population.

To address the region's human resources for health (HRH) ratio, the DOH-CAR will conduct mandatory and regulatory training of health workers (doctors, nurses) to meet the doctor-patient and nurse-patient ratios and leadership development programs for city and provincial health officers.

Doctors-to-the-barrio (DTTB) shall be deployed to work in primary care and public health centers in various geographically isolated and disadvantaged areas in Cordillera. The municipalities of Conner, Flora, Kabugao, Calanasan in Apayao; Buguias, Kabayan, Kibungan in Benguet; Alfonso Lista in Ifugao; Lubuagan in Kalinga; and Sadanga, Tadian, Paracelis, Natonin in

Mountain Province shall be able to avail quality health service from these DTTBs.

Furthermore, the financial and Medical Assistance to Assistance to Indigent Patients (MAIP) will ensure financial risk protection and alleviate the financial burden of the indigent and financially incapacitated patients and families who avail health services in public hospitals.

## Outcome 4: Health systems strengthened

***Accelerate interoperable health information systems.*** Interoperability in healthcare refers to timely and secure access, integration and use of electronic health data so that it can be used to optimize health outcomes for individuals and populations<sup>22</sup>. With the positive response and readiness of the LGUs, concerned agencies and entities will improve the digitalization of health information and management systems; continue providing technical assistance on the implementation of the Local Health Systems Maturity Levels (LHS ML), and guide the implementation of Risk Communication and LHS Playbook in the Province-wide and City-wide Health Systems (P/CWHS).

Health workers will also be trained in the development of system applications for government hospitals, enhancement of Health Facility Development Plan for Rural Health Units (RHUs), Health Centers (HCs), and Hospitals; and licensing standards and requirements for regulated health facilities (HF) through capacity building activities,

series of workshops and forums, and policy dissemination activities.

The DOST-CAR will continue to deploy telemedicine devices in isolated and disadvantaged communities regionwide. These devices, particularly the RxBox, will provide better access to life-saving health care services. It is an Information and Communications Technology innovation designed to support the Department of Health's call for Kalusugang Pangakalahatan or Universal Health Care and one among the Department of Science and Technology's efforts for a "Smarter Philippines".

Strengthening the knowledge management and health information technology in the region will scale up the implementation of IHOMIS, EMR, and establishment of telemedicine services.

***Strengthen health research for evidence-informed policy and self-sufficiency in health***

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<sup>22</sup><https://www.ibm.com/phen/topics/interoperability-in-healthcare>

**technology.** Health researchers and institutions facilitate health research activities attuned to regional health needs. One multi-sectoral organization that serves as a clearinghouse for all health-related researches in the region is the Cordillera Regional Health Research and Development Consortium (CRHRDC).

The CRHRDC promotes, provides, and sustains an enabling health research and

development framework toward evidence-informed health and health-related policies and actions working for the attainment of regional and national goals. Some of its research priorities are mental health, functional foods, nutrition and food safety, disaster risk reduction and climate change adaptation in health, re-emerging and emerging diseases, biomedical devices engineering for health, omic technologies for health, diagnostics, and ICT for health.

## Legislative Agenda

Table 13 Legislative Agenda to Boost Health

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>Resolution to create at least one disease surveillance officer duly trained on applied/field epidemiology, surveillance, and response; and one epidemiology assistant of an allied health profession for every local government unit</b>	<p>As a minimum requirement, each Epidemiology and Surveillance Unit (ESU) shall have at least one Disease Surveillance Officer (DSO) duly trained on applied/field epidemiology, surveillance, and response; and one epidemiology assistant of an allied health profession who is capable of performing tasks as provided for under the IRR of RA No. 11223.</p> <p>Moreover, the human resource complement will support the implementation of Population-based Health Services under Section 17 of the Universal Health Care Act [RA No. 11223] (i.e. an accurate, sensitive, and timely epidemiologic, surveillance system).</p>	DOH

## Chapter 4.2

# 4.2 Improve Education and Lifelong Learning

By 2028, Cordillerans are envisioned to be smart and innovative with learning poverty and loss substantially addressed. Cordilleran learners have access to high-quality lifelong learning opportunities that develop adequate competencies and character qualities, allowing them to thrive in society and the world of work. Transformative lifelong learning opportunities shall be instrumental in developing and protecting the capabilities of families to ensure that all Cordillerans can realize their full potential to keep pace with the envisioned socio-economic transformation.

## Assessment and Challenges

### Assessment of Performance

#### Basic Education

Net enrollment rate decreased. The net enrollment rate for basic education decreased from 2017 to 2021, Table 14). Only the junior high school indicated an increase among the grade levels.

The primary reason for the downtrend was the number of school leavers at the elementary level from 1.65 percent during the SY 2017-2018 to 0.77 percent in SY 2019-2020. This could be attributed to teacher shortage for the senior high school which may have affected the learners' school participation. Common reasons include lack of personal interest and high incidental expenses for attending school, such as school supplies and materials, books, and uniforms.

**Completion rate in the secondary level declined while it increased in the**

with kindergarten showing the highest decrease from 73.21 percent in 2019 to 67.41 percent in 2021 ( **elementary level**. The reasons for the negative trend in the completion rate among the secondary level are similar to the net enrollment rate of the senior high school. The positive trend in the completion rate for the elementary level may be facilitated by teachers' presence, implementation of appropriate learning tools, and parents' support ensuring that their children would graduate.

With less than a hundred percent completion rates in both elementary and high school levels, there remains an issue regarding the number of learners who cannot complete elementary then to high school.

**Table 14 Net Enrollment Rate, CAR:2017-2021 (in percent)**

Levels	2017	2018	2019	2020	2021
Kinder			73.21 %	63.32 %	67.41 %
Elementary	88.64 %	94.65 %	92.24 %	91.40 %	87.53 %
Junior HS	68.56 %	79.75 %	83.64 %	84.76 %	84.90 %
Senior HS	53.64 %	n.d.	53.64 %	50.33 %	52.88 %

Source: Department of Education-Cordillera Administrative Region (DepEd-CAR)

**Table 15 Completion Rate, CAR:2017-2021 (in percent)**

Levels	2017	2018	2019	2020	2021
Elementary (Kinder to Grade 6)	91.65 %	97.65 %	95.32 %	87.01 %	94.56 %
Secondary (Grade 7 to Grade 12)	83.39 %	97.52 %	84.26 %	83.94 %	81.15 %

Source: DepEd-CAR

**Table 16 Number of Enrollees and Passers and Graduation Rate in the ALS Program, CAR: 2018-2021 (in number and in percent)**

Levels	2018	2019	2020	2021
ALS Enrollees	25,430	23,336	13,176	10,009
ALS Graduation Rate	52.45 %	48.96 %	51.87 %	9.81 %
ALS Passers		7,045	4,256	4,341

Source: DepEd-CAR

**Low performance in National Achievement Tests (NAT).** Based on the DepEd-CAR Regional Memorandum 157 s. of 2019 issued in May 2019, the 2018 NAT rating for Grade 6 was at 39.92 percent while the rating for Grade 10 and Grade 12 were at 47.66 percent and 40.73 percent, respectively. The decline in the NAT scores is attributed to the shift in the framing of the test questions following the implementation of the K to 12 programs, rendering test results less directly comparable to those of previous years. CAR's scores fared better than the country results in all the subjects which included Filipino, Mathematics, English, Science, and Social Studies.

**Alternative Learning System (ALS) indicators declined.** The ALS Program is targeted at those who do not have the chance to attend and finish formal basic education. It provides all Filipinos a chance to have access to and complete basic education in a mode that fits their distinct situations and needs. The number of enrollees and graduation rate under the ALS program declined from 2018 to 2021 as majority of the Out-of-school youths (OSYs) dropped out of the program (Table 16). Also, ALS passers declined from 7,045 in 2019 to 4,341 in 2021 as many OSYs failed to pass the Presentation Portfolio Assessment (PPA).

The PPA refers to the process of measuring and certifying the competencies of ALS program completers through checking learners' formal records, evaluating, and validating the pieces of evidence in the work

samples. ALS passers are considered high school graduates thus, eligible to pursue higher education or even short vocational courses.

## Technical Education

**Table 17 Number of TVET Enrollees, TVET Graduates, and Certification Rate, CAR:2017-2021 (in number and in percent)**

Indicators	2017	2018	2019	2020	2021
TVET Enrollees	51,106	57,778	65,140	37,559	46,803
TVET Graduates	50,697	56,611	61,179	34,554	45,070
TVET Certification Rate	76.48 %	91.83 %	90.67 %	92.25 %	90.02 %

Source: Technical Education and Skills Development Authority-Cordillera Administrative Region (TESDA-CAR)

**TVET enrollment and graduation decreased.** The number of TVET enrollees for 2021 was 46,803, a drop from that of 2017 with 51,106 total enrollees (Table 17). The same can be said for the number of TVET graduates which exhibited a negative trend from 50,697 in 2017 to 45,070 in 2021. The numbers of TVET enrollees and graduates in 2019 were the highest with 65,140 enrollees and 61,179 graduates, respectively. Across the years, declines were seen in 2020 with 37,559 enrollees and 34,554 graduates. These were mainly due to travel and face-to-face training restrictions due to the pandemic.

The numbers of enrollees and graduates recovered in 2021 with the resumption of face-to-face training and assessment at 50 percent capacity.

**TVET certification holders increased.** The TVET certificate rate was 90.02 percent in 2021. This is an increase rate of 13.54 percentage points compared to 2017. (Table 17). However, certification holders may not find employment opportunities due to the pandemic with some industries still closed.

## Higher Education

**Table 18 Number of Higher Education Graduates, CAR:2017-2021**

Indicators	2017	2018	2019	2020	2021
Undergraduate	16050	16136	16880	10367	8747
Post Graduate	177	29	166	287	115
MA	1098	918	917	775	707
Ph.D.	176	189	170	138	240

Source: Commission on Higher Education (CHED) – CAR

Number of higher education graduates decreased. Graduates went down for the following programs: undergraduate, post-graduate, and masters in art (MA). Only the number of Ph.D. graduates has increased from 176 in 2017 to 240 in 2021 (Table 18).

**Quality of higher education sustained.**

Among the higher education institutions in CAR, Saint Louis University (SLU) has the most number of programs accredited as Centers of Excellence (COEs) and Centers of Development (CODs). The COEs are in Secondary Education, Criminology, and Information Technology (IT) and the CODs are in Accountancy, Entrepreneurship, IT, Nursing, Business Administration, and Engineering programs (Civil, Mechanical, Chemical, Electrical, Electronics and Communication Engineering).

The University of the Cordilleras (UC) follows with COEs in Criminology, IT, and Secondary Education. The University of the Philippines Baguio has two CODs in Physics and Mathematics. The University of Baguio has one COE in BS Secondary Education while the Benguet State University has COD in BS Agriculture.

Quality of higher education may be indicated by the presence of Centers of Excellence (COE) and Centers of Development (COD). This standard qualification attempts to identify the nerve center of a network of strong and stable universities and the development of satellite institutions in the various regions of the country. These centers were selected for having high levels of standard in the quality of their institution, research, and extension services. These provide institutional leadership in all aspects of development in their specific areas of discipline.

**Regional licensure passing rate improved.**

The overall annual average board exam passing rate, by year, increased from 44.25 percent in 2017 to 57.39 percent in 2021 (Table 4.12). Increases were recorded during the pandemic years of 2019-2021. The top three licensure examinations with the highest numbers of passers are Licensure Examination for Teachers (LET) with 15.16 percent; Nursing Licensure Examination (NLE) with 15.16 percent; and, Criminology Board Examination with 9.52 percent.

**Table 19 Licensure Examination Regional Passing Rate, CAR:2017-2022 (in percent)**

Indicator	2017	2018	2019	2020	2021
Licensure Examination Regional Passing Rate	44.25 %	43.99 %	47.04 %	52.25 %	57.39 %

Source: Professional Regulation Commission-Cordillera Administrative Region (PRC-CAR)



# Challenges

***Various challenges to access and efficiency, quality, and governance in basic education persisted.*** The challenges identified were:

- 1) insufficient physical facilities with buildings needing repairs, limited classrooms due to earthquakes, typhoons, and unfinished school buildings;
- 2) shortage of teachers for junior and senior high schools;
- 3) regular grade levels becoming multigrade as the class shifting requires the additional burden of class preparations on the part of the grade level teachers;
- 4) lack of learning materials due to insufficient textbooks;
- 5) Poor internet connectivity or weak internet signal, particularly in the rural and far-flung areas as enrolled children faced many challenges to effective learning under a distance learning modality; and,
- 6) learning poverty and loss brought about by the pandemic exemplified by students struggling to learn due to less invigorating learning spaces outside of school.

***Various challenges to access and efficiency, quality, and governance in technical and vocational education persisted.*** These

include:

- 1) inadequate training facilities and equipment;
- 2) lack of qualified trainers;
- 3) need to capacitate technical- vocational institutions to offer higher level qualifications (NC III to diploma); and,
- 4) low enrollment due to limited employment opportunities for technical and vocational graduates as most industries closed down during the pandemic and inadequate scholarships.

***Higher education encountered problems with instruction (faculty), curriculum, and research and extension.*** On instruction and curriculum, challenges include:

- 1) few faculty with advanced degrees, especially on emerging trends and technologies;
- 2) curriculums are not relevant to emerging trends;
- 3) need to increase the number of accredited programs at the tertiary level due to diversity, increasing the number of foreign students, digital knowledge, mental health awareness, among others;
- 4) limited international and domestic collaboration to facilitate knowledge transfer;
- 5) low passing rate due to low level of competence among graduates;

- 6) lack of preparedness plans during the sudden disruption of classes brought about by disasters and the pandemic; and,
- 7) limited data and tools to measure the higher educations' link with basic education and technical vocational education.

**Under research, the challenges include:**

- 1) low adoption and utilization of research outputs by industries;
- 2) limited publication of research to reputable journals due to unmet existing publication requirements;
- 3) few faculty conducting research; and,
- 4) low innovations and intellectual property rights (IPR) application due to tedious process and requirements.
- 5) On extension, there was a low percentage of faculty engaged in extension activities due to lack of resources and material time to present their research outputs through capacity building and training, community engagement, and demonstration farms.

# Targets

Table 20 targets to improve education and lifelong learning

Indicators	Baseline	Targets, by Year						Agency
	2018/ 2022	2023	2024	2025	2026	2027	2028	
<b>Outcome 1:</b> Quality, inclusive, adaptive, resilient, and future -ready basic education for all achieved								
Net enrolment rate:								
Elementary	60.40 %	94.37 %	92.24%	91.40%	93.45%	93.84%	99.15 %	DepEd
Junior High School	89.56 %	79.77 %	83.64 %	84.76 %	86.42%	87.32%	90.00 %	DepEd
Senior High School	44.37 %	49.55 %	53.64 %	50.53 %	57.22%	58.41%	60.00 %	DepEd
Completion rate:								
Elementary	95.30 %	91.64%	97.52%	95.32%	98.73%	97.80%	98.00%	DepEd
Junior High School	81.14 %	81.23%	87.01 %	88.25%	90.07%	91.05%	94.00%	DepEd
Senior High School	81 %	85 %	87 %	89 %	90%	91%	92%	DepEd
Proportion of learners achieving at least "Proficient" in the National Achievement Test (NAT):								
a. Reading								
Grade 3	No data	22.37 %	23.37 %	24.37 %	25.37%	26.37%	27.37%	DepEd
Grade 6	21.37 %	22.37 %	23.37 %	24.37 %	25.37%	26.37%	27.37%	DepEd
Grade 10	44.79 %	45.79 %	46.79 %	47.79 %	48.79%	49.79%	50.79%	DepEd
Grade 12	23.71 %	24.71 %	25.71 %	26.71 %	23.71%	23.71%	23.71%	DepEd
b. Mathematics								
Grade 3	No data	22.37 %	23.37 %	24.37 %	25.37%	26.37%	27.37%	DepEd
Grade 6	21.37 %	22.37 %	23.37 %	24.37 %	25.37%	26.37%	27.37%	DepEd
Grade 10	44.79 %	45.79 %	46.79 %	47.79 %	48.79%	49.79%	50.79%	DepEd
Grade 12	23.71 %	24.71 %	25.71 %	26.71 %	23.71%	23.71%	23.71%	DepEd
<b>Outcome 2:</b> Globally competitive and inclusive TVET and higher education, and improved research output attained for a broader knowledge economy								

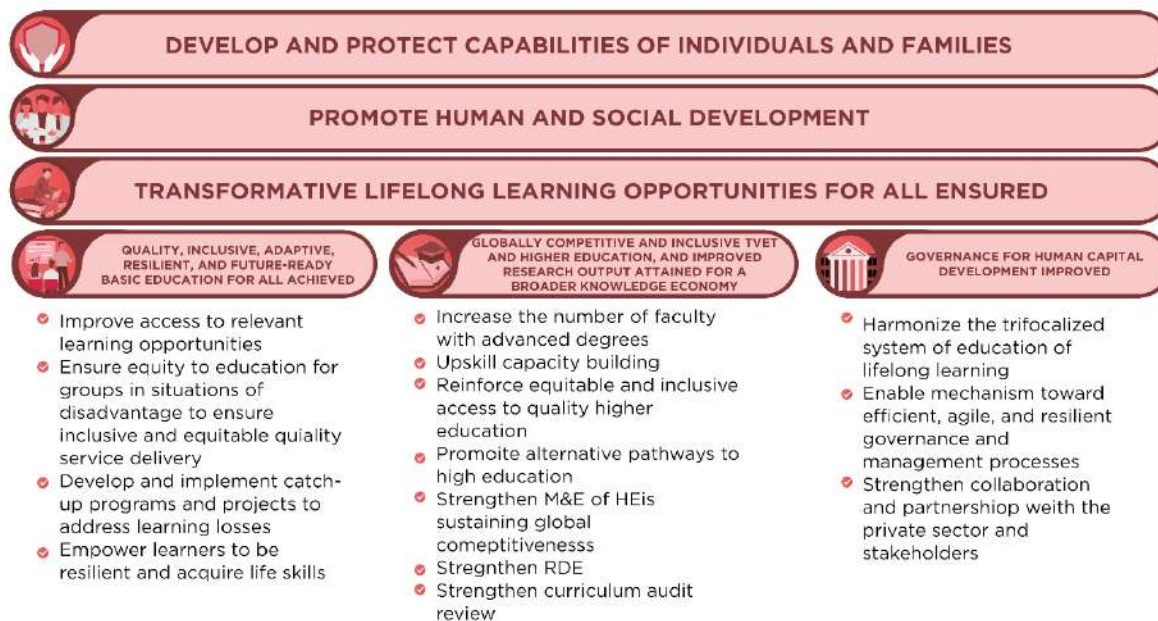
Indicators	Baseline	Targets, by Year						Agency
	2018/ 2022	2023	2024	2025	2026	2027	2028	
Faculty Competencies:								
Number of Faculty with PhD in CAR (new)	600	610	620	630	640	650	660	CHED, HEIs
Percentage of faculty who are members of national and international organizations	100%	100 %	100 %	100 %	100 %	100 %	100 %	CHED, HEIs
Number of scholarships and beneficiaries	7000	7335	7701	8086	8490	8900	9345	CHED, HEIs, TESDA
Curriculum and Quality Assurance:								
Percentage of academic programs accredited	100 %	100 %	100 %	100 %	100 %	100 %	100 %	CHED, HEIs
Number of COEs over CODs	5/13	5/13	6/13	6/15	7/15	7/18	8/20	CHED
Certification Rate	90.16%	92.00%	92.00%	92.00%	92.00%	92.00%	92.00%	TESDA
Licensure Examination Rate	50.00 %	55.41%	56.51%	55.67%	55.86%	56.01%	55.85%	PRC
Licensure Examination Rate (Licensure Exam for Teachers):								
Elementary	60.00 %	60.31%	66.55%	64.16%	63.67%	64.79%	64.21%	PRC
Secondary	59.00 %	59.08%	63.54%	61.21%	61.28%	62.01%	61.50%	PRC
Research:								
Number of researches adopted by industries	15	42	44	46	48	50	52	CHED, HEIs, DOST

Indicators	Baseline	Targets, by Year						Agency
	2018/ 2022	2023	2024	2025	2026	2027	2028	
Number of research publications to reputable journals	300	377	400	477	527	577	627	CHED, HEIs, DOST
Number of researches completed annually	254	321	371	421	471	521	621	CHED, HEIs, DOST
Number of research outputs registered with IPO	3	5	7	10	15	20	25	CHED, HEIs, DOST, IPOPHIL
Budget allotment for research (in Php M)	150 M	150 M	160 M	200 M	220 M	260 M	300 M	CHED, HEIs, DOST
<b>Outcome 3:</b> Governance for human capital development improved								
Number of active partnerships with LGUs, industries, CSOs and other stakeholders as a result of extension activities	17	134	136	148	158	168	200	CHED, HEIs, DOST
Number of extension programs organized consistent with the HEIs' mandated and priority programs	24	19	25	26	27	29	31	CHED, HEIs, DOST
Percentage of students and faculty engaged in extension activities	100 %	100 %	100 %	100 %	100 %	100 %	100 %	CHED, HEIs, DOST

# Strategy Framework

Toward the ultimate goal of ensuring transformative lifelong learning for all, several areas must be addressed not only by the government but more importantly, with the support of the private sector and other stakeholders.

Figure 10 Strategy Framework to improve education and lifelong learning



## Outcome 1: Quality, inclusive, adoptive, resilient, and future-ready basic education for all achieved

**Improve access of all school-age children, out-of-school youth, and adults to relevant basic learning opportunities.**

This could be achieved through the construction of school buildings and access roads where appropriate, hiring of more qualified teachers specifically for junior and senior high school, provision of strong internet connection, and provision of learning materials. Priority areas in the immediate term are Mountain Province, Abra, and Tabuk City.

In response to the negative impact of the pandemic, the DepEd-CAR has instituted flexible learning options for learning delivery.

This includes Project HyTEQ or Hybrid Learning Using Technology for Quality and Equity that responds to access, equity, and quality education.

**Ensure equity for school-age children and youth, and adults in situations of disadvantage to ensure inclusive and equitable quality service delivery.**

Interventions include management and service delivery improvement programs, contextualized and learning delivery,

enhanced platforms for learning resources, and provision of inclusive, effective, culturally-responsive, gender-sensitive, and safe learning spaces. In CAR, DepEd has put up the “Salaknib Tan Namnama” to cater to learners in vulnerable situations and ensure that they are supported educationally until they finish basic education. The ALS Program, the Indigenous Peoples Education Program, and National Values Program also contributes to this.

**Develop and implement catch-up programs to address learning losses.** This requires aligning curriculum and instruction methods in all subjects in basic education and capacity building for assessment through professional development. Under curriculum alignment, the learners are expected to attain Stage 1 (K-Grade 3) learning standards of fundamental reading and numeracy skills to provide a basis for success in the remaining learning stages. Under assessment, the learners are expected to attain Stage 2 (Grades 4 to 6) learning standards in required literacy and numeracy skills and apply 21st-century skills to various real-life situations.

More specifically are the Project SMART (Standardized and Meaningful Assessments Result-based Teaching) and Project RAPID which aims to: Reach every child and keep them in school, assess learning levels, prioritize teaching the fundamentals, increase catch-up learning and progress beyond what was lost, and Develop psychosocial health and well-being so every child is ready to learn. The DepEd will also implement the PRIME project which stands for producing relevant learning packages for effective learning for Math, Science, and English. This consists of curriculum map, lesson plan, instructional materials, and assessment tools.

**Empower learners to be resilient.** These contain integrated programs and projects in the curriculum of learners’ human rights, life skills to access emergency learning interventions in the aftermath of disasters, and protection from death and harm brought about by natural and human-induced hazards.

## **Outcome 2: Globally competitive and inclusive TVET and higher education and improved research output attained for a broader knowledge economy**

**Increase the number of faculty with advanced degrees.** This is one measure in ensuring the global competitiveness of faculty with a degree beyond an undergraduate education. Projects, Programs and Activities (PPAs) include scholarship grants for

advanced and post-graduate levels and the opening of more dearth programs in graduate schools in the region. Dearth programs are aligned programs of existing disciplines which are not yet offered among HEIs such as PhDs in Criminology and Engineering.

**Upskill capacity building.** This refers to instruction on improving the knowledge of the faculty using emerging technologies such as artificial intelligence, online assessment, big data tracking analysis, and the internet of things. PPAs may be in the form of seminars, trainings, workshops, and industry immersions to address different and unusual situations.

**Reinforce equitable and inclusive access to quality technical and higher education.**

This is aimed at increasing the number of enrollees and graduates. This could be done through the implementation of a merit-based scholarship program for priority disciplines and the continued implementation of the Universal Access to Quality Tertiary Education or RA 10931, whether these are free higher education, tertiary education subsidy, or student loan programs. For technical education, the establishment of the Cordillera State Institute of Technical Education (CSITE) and having them in all provinces and cities in CAR could help in improving equitable and inclusive access to quality technical education, as the operation of these facilities will increase the absorptive capacity and improve the institutional capabilities of existing technical-vocational institutions in the region.

**Promote alternative pathways to higher education.**

This is aimed at ensuring that Cordillerans, regardless of age, ethnicity, socio-economic and disability status, sexuality orientation, or geographic location have access to quality higher education. This includes the Ladderized Education Program,

Expanded Tertiary Education and Equivalency Accreditation Program (ETEEAP), and Open and Distance Education.

**Strengthen M&E of HEIs sustaining global competitiveness.**

These include monitoring and evaluation programs accrediting HEIs on their university status, either autonomous or deregulated status, a COE or COD, and SUC leveling.

**Develop a culture of research and strengthen Research, Development, and Extension (RDE).**

Research is expected to impact people, the community, and society as a whole through capacity building and training, community engagement, and the provision of demonstration farms. Research continues as an extension engagement of the faculty in higher education. Interventions include the transfer of technology to different stakeholders to farmers for economic gains, and conduct massive information dissemination to industries and other stakeholders regarding researches for possible adoption, utilization, and commercialization (e.g. research congress, colloquium, and conferences). This strategy further requires the conduct of policy researches to aid policymakers such as assessment of the K to 12 program and 4Ps conditionalities. These may trigger budgetary reforms in research allocation to augment the faculty's resources for the conduct of relevant studies and publication of findings and to prompt HEIs research niche identification programs and projects to facilitate funding.



**Strengthen curriculum audit review.** This is aimed at increasing the number of graduates passing the board exams. Interventions in the preparation for taking the professional board

exams such as in-house reviews and hiring of practitioners as faculty and resource speakers.

### **Outcome 3: Governance for human capital development improved**

**Harmonize the trifocalized system of education for lifelong learning.** The Philippines' education system took a trifocalized structure in 1994/1995 that is having to be responsible for each layer, namely, DepEd, TESDA, and CHED. Harmonizing the trifocalized system has brought to the core the implementation of the Philippine Qualifications Framework (PQF) which establishes the levels of educational qualifications and sets the standards for qualification outcomes. There is a need for policy guidelines and convergence programs and projects such as Ladderized Programs and Alternative Learning Systems (ALS).

The implementation of the Philippine Credit Transfer System (PCTS) Program facilitates the smooth implementation of the PQF by supporting learners to progress in their learning based on an assessment of their achievement of learning outcomes in a qualification obtained through prior formal, informal and/or non-formal learning. This encourages clear pathways from entry-level training to higher education and supports learners in building their knowledge and skills for mobility to the workforce.

**Strengthen collaboration and partnership with the private sector and other stakeholders.** This is needed across all education levels. There is a need for the LGUs to provide scholarship grants to senior high school graduates who cannot afford to go to college due to financial constraints. For technical education and higher education, industry immersion and employment programs are needed.

Owing also to the expertise and availability of resources among the high-end industries, the education sector needs to utilize digital technology to address accessibility for pupils with learning difficulties and disabilities and make learning less location-dependent. There are three key technologies that present the most potential to enhance education accessibility globally: augmented and virtual technology, artificial intelligence, and wireless technology for far-flung areas having limited or no internet access.

Another concern is on the assessment of quality education specifically in the basic education sector on learning poverty and losses. Strongly recognizing the struggles of the region's education system, there is an immediate need to resolve the difficulties by collaborating with professional organizations

of assessment academics and practitioners who are pushing for high-quality theory, research and practice in educational measurement and evaluation, particularly done by the private sector.

strict implementation of the professional continuing development programs with PRC, and setting up of standards to provide learners with a quality and inclusive learning environment.

**Enable mechanisms toward efficient, agile, and resilient governance and management processes.** Programs and projects include trainings for teaching and non-teaching staff,

One crucial program is the establishment of database systems covering all the levels in the education sector.

## Legislative Agenda

Table 21 Legislative Agenda to improve education and lifelong learning

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>Establishment of the College of Medicine at the Benguet State University (HB 312)</b>	To develop a corps of professional physicians to strengthen the healthcare system of the country as well as to respond to the needs for human resource development of the Province of Benguet and the CAR.  The BSU College of Medicine is also expected to provide scholarships and other affirmative action programs to assist poor but deserving students who qualify for the admission to the College.	HOR/BSU
<b>Review of the Basic Education System toward Improving the Enhanced Basic Education Act of 2013</b>	The proposed law seeks to revisit the K-12 curriculum to make the graduates more readily employable, better equipped with critical thinking and problem-solving skills, and imbued with the skills and capacities needed to be productive and active citizens of the country.	DepEd/ Philippine Institute of Development Studies
<b>Expansion of the Government Assistance to Students and Teachers in Private Education (GASTPE) to Elementary Level</b>	In recognition of the complementary role of the private schools in providing basic education to Cordillera learners, the measure aims to expand the existing government assistance for high school students and teachers in private education to include students in private schools in the kindergarten up to Grade 6 level. The Teacher Salary Subsidy (TSS) is also proposed to be expanded to cover teachers employed in private elementary schools.	DepEd

## Chapter 4.3

# 4.3 Establish Livable Communities

The region aims to upgrade and plan human settlements in a way that offers equitable, inclusive, and resilient opportunities for improving human well-being while contributing to the community's economic vitality. Livable areas have the potential to enhance public health, the economy, social inclusion, and environmental and social sustainability.

By 2028, livable communities are established and adopted with an integrated use of space that will bring people closer to work, recreation, and transit options. This will attract businesses, making these areas economic centers whether they are urban or rural.

## Assessment and Challenges

### Assessment of Performance

***Limited human, technical and financial resources of LGUs in implementing housing programs.*** As of November 2022, 8 out of 77 local government units in CAR or accounting for 10.39 percent have approved Local Shelter Plan (LSP). Low compliance was attributed to LGUs' limited human, technical and financial resources. Not all LGUs also have Local Housing Boards (LHBs) represented by 39 percent.

The LSP is a roadmap to address the housing requirement for both the formal and informal sectors of a city or municipality. It presents the local housing situation, household affordability and local resources, main shelter strategies, and corresponding implementation plan. The LGUs through the LHBs have the primary responsibility for shelter planning and addressing the housing needs of their constituents as embodied in the Local Government Code of 1991 and the

Urban Development and Housing Act of 1992.

***Dampened achievements in terms of building shelters due to earthquakes and weather-related disasters.*** In October 2016, Super Typhoon (STY) Lawin severely hit the region causing death and damage to properties, especially to housing. STY Lawin destroyed a total of 36,842 houses (2,720 totally damaged and 34,122 partially damaged) rendering affected families homeless and displaced.

On July 27, 2022, a Magnitude 7.0 Earthquake shook the Province of Abra and adjacent areas. About 27,626 houses were declared partially damaged, with 781 classified as completely damaged, for a total assessed value of Php 949,221,939.31 worth of damage.

Damages to 28,407 homes in CAR total Php 941.924 million and losses in the amount of Php 212.851 million have also been reported. A total of 32,039 families with 118,431

individual members have been permanently and temporarily displaced and, as of August 2022, about 49,086 individuals were unable to return to their homes.

While the public and private sector has provided the necessary assistance to the affected households, families, and individuals, these were insufficient to provide assistance to rebuild homes.

***Demand for housing in CAR increased.***

Results of the 2020 Population Census Survey revealed that CAR's population increased by 0.91 percent annually from 2015 to 2020 thereby demand for living spaces also increased. This is aggravated by displaced households, informal settlers, and high immigration to the region's urban areas. As of November 2022, the total housing needs are equivalent to 129,443 households.

***Need to engage the private sector's active participation to provide housing.***

The private sector can assist the government in the implementation of housing projects considering the high cost involved. The government has pegged the price ceiling of housing packages in the country, that is, Php 480,000 for the lower income groups of the population. While the cost may be lower for the vulnerable groups, it nevertheless needs partnership with the private sector as housing the poor is more expensive with land acquisition, purchases, and housing construction.

The private sector also plays important role in rebuilding communities. During the earthquake in July 2022, the private sector jumpstarted the rebuilding of houses in Abra to allow families to return to their homes. The Peace Convenors' Group provided building materials to households with damaged houses and facilitated community engagement in rebuilding efforts in Tayum, Abra. The San Miguel Development Corporation pledged to establish resettlement housing sites for families severely affected by the earthquake which is expected to provide 128 housing units.

Currently DHSUD partners with Homeowners Associations (HOAs) to sustain community development. As of 2022, it has registered four HOAs and continuously monitoring 41 HOAs. The HOA is a governing body of a certain subdivision, townhouse development, or condominium complex that partner with the community when a realty development is built. It is installed to provide a set of rules and regulations that are enforced on a property that is under its jurisdiction.

***Lack of land for government housing programs in the region.***

The land area needed for housing, as of November 2022, summed up to 1,418.99 hectares. Only 1,102.50 hectares are available thus it needs 316.49 hectares to provide shelter for homeless households. There are possible areas that could be derived for such purposes such as the reclassification of 119,000 hectares of forest land to A&D however the majority of these identified areas are covered by Proclamations

(i.e., Chico River Forest Reserve Proc. No. 573, Ambuklao-Binga Watershed Reservation Proc. No. 548, etc.). Also, given the topography of the region, some areas have slopes of 18 percent and above thereby subject

to restrictions under Presidential Decree 705 (Forestry Reform Code of the Philippines). Some areas are prone to landslides, floods, and other geo-hazards thereby making them inappropriate for housing.

## Targets

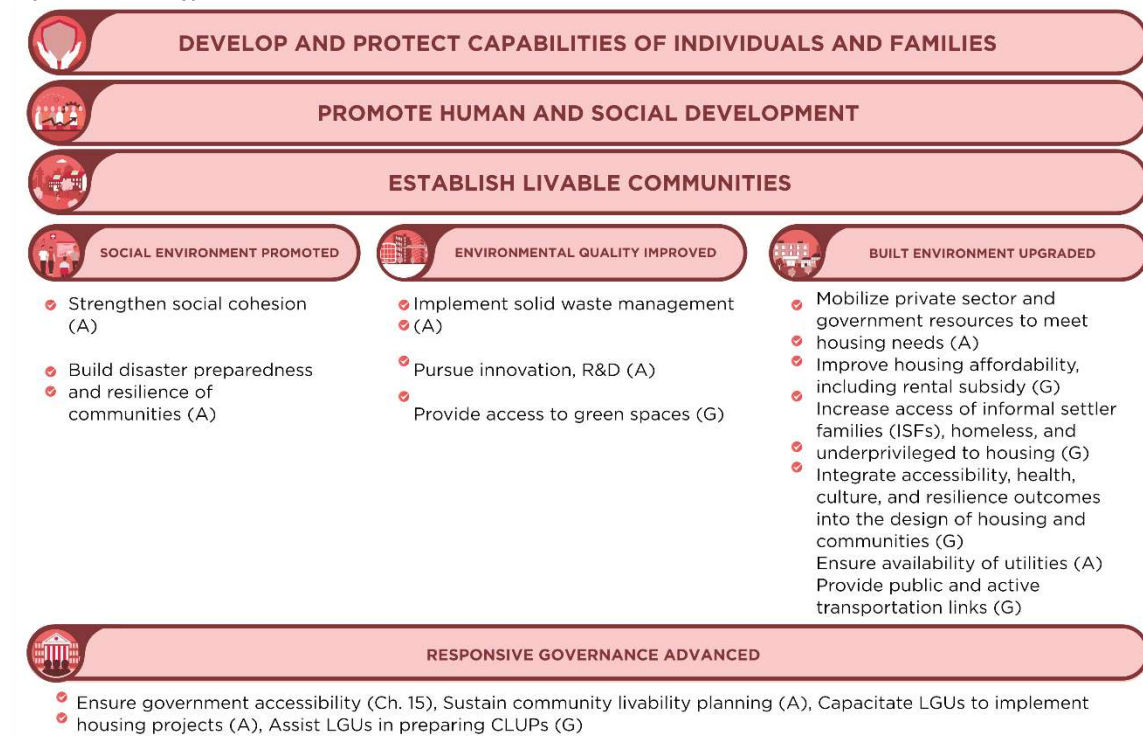
Indicators	Baseline	Targets, by Year						Agency
	2022	2023	2024	2025	2026	2027	2028	
<b>Outcome 1: Human and social development promoted</b>								
Percentage of Homeowners Association (HOA) registered	70	71	73	75	76	78	80	DHSUD
Percentage of residential subdivisions, memorial parks and condominiums compliant with legal requirement for open spaces	100	100	100	100	100	100	100	DHSUD, LGUs
Percentage of locational clearances and building permits issued	100	100	100	100	100	100	100	DHSUD, LGUs
Percentage of housing units adopting Accredited Innovative Technologies (AI Tech)	100	100	100	100	100	100	100	NHA
<b>Outcome 2: Environmental quality improved</b>								
Proportion of barangays with MRFs:								EMB, DENR, LGU
Abra	95%	97%	99%	100%				
Apayao	92%	94%	96%	98%	100%			
Baguio City	4%	6%	8%	10%	12%	14%	16%	
Benguet	61%	63%	65%	67%	69%	71%	73%	
Ifugao	47%	49%	51%	53%	55%	57%	59%	
Kalinga	17%	19%	21%	23%	25%	27%	29%	
Mountain Province	42%	44%	46%	48%	50%	52%	54%	
Proportion of cities and/or municipalities served by sanitary landfill facilities								

Indicators	Baseline	Targets, by Year						Agency
	2022	2023	2024	2025	2026	2027	2028	
Abra	0						100%	EMB, DENR, LGU
Apayao	43%						100%	
Baguio City	100%							
Benguet	46%						100%	
Ifugao	36%						100%	
Kalinga	38%						100%	
Mountain Province	20%						100%	
Percentage of highly urbanized and other major urban centers within ambient air quality guideline values for PM 10 and 2.5	100%	100%	100%	100%	100%	100%	100%	EMB, DENR, LGU
<b>Outcome 3: Built environment upgraded</b>								
Housing units started/financed	10,000	10,000	10,000	10,000	10,000	10,000	10,000	DHSUD
Number of ISFs provided with secured tenure	0	245	214	184	184	68	0	DHSUD
Percentage of housing projects with socialized housing	0	100%	100%	100%	100%	100%	100%	DHSUD
<b>Outcome 4: Responsive governance advanced</b>								
Percentage of LGUs with CLUP	76.65 %						100%	DHSUD
Percentage of LGUs with shelter plan	10.39 %						100%	DHSUD
Percentage of LGUs with Local Housing Boards	25.97 %						100 %	DHSUD

## Strategy Framework

The livability of communities shall be pursued along three outcomes: social environment promoted, environmental quality improved, and the built environment upgraded. These will be guided by the principles of equity, inclusivity, resilience, and sustainability. All three outcomes will be supported by a governance system that is accessible and ensures that the livability of communities is sustained.

Figure 11 Strategy framework to establish livable communities



## Outcome 1: Social environment promoted.

**Strengthen social cohesion.** This could be achieved through IECs and advocacies promoting social welfare against violence and bullying, among others. It should also be noted that housing and resettlement designs, including facilities, should be gender-responsive and inclusive taking into consideration the particular needs of female and male members.

**Build disaster preparedness and resilience of communities.** In light of the worsening impacts of climate change as well as disasters, the following programs and projects will be implemented: capacity building to empower all community members on disaster preparedness and resilience, the establishment of evacuation centers to limit

or limit the use of schools during disasters, and plans preparation such as the Local Disaster Risk Reduction and Management Plan and Local Climate Action Plan. These will include community programs and projects aimed at building adaptive and other resilience capacities and reducing risks from hazards and climate change.

## Outcome 2: Environmental quality improved

**Implement Solid Waste Management.** This covers the implementation of waste diversion programs and projects including recycling, composting, and extended producer responsibility. IECs and identification of waste disposal facilities and sanitary landfills are also included.

**Pursue R and D and Innovation.** This refers to the conduct of R&D on land use management and disaster-resilient infrastructure (e.g., carrying capacity, construction technologies, IKSP). Innovative programs involving the national and LGUs, the private sector, and communities themselves will be explored and implemented. Also, there is a need to review the property valuation processes and

methodologies and re-examine and revisit RA 7279 and the Balancing housing requirements provisions. The current alternative compliance to this requirement has to be reviewed to ensure that the real intent of the law, that is to ensure that there is production and supply of affordable and socialized housing, is achieved.

**Provide access to green spaces.** Considering that green spaces at the barangay and city levels will enhance environmental quality, the following programs and projects will be implemented: “Adopt-a-city”, the establishment of “new towns”, urban farming and biodiversity, national greening, and reforestation.

## Outcome 3: Built environment upgraded.

**Mobilize private sector and government resources to meet housing needs such as public housing and resettlement projects.** Among others, government policies and strategies shall take into account the human rights and needs of informal settlers and all disaster-affected families. The resettlement project shall include housing and site designs and assistance programs addressing the specific needs of disadvantaged and vulnerable groups. In 2022 under the Resettlement Governance Assistance Program, the Bucay municipality in Abra was awarded Php 2 M in financial assistance to augment the local funding for the improvement and provision of lacking basic

services in the Agapita Heights Resettlement Project. Ongoing projects include the Baguio Luna Terraces and Tayum Resettlement Project. The Luna Terraces Project is a permaculture community socialized housing project located in Irisan, Baguio City. It is a tenement type that will benefit around 270 beneficiaries. The Tayum Resettlement Project, on the other hand, will provide 128 housing units within an area of 17,179 sq. m. amounting to Php 147.25 million. Partnering with the private sector will likewise assist the government in settling or resolving land and land use conflicts as it has the capacity and expertise to perform geographical information systems beyond mapping.



***Improve housing affordability to increase access to informal settlers, the homeless, and the underprivileged to housing.*** Housing costs are rising faster than incomes, putting greater financial stress on families and stakeholders. This can alleviate the problem by implementing the following activities: cut the time and streamline the process required to obtain housing development or construction permits, tier and target housing voucher system. Sustain the provision of subsidies such as mortgage financing, direct housing production, and community-driven development. Another is the rental subsidy to support families temporarily displaced by calamities and infrastructure projects and rental housing to address the security of tenure concerns and at the same time respond to the affordability of homebuyers. Also, subsidies from the government, in particular land wherein houses for the low-income groups will be built is another platform. This will tremendously enhance the affordability and accessibility of the lower-income groups.

***Increase access to informal settler families (ISFs), the homeless, the and underprivileged.*** This will be realized by implementing resettlement and relocation programs and projects, establishment of vertical housing for ISFs in metropolitan areas and highly-urbanized cities, dormitories, and halfway homes. Vertical housing may also be in the form of affordable housing walk-ups utilizing new technologies and construction methodologies, sustainable, greens, and resilient approaches which take into consideration mobility and access to work areas of the residents. Under the

resettlement project, the conduct of inventory and assessment of suitable resettlement sites is necessary to encourage the practice of land banking among LGUs. Land banking is the practice of buying land as an investment, holding it for future use, and making no specific plans for its development.

***Integrate accessibility, health, culture, and resilience outcomes into the housing design and communities.*** This could initially be undertaken with the compilation of best practices abundant in the region on accessibility, health, culture, and resilience. The Bayanihan spirit is one best practice for moving neighbors' homes without expecting rewards. Success stories on cooperative housing will be replicated and financial literacy and innovation collection schemes will be adopted, a financial value that will ensure higher repayments and replication for future projects. Other projects include the establishment of open and green spaces. Salient features of open spaces are the presence of parks, playgrounds, and community facilities and amenities within the community and that green designs shall be adopted with the inclusion of green roofs, rainwater harvesting systems, permeable pavements, and safe and secure road systems.

***Ensure availability of utilities and education and health facilities.*** This includes the provisions of basic utilities such as water, electricity, telecommunications, and sanitation to ensure the quality of life while living in the community, especially in resettlement sites.

***Provide public and active transportation links.*** These will be made possible with the following programs and projects such as public utility vehicle modernization

programs, mass transport systems and networks, advocacies on walkability, bike-ability, and use of alternative modes of transportation by providing the necessary infrastructure support.

## **Outcome 4: Governance for human capital development improved**

***Ensure government accessibility.*** Among the programs and projects that will enhance human resources to ensure government access are on database building, data management, and data analytics. Staff needs also to know the various housing laws through information, education, and communication (IECs) campaigns.

***Sustain community livability planning.*** This could be undertaken by integrating LSP in the CLUPs, ADSDPP, and CDRA of cities and municipalities to enable them effectively implement housing programs. The separate preparation of these planning documents has put an additional burden on the shoulder of the LGUs. The same concern can be said for DHSUD as it rendered technical assistance to 55 LGUs in the preparation of the Climate and Disaster Risk Assessment (CDRA), 3 provincial TAs for the preparation of the Provincial Physical Framework and Provincial Development Plans (PDPFPs), and 1 Land Use Development Infrastructure Plan (LUDIP). With the integration of LSP in said planning documents, LGUs can focus on addressing and implementing housing and other development projects.

***Capacitate LGUs in the implementation of housing programs.*** This will be through making mandatory positions for housing officers in LGUs and ensuring the creation of Local Housing Boards in their organizational structure. Topics for capacity building may include full devolution as a result of the Supreme Court's Mandanas-Garcia ruling. This is to ensure the effective and efficient delivery of devolved functions, services, and facilities by the LGUs.

***Assistance to LGUs in the Completion of the Comprehensive Land Use Plans (CLUPs).*** As of 2022, the total number of LGUs with approved CLUP totals 59 out of 77 LGUs or a percent share of 76.65 percent. The CLUP shall ensure rational land use and sustainable urban and regional development. It shall determine the specific uses of land and other physical and natural resources, both private and public, within their territorial jurisdiction including areas co-managed with the national government and as appropriate management plans for ancestral domains, critical watersheds, river basins, and protected areas.

# Legislative Agenda

Legislative action will be pursued to augment the stated strategies to achieve the goal of establishing livable communities.

Table 22 Establish livable communities Legislative Agenda

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
Approval National Land Use Act	Access unutilized/idle land for housing. Provide the parameters on land use planning, including those on hazard-prone areas, multiple uses of land, environmentally critical areas, and culturally significant sites.	NLUC
Reclassification of non-conforming forest lands to A&D	For proper delineation, nonconforming forest lands are reclassified as alienable and disposable (A&D) lands and may be utilized for other land development purposes, such as housing and resettlement sites.	NADC, LGUs
Approval of Shelter Plan as a requirement for LGUs to Participate in Government Shelter	The DHSUD's attached shelter agencies shall include as an additional requirement the LGU's LSPs duly approved by the City or Municipal Council to avail of the government's shelter programs.	DHSUD
Rental Subsidy and access to public rental housing	Improve access and affordability of housing, especially for the ISFs, homeless and underprivileged	NHA
Strengthening of KSAs <ul style="list-style-type: none"> <li>• National Housing Authority Act</li> <li>• Amendments to the NHMFC Charter</li> </ul>	Renew the NHA Charter and strengthen its organizational structure and functions  Broaden mandate to include the development of a housing secondary mortgage market	NHA  NHMFC
Exemption of the region from PD 705 (Forestry Code)	The law prohibits development in lands with 18 percent in slope, leaving only 15 percent of A&D lands for the region given its mountainous topography.	DENR
Creation of Local Housing Boards (LHBs) in every city/municipality	Strengthen the roles of the LGUs in the provision of shelter to households through the mandatory establishment of local housing boards in every city and municipality.	DHSUD, LGUs
Mandatory completion/integration of Climate Disaster Risk	address and support LGUs to mainstream Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) into the Comprehensive Land Use Plans and Zoning Ordinances.	DHSUD

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
Assessment (CDRA) in all local plans		

# 05

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**Increase Income Earning Ability**





## 5 Increase Income-Earning Ability

The region's preferred future for its workforce is characterized by increased income-earning ability of individuals of employment age and increased access to employment opportunities and facilities for upskilling. Government policies and programs support emerging trends, most notably digital careers and green industries, as well as protect and promote inclusion of the informal sector in the formal economy. Training and education opportunities in the region are aligned to the needs of the production sector and are at par with international standards for a globally competitive human resource base.

### Assessment and Challenges

#### Assessment of Performance

Gains in the labor sector were negated by the effects of the COVID-19 pandemic but started to recover as soon as the gradual opening of business started and travel restrictions were relaxed. The period also saw increases in tertiary level and Technical-Vocational Education and Training (TVET) graduates with the passage of the “Universal Access to Quality Education Act of 2017”. It also saw an improvement in the region's performance in licensure examinations in professions regulated by the Professional Regulation Commission (PRC).

**The labor market continues to recover from the effects of the COVID-19 pandemic.** Business closures in 2020 affected the employment situation in the region, with the employment rate decreasing from 96.5 percent in 2019 to 89.6 percent in 2020. However, the employment situation started to reach close to pre-pandemic levels in 2021 with an employment rate of 94.7 percent as businesses started to slowly open with limited

capacity. Jobs were also generated with the boost of electronic commerce (e-commerce) necessitated by the lockdowns in 2020. Online shopping for food, clothing, and non-clothing items facilitated the demand and increase for delivery services. This was complemented by government efforts to provide jobs during the pandemic such as the DOLE's “Tulong Panghanapbuhay sa Ating Disadvantaged/ Displaced Workers” (TUPAD), DSWD's Cash-for-Work that provided emergency employment for workers displaced by the pandemic, and the 26,887 jobs generated by the DPWH with the increase in funding for infrastructure projects in 2021. However, this recovery did not outpace the 2019 mid-term baseline value for unemployment of 3.2 percent, with an unemployment rate of 5.3 percent in 2021.

**Underemployment rate was reduced.** The underemployment rate improved from 2015 to 2019 with a sharp reduction from 20.8 percent to 12.2 percent. However,

underemployment may have hit its minimum value in 2019, as it started to surge once again in 2020 to 14.5 percent and then in 2021 to 17.7 percent. This may be attributed to the type of jobs offered during the pandemic, such as food and parcel delivery, compounded by the effects of automation. Underemployed are employed people who express the desire to have additional hours of work in their present job, to have an additional job, or to have a new job with longer working hours.

**High employability of Technical-Vocational Education and Training (TVET) graduates.** The employment rate of TVET graduates surpassed the end-of-plan target of 75 percent with an employment rate of 87 percent in 2021. This indicates growing confidence in careers that are technical-vocational in nature. This may be attributed to the area-based demand approach developed by the Technical Education and Skills Development Authority (TESDA) with training regulations based on a specific area to address gaps. One notable application of this approach is the offering of diploma courses in Mechanical Engineering Technology and Electrical Engineering Technology at the Cordillera State Institute of Technical Education (CSITE) in Baguio City, which puts TVET graduates in a better position to land decent-paying jobs in industries inside and outside the region, as well as in foreign lands.

**Increase in TVET enrollment and completion.** The number of TVET enrollees and graduates has surpassed the end-of-plan

targets of 40,513 and 36,642, respectively. The number of TVET enrollees for 2021 was 46,803, while the number of TVET graduates for the same year was 45,070. It is notable to see that 96.3 percent of TVET enrollees completed their respective training. The number of TVET enrollees and graduates in 2019 was the highest with 65,140 enrollees and 61,179 graduates. This saw a sharp decline in 2020 with 37,559 enrollees and 34,554 graduates, which was mainly due to travel and face-to-face training restrictions due to the pandemic. The numbers recovered a bit in 2021 with the resumption of face-to-face training and assessment at 50 percent capacity in September of the year. Nevertheless, prior to the pandemic, the trend in both TVET enrollees and graduates shows an annual increase from 2017 until 2019.

The passage of RA 10931 or the “Universal Access to Quality Education Act of 2017” also helped improve the number of enrollees in TVET as it increased the number of scholars in private and public TVET institutions in the region. There was a fluctuation in the number of TVET scholars from 2017 to 2021. However, it was observed that the year-on-year number of scholars is higher than the baseline of 3,580 set in 2017. Actual numbers from 2017 to 2021 were higher than the baseline value, except in 2020, when there were only 2,933 scholars. This is attributed to the pandemic as travel restrictions and limited holding of classes were implemented. Nevertheless, the actual number of scholars in 2021, with 7,036 scholars is higher than the end-of-plan target of 3,157.



In spite of the gains in TVET education, the certification rate of TVET decreased from 91.41 percent in 2017 to 90.02 percent in 2021, with a high of 92.25 percent in 2020. This could indicate the need for more industry immersion by trainees, trainers, and assessors and additional investments in facilities. The establishment of the CSITE and having these in all provinces and cities in CAR could help in the latter, as the operation of these facilities will be directly supervised by TESDA. This is envisioned to increase the absorptive capacity and improve the institutional capabilities of existing technical-vocational institutions in the region.

**Licensure Examination Regional Passing Rate Increased.** The passing rate for licensure examinations for professions regulated by the PRC increased from 44.3 percent in 2017 to 57.4 percent in 2021, with an upward trend starting in 2018. This surpassed the end-of-plan target of 47.76 percent. The annual average from 2017 to 2021, at 49 percent, is also higher than the target for 2022. This may be an indication that the curricula of Higher Education Institutions (HEIs) offering bachelor's degrees for regulated professions have been aligned with the standards of board examinations.

## Challenges

The COVID-19 pandemic exposed the weaknesses of the employment sector such as the volatility of security of tenure and limitations of infrastructure support. This has shown the vulnerabilities of both employers and employees and the difficulties in recovering from the shocks brought about by such disruption. At the onset of the pandemic, travel restrictions and local lockdowns left many workers jobless or underemployed.

Meanwhile, PRC licenses remain unrecognized abroad, affecting the income-earning ability of Cordilleran tertiary-level graduates in foreign countries. Youth employment situation also did not improve in the region as employers prefer college graduates, undergraduates, and TVET graduates over K-12 graduates even in elementary occupations.

**Employment may continue to be disrupted through the compounded effects of automation, climate change, the obsolescence of certain jobs, and restrictions and limitations due to the COVID-19 pandemic.** This could contribute to the underemployment situation of the region. Disruptions may be inevitable, but mechanisms can be developed to ensure that the shocks due to the said factors are avoided or lowered to levels where the affected workers can cope. These mechanisms may include longer coverage of unemployment insurance or the presence of temporary employment in relevant agencies' budgets as a contingency measure.

**Gender gap in the labor force.** Latest sex-disaggregated data<sup>23</sup> shows that labor force participation and employment rate of males are consistently higher than females and that wages for male farm workers are higher than female farm workers. Also, there is inadequate appropriate support for unpaid care work to enable women to stay in the labor market.

**Challenges in the communication sector, primarily internet connection, have contributed to the challenges in the employment and education sectors.** The pandemic has shown that workplace flexibility is attainable and practical. However, claims of slow and intermittent internet connection put workers in the region under these arrangements at a disadvantage. This also affected online teachers and learners, including TVET trainees. This then is a challenge to the infrastructure sector in support of the other sectors, most especially to the education and employment sectors.

**Skills mismatch continues to be a concern considering that it leads to unemployment and underemployment, thereby affecting the local employment situation.** This may be aggravated by the influx of workers from other regions as border restrictions have been relaxed as the country transitions to the new normal. Upskilling is thus, a priority for the local workforce to be more competitive.

**High cost of shifting to and adopting green technologies.** The current trend

internationally is the adoption of green technologies for sustainable development. The workforce will need to be trained and investments made to adapt to the changes in technology. This entails added costs on the prices of materials and upskilling the current workforce to be competitive.

**Licenses of professions regulated by the PRC are not recognized abroad, which weakens the link between tertiary education and foreign employment.** Tertiary-level graduates will then bloat the workforce expecting to be employed in the region. This will worsen the employment situation for youth, K-12, and TVET graduates as employers continue to prefer bachelor's degree holders and college undergraduates over TVET and K-12 graduates. This is also prevalent in government offices in consideration of Civil Service eligibility guidelines.

**Youth employability has not improved with a downward trend even at the national level given the high number of Youth NEETs (Not in Employment, Education, and Training).** This could be an indication that more employment interventions are needed or the strengthening of existing programs, like the Special Program of the Employment of Students (SPES) to make them more appealing to the youth. It is, however, not an end as it is supposed to be a means for the young ones to pursue further education that is geared toward upskilling.

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<sup>23</sup> PSA-CAR. 2022. Women and Men in the Cordillera Administrative Region

# Targets

Table 23 Targets to Increase-income earning ability

Outcome Indicators	Baseline		Targets								Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	EOP		
<b>Outcome 1: Increase Employability</b>											
Labor Force Participation Rate	2021	63.78	64	64.3	64.5	64.8	65	65	65	65	PSA (LFS)
Employment Rate	2021	94.69	95	95	95.5	95.5	95.5	95.5	95.5	95.5	PSA (LFS)
Unemployment Rate	2021	5.31	5	5	4.5	4.5	4.5	4.5	4.5	4.5	PSA (LFS)
Underemployment Rate	2021	17.68	17	16	15	14	13	12	TBD	TBD	PSA (LFS)
Percentage of youth not in employment, education, or training (%) reduced***	2018	15.9								TBD	PSA (LFS)
TESDA Certification Rate (%) retained	2022	92	92.0	92.5	93.0	93.5	94.0	95.0	95.0	95.0	TESDA
Employment Rate of TVET graduates (%) increased	2020	70.51	77.0	77.64	78.98	80.32	81.66	83.0	83.0	83.0	TESDA (LMIR)
Employment rate of K to 12 graduates (%) increased	2021	6	7	8	9	10	11	12	12	12	DepEd (Tracer Study)
<b>Outcome 2: Access to employment opportunities expanded</b>											
Labor Force Participation Rate of Women increased	2019	49.7	TBD							95**	PSA (LFS)
	2021	48.9*									
Percentage of educated unemployed to total unemployed reduced***	2020	28*	TBD							TBD	PSA (LFS)
Placement rate (%) of Public Employment Service Offices (PESOs) increased	2022	80	80	85	85	85	85	85	85	85	DOLE
<b>Outcome 3: Shared Market Governance Achieved</b>											
Number of establishments provided with technical assistance and installed or enhance productivity performance-based incentive schemes	2022	74	75	75	80	80	80	80	80	80	DOLE
Number of MSME's that implemented	2022	80	100	100	100	100	100	100	100	80	DOLE

Outcome Indicators	Baseline		Targets							Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	EOP	
productivity improvement program										

\* - National baseline data

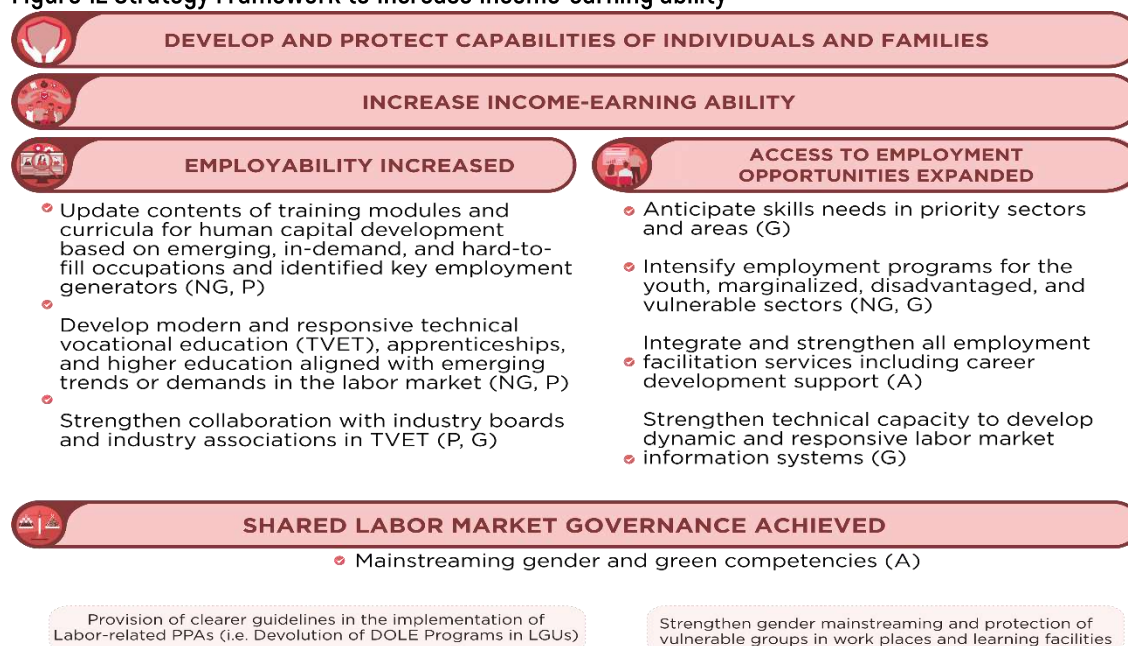
\*\* - SDG target

\*\*\* - indicators referred to the PSA-CO for regional disaggregation

## Strategy Framework

In the next 6 years, the region will focus on increasing the income-earning ability of workers in the Cordillera through productive, financially rewarding, green, and decent employment that is available and accessible to all, through upskilling the workforce and expanding access to quality education and training and employment opportunities.

Figure 12 Strategy Framework to Increase Income-earning ability



## Outcome 1: Increase Employability

**Update contents of training modules and curricula for human capital development based on emerging, in-demand, and hard-to-fill occupations and identified key employment generators.** Updating the training modules and curricula for college, TVET, and K-12 will ensure that the local workforce is globally competitive. This will support the workforce to have updated skills and knowledge or opportunities for upscaling. This will require a review and assessment of training modules and curricula for TVET and tertiary-level courses, as well as the standards for licensure examinations.

Such would aid in maintaining the high employment rate (even for TVET graduates) and low unemployment rate in the region. The underemployment rate will also be addressed as these strategies will give workers the opportunity for upskilling even while they are working. These should be accompanied by policies for lifelong learning. Moreover, this should also be complemented by proactive and timely reports by TESDA for the Labor Market Intelligence Report (LMIR) and the DOLE for the Jobs Fit Labor Market Information Report (JobsFit).

The service and tourism sector remains among the top employment generators in the region as it hosts regular tourist destinations such as Baguio City and Sagada in Mountain Province, and developing ones in Atok, Benguet and Tineg, Abra, to name a few. Emerging trends such as eco-tourism and

farm tourism should already be considered in the updating of curricula of HEIs so that graduates and training completers can help ensure the region's environmental integrity being the watershed cradle of the north.

**Develop modern and responsive technical vocational education (TVET), apprenticeships, and basic and higher education aligned with emerging trends or demands in the labor market.** Education prepares individuals to be productive members of society. Basic education, from elementary to high school, provides the foundation for the development of basic skills, like math, reading and writing, and values formation. TVET and tertiary education provide the specialized skills for the graduates to be employable. The skills, including soft skills, should be based on what the labor market demands. This would require updating standards and regulatory processes which include certification for TVET, apprenticeship completers, and K-12 (technical-vocational-livelihood or TVL track) graduates and board exams and Continuing Professional Development (CPD) for professionals. This can help avoid having college graduates competing with TVET and K-12 graduates for elementary occupations.

This must consider improvements in teaching and training for current trends in the agriculture sector for the State Universities and Colleges (SUCs) and TVET institutions,

especially in the provinces. These institutions could consider strengthening the capabilities of agriculture graduates to support the products of their respective provinces such as Benguet for highland vegetables, Kalinga and Mountain Province for rice, Ifugao for corn, and Apayao for fruits. Furthermore, with challenges in food security, agriculture courses and pieces of training should be aligned to precision agriculture and Agriculture 4.0 in the context of climate change. This would create more jobs across the agriculture value chain, particularly among the youth.

Electronics and metallurgy should also be a priority consideration for Baguio City. This is to support the Baguio City Economic Zone, whose locators topped export sales in all PEZA in 2021 for products such as radio, television, communication equipment and apparatus, and other transport equipment. Moreover, courses and pieces of training in industrial technology should also prepare graduates to be competitive, locally and internationally, in terms of the needs of the fourth industrial revolution or Industry 4.0. Investments should be made on interdisciplinary teaching, as well as in research and innovation.

An emerging trend that also needs consideration is the sports sector. Courses that produce specialists that cater to sports professionals such as those in sports science and sports medicine should also be updated to be competitive with advanced countries.

Scholarships and exchange programs with other may be considered for upskilling and absorption of new technologies. This will help increase the local and international employability of athletic trainers<sup>24</sup> or graduates of sports-related medical allied courses such as physical therapy, rehabilitation, and chiropractic medicine, among others. Sports facilities must also be improved to attract big international events, such as the FIBA Basketball Regional and World Championships, big ticket boxing matches, and FIFA matches, to name a few, which will be followed by positive externalities, particularly in generating jobs in the construction sector or as a consequence of the emergence of economic activities around the facilities.

The education system should also provide workers the opportunities for self-improvement and advancement, as well as the chance to upskill when the demands of the labor market become complicated or more advanced. This requires ensuring that students, trainees, and even workers, will have access to quality training and assessments. This would bear additional expenses for the affected individuals, particularly the poor. The TESDA should consider the provision of scholarships for workers based on their degrees and TESDA upscaling. This may be complemented by the increase in the budget for a free assessment of certifying workers, which is also a part of the TESDA budget.

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<sup>24</sup> Specialists in the management, prevention, and recovery of injured athletes.

The CHED should review tertiary education curricula and the PRC to update its licensure examinations to align education and professional regulation with international standards so that professional Overseas Filipino Workers (OFWs) will be readily employable in foreign countries, needing only basic training and not schooling.

**Strengthen collaboration with local and global industry boards and industry associations in TVET.** Working closely with

industry stakeholders can ensure that the skills transferred to graduates and trainees are what the industries need to avoid having skills mismatches and have a relatively sure market for laborers/workers. This can also help improve the employment situation of K-12 graduates, considering that they are the least preferred among the graduates in the workforce (TVET, college), and even with college undergraduates.

## **Outcome 2: Access to employment opportunities expanded**

**Anticipate skills needs in priority sectors and areas.** Reports such as the Labor Market Intelligence Report (LMIR) by the TESDA and the Jobs Fit Labor Market Information Report (JobsFit) by the DOLE provide the information needed by job seekers and employers alike. It can be likened to skills mapping to ensure that graduates produced are needed in the area or that industries are able to find a nearby area with a supply of the needed workers. This would ensure that the training provided is what the industries need and thus, there will be a market for the graduates or training completers. This is also beneficial for the government as funds used will surely yield positive results.

The lack of skilled workers remains a top concern in the infrastructure sector, which could be aggravated by the Build Better More program. With a wider reach of TVET training on construction skills, such as carpentry and masonry, contractors will have

a steady supply of workers in every LGU. This strategy can also help in strengthening cultural industries such as weaving and handicrafts.

**Intensify employment programs for the women, youth and other marginalized, disadvantaged, and vulnerable sectors.** This is to strengthen the current initiatives of the government such as the Government Internship Program (GIP), Public Employment of Services-Labor Market Information (PES-LMI), and Philjobnet (PJN), with the private sector to employ people in the identified sectors. This may entail incentivizing companies that provide employment for the disadvantaged and vulnerable sectors, particularly differently-abled individuals and youth.

The government can attract the youth to avail of public employment programs by expanding the reach of the SPES by assisting

the poorest LGUs. The DOLE can assist LGUs which are having a hard time providing their counterpart for SPES beneficiaries. This will allow for more SPES applicants as the LGUs' limitations due to financial constraints will be alleviated.

There will also be a need to look into the Civil Service Eligibility Guidelines as Level 1 or the Sub-Professional Eligibility Examination can only be availed by undergraduates who have completed less than four years of college education.

**Integrate and strengthen all employment facilitation services including career development support.** The capacity of relevant agencies and LGUs in providing timely assistance and information to assist job seekers needs to be improved. This would engender the faster release of employment requirements like PSA civil registry documents, NBI clearance, and other documentary requirements that are either requested in advance or in LGUs far from the applicants' homes.

The establishment of Cordillera State Institute of Technical Education (CSITE) campuses or facilities in all provinces in the region needs to be pursued. This would ensure that all technical-vocational workers will have access to advanced learning facilities as these will be directly under the TESDA.

This would need local support, particularly from the Public Employment Services Offices (PESOs) of the LGUs through the updating of labor market information for timely referral

and placement. These offices, in coordination with the DOLE can increase the number of job fairs conducted yearly.

The government will also need to look into the current state of internet connectivity, particularly in enjoining internet providers and telecommunications companies to ensure a stable internet connection. This will help ensure the employability of local workers in the Business Process Outsourcing (BPO) field, as well as encourage continued operations of BPOs in the region. This can also help expand the services that BPOs and locally-owned call center agencies provide in the international market. From customer support, online teaching, medical transcription, sales and after-sales support, and technical support, they can now also provide services including online bookkeeping, online office assistant, and more.

**Strengthen technical capacity to develop dynamic and responsive labor market information systems.** Currently, there are platforms for labor market information such as TESDA's LMIR and DOLE's JobsFit. The JobsFit is a compilation of information on key employment-generating sectors, emerging industries, in-demand job, and hard-to-fill occupations, as well as an action agenda for identified industry gaps and challenges in the region. These also provides information on the available labor force. The LMIR provides insights on current trends, issues, and challenges available in the local and international labor markets, both demand, and supply.



Information from these reports are very helpful; however, job seekers need labor market information instantly hence, the need to provide digital platforms to make information available and accessible to all at any time. To this end, there is a need to develop websites or other online systems where job seekers can access these reports and file their applications for available jobs at the same time.

To aid the efforts in this strategy, schools, from senior high, TVET, and higher education, should conduct tracer studies to track if their graduates are who the market needs and if their respective curricula are still responsive to market needs. This can also be expanded with the Overseas Workers Welfare Administration (OWWA), where databases can be created so that repatriated OFWs can be properly referred for local or international employment.

### Outcome 3: Shared Market Governance Achieved

**Mainstreaming gender and green competencies.** This strategy is for the proper allocation of resources to ensure that gender and green competencies are included in the curricula of basic, higher, and TVET education. This would entail a review and assessment of training modules and curricula for basic, higher, and TVET courses. This ensures that graduates and trainees are provided with soft skills like treating people equitably and proper communication per gender and development, and knowledge about the environment and technical skills to support sustainable environmental practices. This can also be achieved through the professionalization of all industries, such as arts and culture related work, salons, driving, construction, arts and crafts, and others.

This can be led by the LGUs, which can pass an ordinance that would require National Certificate Level II (NC II) or higher for workers in industries where workers are not license-holders of PRC-regulated professions. This can also give benefits to the public as services provided in such industries will have better quality. This can ensure that workers from vulnerable groups (elderly, women, differently-abled individuals, and more) are protected in the workplace and training areas.

# Legislative Agenda

Table 24 Legislative agenda to increase income-earning ability

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>Expanded Unemployment Insurance Bill</b>	To expand the unemployment insurance of individuals from 2 months to 3 months. This may be a necessity in CAR as shown during the pandemic, with employment opportunities being available only toward the end of the year, when businesses started to gradually open.	DOLE
<b>Apprenticeship Bill</b>	Apprenticeships in companies enable learners to gain skills that simulate real working conditions. This can strengthen linkages and collaboration among government and industry associations, enterprises, and social partners. Indirectly, this will market learners to employers in different industries in the region, most importantly in the special economic zones, primarily the BCEZ.	TESDA
<b>Amendment to the SPES Law</b>	DOLE to assist LGUs to expand the reach of the program by providing a 100 percent share in the salary/wages of beneficiaries from the poorest LGUs. For CAR, DOLE assistance to LGUs is needed as 56 of the 75 municipalities are 4 <sup>th</sup> to 6 <sup>th</sup> class LGUs.	DOLE LGUs (PESOs)
<b>Jobs Creation Strategy Bill</b>	Develop employment recovery and job creation in specific industries and emerging sectors. All of these are employment generators in the region, with most, save for agriculture, located in Baguio City.  Being a top tourist destination, CAR relies heavily on its tourism industry. However, tourism is seasonal, which is from October or November up to June or July. During the off-peak season, many workers in the tourism sector become underemployed as they are relegated to "on-call" status. The bill can help move workers to other industries or sectors for full-time job opportunities.	DOLE
<b>Amendments to Baguio City Ordinance No. 48 Series 2021 or the Baguio-locals-first hiring Policy</b>	For the policy to expand the priority workers for hiring to residents of the BLISTT (Baguio-La Trinidad-Itogon-Sablan-Tuba-Tublay) to help improve access to employment opportunities to residents of the LISTT municipalities.	MBLISTTDA Baguio LGU/SP
<b>Emergency Employment Bill</b>	A bill that would be an updated version of the Emergency Employment Act of 1962 (RA 3466). This bill should consider providing emergency employment to displaced workers in the formal and informal sectors due to man-made disasters and natural calamities. The bill should also consider training support for affected workers to avoid skills mismatch.	DOLE

# 06

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## Protect Purchasing Power

**6.1 Ensure Food Security**

**6.2 Strengthen Social Protection**



## Chapter 6.1

# 6.1 Ensure Food Security and Proper Nutrition

To ensure food security and proper nutrition, the region will diversify food supply sources, strengthen buffer stocking in preparation for supply-chain disruptions, optimize digital platforms for the marketing and delivery of food, and proactively monitor the supply and demand for key commodities.

## Assessment and Challenges

### Assessment of performance

**Food sufficiency.** Decreases in major commodity production resulted in the contraction of food sufficiency levels for 2020 and 2021 particularly for rice, roots and tuber crops, pork, chevon and poultry (Table 25).

Nevertheless, the region remains food sufficient in terms of rice, white corn, vegetables, and roots and tuber crops. The region showed slight increases in food sufficiency levels for corn, vegetables, fruits, beef, and eggs.

Table 25 Food Sufficiency Level by Commodity Group (in percent), CAR, 2017-2021, DA-CAR

Commodity	2017	2018	2019	2020	2021	Percent Change (2020-2021)
Rice	117.94	101.89	107.13	98.91	97.40	-1.5%
White Corn	260.12	238.33	227.52	259.81	260.37	0.2%
Roots and Tuber Crops	395.73	381.91	370.82	347.18	302.7	-12.8%
Vegetables	198.70	228.53	238.58	253.92	254.07	0.1%
Fruits	55.68	53.49	49.26	53.03	54.55	2.9%
Pork	97.94	99.34	97.62	96.90	80.87	-16.5%
Beef	69.19	65.48	62.37	55.42	55.44	0.04%
Chevon (Goat)	22.04	20.89	20.69	20.91	20.64	-1.3%
Poultry	7.78	7.09	6.44	6.10	5.70	-6.6%
Eggs	2.27	2.52	2.55	2.86	2.96	3.5%

Source: Department of Agriculture - CAR

**Production of most food commodities declined and contracted even further during the pandemic.** Palay production in 2021 was recorded at 381,077 metric tons (MT) contributing around 2.1 percent of the national output. Across provinces, Kalinga

remains as the top palay producer at 32 percent, followed by Abra at 24 percent.

The provinces of Abra, Benguet, and Kalinga had better corn production in 2021. Ifugao, the region's leading corn producer,

contributed 34 percent of the total production equivalent to 73,711 metric tons, while Benguet contributed the least at 483 metric tons.

The province of Kalinga has a physical corn production area of 12,343 hectares which are fully utilized during the rainy season. Major yellow corn-producing municipalities are Tabuk City, Pinukpuk, Tanudan, and Rizal. Hence, most of the corn interventions go to these municipalities. They also produce white corn primarily for home and local consumption. With the growing demand for yellow corn being the main ingredient for livestock and poultry feeds, the corn production areas continue to expand even in the steep rolling areas. High yield, however, in these areas is not guaranteed because of the unfavorable slope.

One main problem identified particularly during the rainy days is the surface runoff which carries away the nutrients needed by the plants. Amidst this, sustainable ways such as sustainable corn production in sloping areas (SCoPSA) and intercropping are being promoted by the DA-CAR. Technology demonstrations on SCoPSA were established in the major-producing provinces in the region since 2019. For Kalinga, there are two established areas located in the municipality of Tanudan. SCoPSA is a project introduced by the DA which aims to enhance the productivity level of corn farmers by promoting sustainable land use management that will enhance the agricultural livelihood as well as restore the ecological balance in the sloping areas.

***On vegetables, the region remains as the top producer of highland vegetables such as cabbage and potato.*** While a 4.17 percent decrease was recorded in overall vegetable production in 2021, latest available data based on the Crop Production Survey as of September 2022 shows CAR as the top producer of cabbage and potato, contributing 57.2 percent and 62.2 percent, respectively, to national production. Much of the production of vegetables emanates from the provinces of Benguet and Mountain Province. The region also supplies at least 80 percent of the highland vegetable requirement of the National Capital Region (NCR).

***Meanwhile, production of major fruit crops (banana and mango) increased by 2.43 percent from 30,222 MT to 30,957 MT.*** The province of Apayao is the top producer of banana in the region, accounting for 34 percent, followed by Abra at 28 percent.

***On coffee production, the region gained global recognition.*** Coffee from Sagada, Mountain Province and Mankayan, Benguet were awarded in international competitions held in Paris and South Korea, respectively. While coffee production increased by 11 percent, the region has yet to realize its full potential as agricultural production area remains limited.

***Livestock and poultry contracted at 12 percent and 5 percent, respectively.*** Livestock, particularly hog raisers were affected by the African Swine Fever (ASF) which was detected in 16 percent or 199 out

of 1,178 barangays in the region from 2019 to 2022.

The DA-CAR implemented the ‘Bantay ASF sa Barangay’ (BABay) Program, a community-based approach developed by the Bureau of Animal Industry (BAI), DA, and a collegial body of swine veterinarians. Engagement with LGUs, surveillance, biosecurity, capability and awareness, and recovery and repopulation were key in preventing further ASF infection in the region.

The Philippine Crop Insurance Corporation (PCIC) also provided financial assistance to affected hog raisers. The DA’s Special Area for Agriculture Development Program (DA-

SAAD) also assisted ASF-free barangays in Apayao, Mountain Province, and Kalinga through the provision of feeds. Continuous swine production was also encouraged through the Swine Production Feeds Assistance Program (SPFAP) which covers the provision of feeds to qualified backyard swine breeder farms in ASF-free areas.

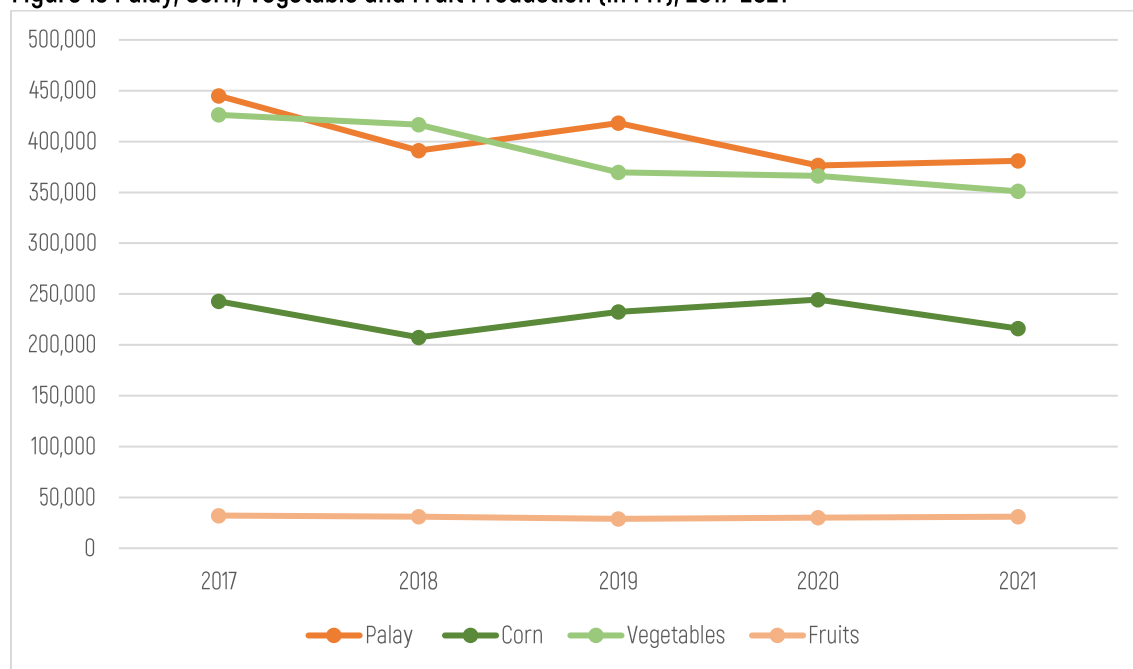
As of March 2023, 12 municipalities are currently listed under Green (free) zone, 21 municipalities under Pink zone, and 44 municipalities listed under Red (infected) zone. The need to improve the production of various commodities can be seen in which shows the lackluster performance in recent years.

**Table 26 Volume of Production (in MT) per Commodity Group, CAR, 2017-2021**

Commodity Group	2017	2018	2019	2020	2021	Percent Change (2020-2021)
Palay	445,006	391,105	418,321	376,473	381,077	1.22%
Corn	242,850	207,439	232,351	244,550	216,066	-11.65%
Vegetables	426,233	416,581	369,759	366,315	351,031	-4.17%
Fruits	32,123	31,096	28,895	30,222	30,957	2.43%
Coffee	1,866	2,182	1,579	2,006	2,229	11.12%
Livestock	46,529	34,334	34,187	32,583	28,664	-12.03%
Poultry	8,663	8,036	7,426	6,854	6,512	-4.99%
Fish	4,148	4,419	4,158	3,702	4,054	9.51%

Source: PSA-CAR

**Figure 13 Palay, Corn, Vegetable and Fruit Production (in MT), 2017-2021**



Source: PSA

**Two out of 100 individuals in CAR are food poor.** In 2021, 2 in every 100 individuals in the region belong to the food poor population whose amount of incomes were below the food threshold, or the amount needed to buy their basic food needs and satisfy the nutritional requirements set by the Food and Nutrition Research Institute (FNRI) to ensure that one remains economically and socially productive.

In 2021, significant improvements in subsistence incidence among population were recorded in all provinces of CAR. Apayao recorded the most significant improvement in the region with a drop of 4.4 percentage points, from 5.6 percent in 2018 to 1.2 percent in 2021. Mountain Province came in second at 5.2 percent in 2021, 4.0 percentage points lower than the 2018 record of 9.2 percent. The City of Baguio posted the

lowest subsistence incidence among population in CAR with 0.2 percent. In terms of magnitude, around 40,000 individuals in the region are considered food poor in 2021, a 32 percent decrease from 59,000 in 2018. By province, almost one-third (32.5%) are from the province of Abra, followed by Benguet at 22.5 percent. Meanwhile, less than 1 percent (800 food poor individuals) are from Baguio City. Overall, subsistence incidence in the region improved by 1.1 percentage points from 3.3 percent in 2018 to 2.2 percent in 2021.

**Food inflation rate accelerated during the COVID-19 pandemic and worsened even further due to external economic shocks.** One of the primary drivers of food inflation during the pandemic was the disruptions in food supply chain. The lockdowns, travel restrictions, and other measures designed to



slow the spread of the virus made it difficult to transport food from farms and processing facilities to retail outlets and restaurants. Increased demand for food as families spent more time at home also contributed to inflation. With more people cooking at home and fewer dining out, demand for certain food items increased, which put additional pressure on supply chains and led to price increases. External economic shocks, such as rising oil prices and disruptions in global trade, have also contributed to food inflation rates. Transportation costs have increased due to higher fuel prices, which have in turn increased the cost of shipping food products. The region is also prone to natural disasters such as typhoons, which can disrupt food production and supply chains.

In 2022, food inflation is highest for sugar, confectionery and desserts. In terms of weight, it is led by vegetables, tubers, cooking bananas and pulses, with an inflation rate of 36.3 percent in December 2022.<sup>25</sup> Sugar shortage that started in early 2022 pulled up inflation for the commodity from only 0.4 percent in 2021 to 43.1 percent in December 2022. Meanwhile, increasing inflation for vegetables has been observed since 2020 when it was difficult to transport produce because of the pandemic.

The government sustained its efforts to ensure that food products are available and affordable. Through the DA-CAR's Plant Plant Program, over 602 kilograms of free vegetable seeds to farmers to ensure food

production, availability, and accessibility across the region amidst the pandemic. The DA-CAR also partnered with the local government unit (LGU) in providing assistance and support to farmers, farmer cooperatives and associations (FCAs), and the local communities. Since 2019, the DA-CAR also sustained efforts to link farmers/ fisherfolk with consumers through the "Kadiwa ni Ani at Kita". This program ensures that farmers get the best prices for their goods, while providing, affordable, safe and nutritious food to consumers.

***Reduction in the prevalence of malnutrition among children under-five showed significant improvements.*** From 2017 to 2021, prevalence of stunting among this age group decreased from 12.07 percent to 9.72 percent; wasting from 2.34 percent to 1.47 percent; overweight from 2.64 percent to 2.63 percent; and underweight from 3.55 percent to 3.19 percent.

Disruptions in the delivery of nutrition services at the beginning of the COVID-19 pandemic threatened to exacerbate the prevalence of malnutrition in the region. To mitigate the pandemic's impact and other challenges such as absence of permanent Nutrition Action Officers (NAOs) and insufficient funding, the LGUs ensured the presence of local funding resources for the implementation of Local Nutrition Action Plans (LNAP), sustained activities on the First 1000 Days, and employed permanent local

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<sup>25</sup> Weight in the Consumer Price Index (CPI) corresponds to "the value attached to the commodity or group of commodities to indicate the relative importance of that commodity or group in the

market base." (PSA) In terms of weight, the impact of inflation for rice; meat; fish and other seafood; vegetables; and bread, in this order, will have the greatest effect on food inflation. Sugar has among the lowest weights for food inflation.

nutrition focal points. These resulted to the continuation of nutrition service delivery and provision of food packs for families.

“Gulayan sa Paaralan Program” to help in decreasing malnutrition among children and harmonize efforts to attain food sufficiency.

In 2021, the DA-CAR provided agricultural inputs to the DepEd-CAR in support to its

## Challenges

***Agricultural production areas remain limited, hence, the encroachment of forest lands in the region.*** Only 15 percent of the region’s land area or 283,543 hectares are classified as alienable and disposable (A&D) and 85 percent or 1,583,117 hectares are classified as forest land including those within protected areas. Such land classification, along with the steep terrain of the region, limits areas suitable for agriculture such that built-up areas encroach into forest areas (Chapter 2).

***Vulnerability to disasters and climate change persists.*** Crops and livestock losses, damages to irrigation and farm-to-market roads (FMRs) and rain-induced landslides caused by typhoons continue to affect the agriculture sector in the region. Thus, the sector’s resilience to disasters, extreme temperature and off-season typhoons need to be integrated in the design of support infrastructure like irrigation and FMRs as well as in technologies being developed. Crop losses and rehabilitation costs are foregone funds that could have been added to farmers’ income or for government assistance.

The conversion of prime agricultural lands into other uses further limits areas for agricultural production. In Tabuk City, Kalinga alone, more than 200 hectares of agricultural lands were converted to other land uses in 2022. This is a significant reduction on the area being tilled by the farmers to produce rice and other agricultural crops that sustain the rice self-sufficiency of the Cordillera.

Further development of potential agricultural areas is also hampered by poor road networks, inadequate irrigation systems, and limited transportation facilities.

***Use of chemical-heavy fertilizers and pesticides impacts food safety and threatens the region’s environment and ecosystem.***

While chemical fertilizers can increase crop yield, improper use and over-reliance on them can have negative effects on human health. The intensive use of the chemical fertilizers and pesticides to boost agricultural yield has negative effects to the environment

specially on soil health and fertility. The improper disposal of chemical bottles and containers also contaminate water bodies that are primarily for domestic and agriculture use. In addition, conventional farming practices also poses risks to human health and contribute to the development of chronic diseases.

## Targets

**Table 27 Plan Targets to Ensure Food Security and Proper Nutrition**

Outcome Indicators	Baseline		Targets						Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	
<b>Food Security and Proper Nutrition Ensured</b>									
Sub-Chapter Outcome 1: Sufficient and stable supply of food commodities attained									
Food inflation rate kept within target (%)	2022	10.2%	4.5-5.5	4.5-5.5	4.5-5.5	4.5-5.5	3.5-5.5	3.5-5.5	PSA, NEDA <sup>26</sup>
Food sufficiency levels kept within target (%)									DA
Rice	2021	97.4	109	111	113	116	119	119	
White Corn		260.4	343	344	344	344	347	351	
Roots and Tuber Crops		302.7	312	317	322	319	319	318	
Vegetables		254.1	262	266	270	274	274	274	
Fruits		54.6	57.2	58.6	60	61.4	63.4	65.5	
Pork		80.9	86.8	87.1	87.4	87.7	88.7	89.7	
Beef		55.44	55.7	57.2	57.8	58.4	59.6	60.7	
Chevon		20.64	21.5	22	22.5	23	24	25	
Poultry		5.70	6.18	6.43	6.7	6.9	7.2	7.7	
Eggs		2.96	3.21	3.34	3.47	3.61	3.79	3.98	
<b>Sub-Chapter Outcome 2: Access of consumers to affordable, safe and nutritious food expanded</b>									
Subsistence incidence among population (%) reduced									PSA
CAR	2021	2.2%			1.5-2.0			1.5-2.0	PSA, NEDA <sup>27</sup>
Abra		5.3%							
Apayao		1.2%							
Baguio City		0.2%							

<sup>26</sup> Targets were estimated by NEDA considering national targets and past trends

<sup>27</sup> Targets were estimated by NEDA considering national targets and past trends

Outcome Indicators	Baseline		Targets						Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	
Benguet		1.8%							
Ifugao		1.5%							
Kalinga		1.9%							
Mountain Province		5.2%							
<b>Number farms/aquafarms/food establishments with food safety certifications increased (cumulative)</b>									
Good Agricultural Practices (GAP)	2022	512	692	872	1,052	1,232	1,412	1,592	DA
Good Animal Husbandry Practices (GAHP)	2022	0	30	60	90	120	150	180	DA
Good Aquaculture Practices (GAQP)	2022	17	Increasing						BFAR
<b>Sub-Chapter Outcome 3: Nutrition across all ages improved</b>									
Proportion of households meeting 100% energy intake (%) increased	21.8	2018	26.6	27.8	29.0	30.2	31.4	32.6	NNC
Prevalence of stunting among children under five years of age decreased (%)	2022	7.49	7.28	7.07	6.86	6.65	6.44	7.49	NNC
Abra		13.94							
Apayao		11.17							
Baguio City		1.61							
Benguet		5.55							
Ifugao		4.43							
Kalinga		10.74							
Mountain Province		13.67							
Male		5,294							
Female		4,491							
Prevalence of wasting for children under five years (wasting) decreased (%)	2022	1.47	1.427	1.384	1.341	1.298	1.254	1.47	NNC
Abra		3.84							
Apayao		2.24							
Baguio City		0.22							
Benguet		0.85							
Ifugao		0.73							
Kalinga		2.3							
Mountain Province		1.94							
Male		1,085							
Female		864							

# Strategy Framework

Figure 14 Strategy Framework to ensure food security and proper nutrition



Improving food security and proper nutrition in the Cordillera will require a multi-faceted approach that addresses not only agricultural production but also access to healthy and diverse diets, as well as nutrition education and food fortification initiatives. In line with the CAR Regional Spatial Development Framework (2019-2049), sustainable agriculture practices will be promoted, crop diversification will be encouraged, market linkages will be developed and agricultural research and development will be supported. Specifically, the following strategies and programs can be promoted in support of the regular programs of government agencies:

## Outcome 1: Sufficient and stable supply of food commodities attained

**Boost productivity and resiliency of the local agri-fishery sector.** Interventions to enhance agri-fishery production and resilience of small farmers shall be intensified. Guided by the Regional Competitiveness Agenda (RCA)

2022- 2028, the region shall pursue a robust exporting, value-adding agri-business industry and high standard tourism sector that is competent, safe, and with a culture-based sustainability. Under the economic

dynamism pillar, DA-CAR and DTI-CAR shall assist farmers and fisherfolk through competency building and training needs analysis. Production of high-value crops such as coffee shall be expanded aside from the top coffee producers in the region (Benguet, Mountain Province, Kalinga) with the help of DENR-CAR in identifying expansion areas for specialty coffee production.

The various programs of the DA-CAR on rice, corn, high-value crops, livestock and organic agriculture will be strengthened and expanded. The DA-CAR through the Special Area for Agricultural Development (SAAD) program shall also strengthen its collaborative efforts with local government units specifically in the provinces of Apayao, Kalinga and Mountain Province. Through the Production and Livelihood Interventions component of the SAAD, interventions given to selected beneficiaries range from

animals, crops, fisheries production, post-production inputs, tools, machinery, facilities, and equipment to improve their farm and fish production practices and productivity. On the other hand, through the Marketing Assistance and Enterprise Development component of the program, community-based enterprises will be established.

Considering the region's vulnerability to climate-change induced natural calamities, good practice options for climate-change adaptation (CCA) identified in Benguet and Ifugao may be adopted in other provinces in the region.

In Benguet, some of the good practices include: a) seed production in greenhouses; b) integrating lemon in vegetables farms for slope protection, soil fertility improvement through composting; c) planting of heavy rainfall tolerant crop varieties; d) small irrigation facilities to support vegetables production; and e) forest enrichment by planting fruit and forest trees and fallow cropping after rice.

In Ifugao, good practices include: a) community nursery for indigenous fruit trees; b) planting of coffee, rambutan, and pomelo for forest enrichment and slope protection; c) integration of vegetables in rice production; d) homestead gardening; e) riverbank rehabilitation by planting bamboos; and f) planting alternative crops in the abandoned rice fields. These good practices will be combined with knowledge and science-based approaches to climate change adaptation.

***Diversify food supply sources by maximizing the use of non-traditional agricultural areas.***

Given the limited agricultural production area in the region, the practice of agriculture in urban areas will be promoted through the urban and peri-urban agriculture (UPA) system as it is a key player in the delivery of healthy and nutritious food to urban residents and in minimizing food loss and waste through short supply chains.

Free seeds will be distributed to residents in the region to promote the planting of vegetables, herbs and spices in non-traditional areas (e.g. vertical, rooftop, and backyard gardening). Subsistence gardening

will enable households to have easier access to food sources during supply disruptions.

In line with the DA-CAR and the Bureau of Plant Industry's (BPI) Green Revolution 2.0: Plants for Bountiful Barangay Movement (Luntiang Ani ng Mamamayan). The adoption of the said program will not only mean food availability but also a cost-cutting measure considering the high prices of commodities.

In CAR, Baguio City and Tabuk City are the beneficiaries of this program. Among the interventions to be implemented are the establishment of rabbit and mushroom production facilities, provision of fertilizers, technology demonstration for lowland vegetables, establishment of nurseries, and conduct of specialized trainings. This will also be expanded to qualified peri-urban areas in the region as beneficiaries for the rest of the plan period.

Aside from non-traditional agricultural areas, the government will also encourage households and communities to till vacant lots and school-based agriculture through *Gulayan sa Barangay* and *Gulayan sa Paaralan* Programs. This is in partnership with the different barangay local government units and the public schools.

School-based agriculture will also be promoted through the 4H Club which stands for 'Head, Heart, Hands, and Health'.<sup>28</sup>

To operationalize these programs, the DA-CAR shall provide production inputs, such as seeds or seedlings, soil, compost, and initial stock (e.g., small ruminants, chicken, and ducks) as starter kits, complemented with skills training (e.g., sowing of seeds and proper management, composting, and pest disease management).

***Promote strategic areas for agriculture and fisheries development.*** Production of food commodities will be prioritized in provinces based on their natural resource endowments, market demand, and socio-economic conditions which are consistent with the Strategic Agriculture and Fisheries Development Zones (Refer to Map 12 in Chapter 7). Production of high-value crops such as coffee, cacao, and vegetables has great potential in all the provinces. All of the provinces except Benguet also have the potential for livestock production.

Inland fish production in Abra and Ifugao needs to be further developed as a food source and income for local communities. The development of fish farming infrastructure, such as fish ponds and hatcheries, as well as the provision of technical assistance and training to fish farmers, can help improve fish production in these provinces.

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<sup>28</sup> It aims to inculcate among young people (7 to 30 years old) the importance of knowing the different facets of agriculture, understanding its value, participating in food production for food sustainability

and eating healthy for a healthy body. It's current membership of 6,500 in the region mainly from schools in Kalinga and Baguio City will be expanded to include students from the other provinces.

The East Kalinga Growth Center (EKGC) will also be strengthened as the agro-industrial center in the region. The potential of Tabuk City and its neighboring municipalities as a primary growth center is significant given its vast and versatile land area. Tabuk City will serve as the primary service center, while Pinukpuk shall be the primary agri-production and processing center. The municipality of Tanudan will serve as the agri and eco-tourism primary center with sites like Mt. Binaratan.

The development of agro-industrial activities in the region will be guided by principles such as soil conservation, water management, biodiversity conservation, and the promotion of sustainable livelihoods for indigenous communities as provided in the CAR Declaration of Principles on Environmental Governance (DPEG).

In line with the Network of Protected Areas for Agriculture and Agro-Industrial Development (*Refer to Chapter 7 Modernize Agriculture and Agribusiness Map 7.1.2*). It will also prioritize the use of environmentally friendly technologies and practices, such as organic farming, sustainable forest management, and renewable energy sources. The use of pesticides and fertilizers should be minimized, and the adoption of integrated pest management techniques should be encouraged. Similarly, water management practices should be improved to ensure that water resources are used efficiently and sustainably.

***Strengthen buffer stocking of rice and other basic food items for emergencies and disasters.*** Drawing from lessons learned during the COVID-19 pandemic, the DA-CAR will implement the Plant Plant Plant Program Phase 2 as the region's local food system is challenged anew with the high prices of basic food items to mitigate and cushion the effects of the global economic challenges compounded by the Ukraine crisis, while boosting local food production.

At present, the buffer stock of rice of the National Food Authority (NFA) in the region is only good for 8.6 days. Hence, LGUs will also be encouraged to take the lead in ensuring adequate buffer stock within their jurisdiction. The LGUs could also purchase and store rice from local farmers during times of surplus and release this stock into the market during times of shortage or high prices. This could be done by using warehouses or other storage facilities that meet the necessary standards for food safety and quality. Moreover, the establishment of a buffer stock for rice could provide additional benefits beyond stabilizing prices and supply as it could also create opportunities for small-scale farmers to sell their produce to the government or other organizations at a fair price, and promote food security by ensuring that there is an adequate supply of rice available in times of need.

Private-sector-initiated food banks or community pantries will also be crucial during emergencies and supply-chain disruptions, especially for the most vulnerable sectors.



***Reduce and prevent food losses and waste.***

More food processing facilities will be established in the region to reduce waste from unsold crops and to avoid dumping of vegetables. Through the food processing facility in the Benguet Agri Pinoy Trading Center (BAPTC), initial washing and trimming of high-value crops will be done while more complicated processing activities will be done through the DA-funded processing facility under the Benguet State University (BSU). These facilities will be promoted among farmers in the region to enable them to add more value to their produce instead of dumping unsold vegetables.

To improve post-harvest handling and aid in the delivery of farmers' produce, cold-chain facilities will be established in strategic areas in the region. As of date, there are two cold-chain facilities in the region, the Benguet Cold Chain (BCC) facility and the Benguet Agri Pinoy Trading Center (BAPTC) cold-chain

facility in La Trinidad, Benguet. The BCC facility will serve as an operational packaging line for fresh and semi-processed agricultural products such as broccoli, cauliflower, cabbage, lettuce, bell pepper, carrots, and strawberry.

Aside from these, the DA-CAR along with other regional line agencies, LGUs and the private sector will intensify IEC activities to cut down on food waste through the Be RICEponsible advocacy, among others.

Cordillera food traditions and ethics that are deeply rooted in indigenous communities will also play a role in reducing food losses and waste at the household level. An example of which is the practice of “ayyew” or being mindful in gathering and preparing food resources so that nothing is wasted and others too have their share. This also includes creativity and resourcefulness in working with simple ingredients and cooking implements, and working within the limits of what is available.<sup>29</sup>

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<sup>29</sup>Balusdan M., Cariño J., Cariño-Fangloy, J. et.al. (2019), Heirloom Recipes of the Cordillera. Philippine Task Force for Indigenous People's Rights. Retrieved from

[https://voice.global/assets/2019/06/Heirloom-Recipe-Book\\_ecopy.pdf](https://voice.global/assets/2019/06/Heirloom-Recipe-Book_ecopy.pdf) on January 25, 2023.

## Outcome 2: Access of consumers to affordable, safe, and nutritious food expanded

**Promote private investment in facilities, transport, and logistics systems to bring safe and nutritious food closer to consumers.** The private sector and LGUs will also be engaged in the creation of food hubs and establishment of efficient transport and logistics systems (e.g., warehouses, cold chains, cold storage and refrigeration facilities, mobile storage, and mobile marketplaces, rolling stores, processing facilities, and digital marketing channels). These will be guided by existing national agriculture planning tools and information systems (e.g., ABEMIS and GeoAgri Portal), master plans (e.g., National Irrigation Master Plan), and various commodity roadmaps.

Increased collaboration with the private sector will improve production cost efficiency, compliance to quality standards, consolidation of produce, and access to wider markets. Stakeholders from the private sector will also be encouraged to invest in and set up more agri-based industries in the region, and help develop linkages to local and export markets.

**Ramp up the promotion and use of digital platforms for marketing, delivery, and payment transactions.** Leveraging on the use of existing online marketing platforms will be promoted in collaboration with the private sector to make farmers' produce accessible to consumers within and outside the region.

In addition, convergence programs such as the Agribusiness Support for Promotion and Investment in Regional Exposition (ASPIRE) of the DA-CAR, DTI-CAR and Philippine Chamber of Commerce (PCCI) shall be sustained.<sup>30</sup>

The first step is to develop digital platforms that can be used for marketing, delivery, and payment transactions in agriculture. These platforms should be user-friendly and accessible to farmers, traders, and consumers alike. The success of the Session Groceries Farm to Table business model can be replicated in other provinces. It is an app that directly links over 2,000 partner farmers spread across Benguet, Cavite, Ilocos, Mindoro, and Pangasinan and consumers (NCR, Region IV-B and Region III) to support local agribusiness, promote a sustainable lifestyle, and educate the local community on the benefits of eating fresh, locally grown food.

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<sup>30</sup> ASPIRE is a collaborative program of the Department of Agriculture (DA), Department of Trade and Industry (DTI), and the Philippine Chamber of Commerce and Industry (PCCI) as a platform to recognize the importance of collaboration and networking specifically in the promotion of agri-based products from the local micro, small and

medium enterprises (MSMEs) including different farmers and cooperatives associations (FCAs), and individual farmers and fisher folk.

Once the digital platforms are developed, it is important to provide training and education to farmers and other stakeholders on how to use them effectively. This will help ensure that everyone is able to take advantage of the benefits of these platforms.

To encourage adoption of the digital platforms, it may be necessary to offer incentives such as discounts or other rewards to those who use them. Additionally, it is important to highlight the benefits of using digital platforms, such as increased efficiency and lower transaction costs. To ensure the success of digital platforms in agriculture, it is important to foster partnerships between farmers, traders, and other stakeholders. This can help create a more integrated and efficient supply chain that benefits everyone involved.

***Improve food transportation and distribution processes to hasten and ensure unhampered movement of food products.***

The DA-CAR will continue ensuring that quality agri-fishery products such as rice, fish, poultry and livestock products, fruits and vegetables, and other basic commodities are accessible and available at affordable prices through the various modalities of the Kadiwa ni Ani at Kita Program (e.g. Kadiwa Retailing, Kadiwa on-wheels). These will be in collaboration with the local government units. Unhampered delivery of food commodities will also be ensured through the close coordination of relevant RLAs and LGUs.

To facilitate interregional trade, food terminals will be established in strategic areas

to expand areas where highland vegetables will be made available to consumers at affordable prices.

***Strengthen price and supply monitoring of food commodities.***

The Local Price Coordinating Councils (LPCCs) will be strengthened to closely monitor prices of agricultural commodities and processed goods, and coordinate and rationalize programs intended to stabilize prices and supply at the local level.

The DTI-CAR will continue monitoring the prices and supply of basic food commodities in public markets and grocery stores through the market monitoring system. Price-control measures will also be implemented to prevent unscrupulous traders from taking advantage of supply shortages and increasing prices unreasonably.

***Address anti-competitive practices and price manipulation.***

The Philippine Competition Commission (PCC) through its Investigation Station (iStation) located in the University of the Philippines - Baguio shall be vigilant in monitoring anti-competitive practices that hamper fair competition, such as price-fixing, and market division/allocation, among others; and thereby secure the benefits of both consumers and businesses.

The DA and the DTI, in coordination with LGUs and accredited consumer groups, shall also intensify monitoring and enforcement activities to protect consumers from price manipulation and ensure that prices of necessities like rice and prime commodities

are kept within reasonable levels through the LPCCs.

***Intensify promotion of food labeling and food safety measures.*** The promotion of food labeling and food safety measures is crucial in ensuring that consumers in the region have access to safe and high-quality food products. This is especially important for agricultural products, as they are a major source of livelihood for many small-scale farmers in the region. To do this, the government can develop and enforce food safety standards that are specific to the region's agricultural products, taking into account the unique production methods and cultural practices of local farmers. These standards can be developed in collaboration with local farmers, producers, and consumer groups to ensure that they are practical and effective.

Education and training to farmers, producers, and consumers on food safety and labeling practices will also be provided. This can include workshops and seminars on good agricultural practices, hygiene, and labeling requirements, as well as the use of food safety technologies such as irradiation and pasteurization. Voluntary labeling will also be encouraged by providing incentives for producers and farmers who adhere to food safety and labeling requirements. This can include promotional materials, marketing campaigns, and financial support for producers who invest in food safety technologies.

Monitoring and enforcement mechanisms will also have strengthened to ensure that

food products meet food safety and labeling standards. This can include inspections of food establishments and testing of food products for contaminants and other hazards. These will promote consumer trust in local agricultural products, support the livelihoods of small-scale farmers, and ensure that the region's food supply is safe and of high quality.

IEC activities to promote safe and responsible use of chemical fertilizers to ensure food safety and security will be intensified. These will increase awareness of farmers on the benefits of using organic fertilizers, and the potential health and environmental risks associated with excessive use of chemical fertilizers. Alternative and sustainable practices that could reduce the region's reliance on chemical fertilizers and enhance the quality of its agricultural produce will also be explored and promoted to farmers (*Chapter 7*).

The promotion of Good Agricultural Practices (GAP), Good Animal Husbandry Practices (GAHP), Good Aquaculture Practices (GAqP) and Good Manufacturing Process (GMF) will be intensified and expanded. These are important in ensuring food safety and assuring product quality while keeping high regard for environmental protection and that of consumers' health, safety, and welfare. These practices bridge the gap between traditional farming practices and the market as well as the customers' standards for agri-fishery products.

## Outcome 3: Nutrition Across All Ages Improved

*Adopt a whole-of-society approach in the promotion of good eating practices and healthy lifestyle.* This strategy will be crucial in addressing the prevalence of malnutrition, obesity, and non-communicable diseases (NCDs) in the region. It will also involve the active participation and collaboration of the government, private sector, civil society, and individuals in promoting good eating practices and healthy lifestyle. Thus, it recognizes that the responsibility for achieving better health outcomes is shared by everyone.

The local government units through their respective Local Nutrition Action Plan will target and prioritize households in the provision of support services such as the provision of seeds in partnership with the DA-CAR and fingerlings in partnership with BFAR-CAR.

The National Nutrition Council-CAR will expand the Tutok Kainan Dietary Supplementation Program for stunted children 6-23 months old. This is in collaboration with the Department of Agrarian Reform-CAR as Agrarian Reform Beneficiaries and Organizations serve as supplier of food commodities used for the program. Produce from the Gulayan sa Paaralan will also be used for the supplementary feeding for malnourished children. These will be monitored by the NNC-CAR through the Monitoring and

Evaluation of Local Level Plan Implementation (MELLPI Pro).

In the establishment of scaling up Nutrition (SUN) Networks there is also a need to involve Academe, Civil Society, Business Sector, Youth Sector, Development Sector to help advocate malnutrition in the region.

Multi-media IEC will focus on consumption of diversified and nutritious food in all life stages but with emphasis in the First 1000 days of life and additional nutrients will be provided to undernourished 6-23 months' children and nutritionally-at-risk pregnant women through the conduct of Tutok Kainan Dietary Supplementation Program. The NNC-CAR will also continue to provide assistance to the five Nutriskwela Community Radio Stations and will lead the conduct of the region-wide Nutrition Month Celebration.

The private sector can be engaged in promoting good eating practices and healthy lifestyle by offering healthier food options, providing facilities for physical activity, and supporting community health initiatives.

Lastly, individuals and families will be empowered to make healthier choices by promoting healthy eating habits at home, encouraging physical activity, and setting a good example for others.

***Intensify research, development and adoption of technologies that increase and preserve nutritional content and prolong shelf-life of food products.*** Through the Regional Research Fund of the Cordillera Regional Health Research and Development Consortium (CRHRDC) support to studies on food and nutrition specifically on the nutritional status across all ages and emerging issues on food safety will be provided as these are included in Regional Unified Health Research Agenda (RURHA). This will be in partnership with SUCs, HEIs, regional line agencies and Civil Society Organizations (CSOs).

Technology transfer trainings spearheaded by the DOST-CAR with the Food and will be sustained (e.g. Enhanced Nutribun variants) for the supplemental feeding of malnourished children in the region. As there are only 12 nutribun technology adopters in the region, this will be expanded particularly in areas where malnutrition indicators are high (Abra, Apayao, Kalinga and Mountain Province). Complementary Food Processing Facilities (CPF) will also be established in addition to the two CPFs located in the Apayao State College (ASC) and Ifugao State University (IFSU). These CPFs process complementary food products such as rice-mongo curls, rice-mongo instant blend, and rice-mongo sesame food blend which were developed by the Food and Nutrition Research Institute

***Promote consumption of nutrient-rich local food commodities.*** Relevant government agencies such as the DA-CAR, NNC-CAR, DepEd-CAR will advocate for the

consumption and production of local food commodities such as roots and tuber crops (e.g. camote which is rich in carbohydrates, fats, proteins and various micronutrients that help maintain good health and nutrition). Other nutrient-rich food commodities that will be promoted include legumes and heirloom rice.

***Strengthen complementation and convergence of nutrition-specific, nutrition-sensitive, and enabling interventions.*** Convergence among concerned agencies, especially the National Nutrition Council (NNC)-CAR being the lead and the LGUs, will ensure provision of technical assistance in planning, implementing, and evaluating nutrition interventions, financial assistance to Barangay Nutrition Scholars, and conduct capacity building to nutrition workers and member of the local nutrition committees. Nutrition-specific interventions include supplementary and school-based feeding programs of the Department of Social Welfare and Development (DSWD) and Department of Education (DepEd).

The Dep-Ed-CAR shall strengthen its implementation of School-Based Feeding Program (SBFP) through a capacity building on the establishment of central kitchens and finalization of the SBFP roadmap. The actual feeding of Nutritional Food Products (NFP) and milk shall be done in 120 days and 43 days, respectively. DepEd CAR shall validate the recommended skim milk powder and powdered milk in compliance to RA 11037 “An Act Institutionalizing a National Feeding Program for Undernourished Children in

Public Day Care, Kindergarten and Elementary Schools to Combat Hunger and Undernutrition Among Filipino Children and Appropriating Funds Therefor”.

***Strengthen nutrition governance especially in local government units.*** Nutrition programs will be developed and reinforced by conducting a Monitoring and Evaluation of Local Level Plan Implementation (MELLPI) Pro to assess nutrition program implementation of LGUs and identify areas for technical assistance. Nutrition shepherding will also guide LGUs with high prevalence of malnutrition in the management of nutrition program, and strengthen the Regional Nutrition Committee (RNC)-CAR to conduct necessary activities to address needs of LGUs. The NNC-CAR will also conduct nutrition governance webinar for Punong Barangays.

# Legislative Agenda

Table 28 Legislative Agenda to ensure food security and proper nutrition

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<p><b>Support to the Cordillera Regional Autonomy</b></p>	<p>This will enable the region to craft policies that are responsive to the unique needs of the Cordillera farmers and fisherfolk.</p> <p>Through Cordillera autonomy, the region will have more control over its own economic development and could prioritize agriculture as a key industry, with a focus on sustainable and inclusive growth. This could lead to policies and investments that support small-scale farmers, promote sustainable agriculture practices, and increase access to markets and financing.</p>	<p>RDC, NEDA</p>
<p><b>Increase funding for R&amp;D activities</b></p>	<p>This will ensure that SUCs as well as the academe will have adequate funding for R&amp;D activities in relation to food sustainability, nutritional content and agri-fishery sector.</p> <p>It will also help accelerate agricultural development in the Cordillera region by providing the necessary resources to develop and implement new technologies and practices that are specifically tailored to the unique needs of the region.</p>	<p>SUCs, DOST, DA</p>
<p><b>Amendment of PD 1569 or the Barangay Nutrition Scholar (BNS) Law</b></p>	<p>The amendment of PD 1569 could have a positive impact on the Cordillera region as it will strengthen community participation, improve maternal and child health outcomes, provide better training and support for BNS, and enhance collaboration with local government units.</p> <p>The proposed amendment places a greater emphasis on the role of BNS in promoting maternal and child health. This is particularly important in the Cordillera region, where many communities are located in remote and hard-to-reach areas, making it challenging for mothers and children to access healthcare services. It also seeks to provide more comprehensive training and support for BNS, including opportunities for skills development and career advancement. This can lead to a more motivated and effective BNS workforce in the region.</p>	<p>NNC</p>
<p><b>Resolution to create positions for nutrition and</b></p>	<p>This is essential in promoting the health and well-being of the local communities and ensure sustainable</p>	<p>NNC, PopCom</p>



LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>population and development programs</b>	development as it will help in addressing their unique needs. Permanent positions for workers on nutrition and population development programs shall mobilize and intensify implementation of health, nutrition, and population interventions in LGUs.	
<b>Establishment of LGU nutrition offices</b>	<p>The National Nutrition Council (NNC) is the primary agency responsible for the implementation of nutrition programs and policies in the Philippines. However, the implementation of these programs is decentralized to the local government units (LGUs), which are expected to establish and maintain a local nutrition office to support the implementation of nutrition programs and policies at the local level.</p> <p>The establishment of a local nutrition office with sufficient nutrition personnel is crucial in addressing the nutritional needs of its citizens, especially in the context of the region's high prevalence of malnutrition and undernutrition. This will result in the full functionality of the Local Nutrition Committee (LNC). Further, it will ensure effective and efficient implementation of nutrition interventions, which would contribute to the institutionalization of nutrition program of the region.</p>	NNC

## Chapter 6.2

# 6.2 Strengthen Social Protection

This Chapter discusses strategies on how to achieve a transformative social protection system that enable Cordillerans to manage all types of risks in their lifetime. By 2028, all shall have access to social protection policies and programs that address structural vulnerabilities and social inequities. These are aimed at reducing poverty and vulnerabilities to risks and enhancing the social status and rights of the marginalized.

## Assessment and Challenges

### Assessment of Performance

***Poverty and subsistence incidence improved amid the pandemic.*** The poverty incidence among families in the Cordillera improved to 6.9 percent in 2021 compared to 8.6 percent in 2018. The decreasing trend is attributed to a strong regional economy, steady employment, single-digit inflation, stable income, and the stimulus packages and subsidies distributed to poor individuals and families during the pandemic.

Between 2018 and 2021, significant improvements in poverty incidence among families in Apayao, Benguet, City of Baguio, Ifugao, Kalinga, and Mountain Province were recorded. The City of Baguio posted the lowest poverty incidence among families in CAR with 1.0 percent. Poverty incidence among the population in Abra increased to 15.8 percent in 2021 from 14.7 percent in 2018.

The subsistence incidence in Cordillera also improved to 1.4 percent which translates to

6,100 families, compared to 2.2 percent or around 9,400 families in 2018. This refers to the minimum amount or income a family needs for their basic food requirement called food threshold.

***Social Protection (SP) programs that address income shocks due to COVID-19 and other disasters, and economic and individual lifecycle risks intensified.*** The passage of Republic Act (RA) No. 11469 “*Bayanihan to Heal as One Act of 2020*” and RA No. 11494 “*Bayanihan to Recover as One Act of 2020*”, both intensified government response that enjoins all agencies and LGUs to render full assistance and mobilize the necessary resources to undertake appropriate measures to curtail the effects of the pandemic on the economic, physical, and psychosocial well-being of the vulnerable sector.

The SP system has programs that aimed to break intergenerational poverty among Cordillerans.<sup>31</sup> In 2020, the Department of

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<sup>31</sup> This includes the DSWD’s Social Amelioration Program (SAP), Cash-for-Work (CFW), Emergency

Shelter Assistance, and Social Pension Program for Indigent Senior Citizens; DOLE’s Integrated

Social Welfare and Development (DSWD) issued MC N0. 09 “Omnibus Guidelines in the Implementation of Emergency Subsidy Program of the DSWD”. Social amelioration measures include the implementation of

Assistance to Individuals in Crisis Situation (AICS) and Livelihood Assistance Grants (LAG).

**Table 29 Poverty and Subsistence Incidence among Families by Province/HUC, CAR: 2018 and 2021 (in percent)**

Province	Poverty Incidence among Families		Subsistence Incidence among Families	
	2018	2021	2018	2021
<b>CAR</b>	8.6	6.9	2.2	1.4
Abra	14.7	15.8	4.4	3.4
Apayao	16.0	4.7	4.2	0.8
Benguet	6.6	6.2	2.1	1.2
Baguio City	1.5	1.0	0.2	0.1
Ifugao	9.9	6.0	1.1	1.1
Kalinga	9.2	5.6	1.5	1.1
Mountain Province	17.1	15.3	5.6	3.4

Source: PSA-CAR

A total of 57,749 Pantawid Pamilyang Pilipino Program (4Ps) beneficiaries were recorded in 2022 from 60,596 beneficiaries in 2017. The decrease in the number shows that some of the beneficiaries of the program no longer need the help from the government as a subsidy to support the education and nutritional needs of their children. The province of Abra has the highest number of 4Ps beneficiaries in the region with 11,439 households followed by the provinces of Benguet and Kalinga with 10,810 and 10,318 4Ps households, respectively. The conditions set by the program, especially the monthly Family Development Sessions, the provision of regular cash grants and other interventions provided by both internal and external

partners contribute to the improvement of the level of well-being of program beneficiaries. 4Ps households have been prioritized in the provision of services by the different government institutions or private sectors.

There were also 255,760 Indigenous People (IPs) in Geographically Isolated and Disadvantaged Areas (GIDA) assisted. The top three GIDA beneficiaries are located in Irisan, Baguio City; Barangay Bulanao in Tabuk City; and Barangay Buringal in Paracelis, Mountain Province. In 2022, a total of 5,985 registered households were delisted from the program mostly due to ineligible children (0-18 years old) for education

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Livelihood Program and *Tulong Panghanapbuhay sa Ating Disadvantaged/ Displaced Workers (TUPAD)*; and DTT's *Pangkabuhayan sa Pagbangon at Ginhawa*.

monitoring, program waived by the beneficiaries, and beneficiaries have already exited with improved level of well-being.

With the pandemic restrictions, there was a decrease in the number of Supplementary Feeding Program (SFP) beneficiaries since the program was designed to be center-based. However, in 2022, as the pandemic wanes and face-to-face session opens, the number of children enrolled in Child Development Centers (CDCs) increased which also resulted in the increased number of children beneficiaries being provided with hot meals under SFP.

Under the Crisis Intervention Program of DSWD, the Assistance to Individuals in Crisis Situation (AICS) is a social safety net or a stop-gap mechanism that caters to vulnerable sectors including women, children, youth, senior citizens, and persons with disability (PWDs) in crisis situation. Beneficiaries served through AICS increased from 7,327 in 2016 to 97,569 in 2022 wherein most clients were provided with educational assistance, other cash assistance, and medical assistance.

The Sustainable Livelihood Program (SLP) is a community-based capacity-building program that seeks to improve the program participants' socio-economic status. An increase in the number of SLP participant beneficiaries was achieved in 2022 with 5,430 walk-ins/referrals, LAG beneficiaries, and SLPA members. Of this, 5,005 were engaged in microenterprises and equipped with employment.

***Significant legislations that expand social protection coverage were adopted in the region.*** Republic Act 11223 or the Universal Health Care (UHC) Law and RA 11310 or the *Pantawid Pamilyang Pilipino Program (4Ps)* Act were fully implemented in the region.

In 2021 and 2022, the City of Baguio and the Province of Benguet launched their Health Care Provider Network (HCPN). The Baguio and Benguet HCPNs ensured the full implementation of the UHC law which enabled all residents to get access to affordable, quality, and effective healthcare.

In 2022, 57,749 4Ps households were provided with conditional cash grants in the amount of Php 1,236,757,700.00. An increase in the percentage compliance of 4Ps households on school enrollment of children and availment of health services at 98.58 percent and 98.48 percent respectively, was observed with the full implementation and monitoring of the 4Ps Act.

***Registration of the Philippine Identification System or PhilSys rolled-out widely in the region in efforts to simplify delivery of public services.*** Republic Act No. 11055 otherwise known as the Philippine Identification System Act which was signed into law by President Rodrigo Roa Duterte in August 2018 mandates the Philippine Statistics Authority (PSA) to implement the PhilSys with technical assistance from the Department of Information and Communications Technology (DICT). In January 2021, the regional PhilSys registration was conducted. As of September

2022, PSA-CAR registered 652,859 residents in the region or 52.29 percent of its target population of 1.2million. The province of Abra has 63,539 registrants (48.73 percent of target registrants) while Apayao has 30,318 (75.57 percent); Benguet (including Baguio City) has 453,477 (54.15 percent); Ifugao has 30,434 (33.71 percent); Kalinga has 47,572 (52.70 percent) and Mountain Province has 27,519 (45.73 percent).

## Challenges

***Disasters still result in deaths and missing persons.*** While the government has improved social protection financing and institutional arrangements during the midterm Plan implementation, there are still pressing challenges. “Zero deaths due to disasters” was not met because of limited capacity and limited coherent actions from multi-sectoral actors in disaster risk management, particularly in addressing underlying vulnerabilities of communities. For instance, with the limited relief and emergency assistance, the region shifted to early recovery efforts during the Magnitude 7.0 Northwestern Luzon earthquake that caused massive destruction to private and public properties. Around 114,389 families or 22.9 percent of the total population were affected. The region recorded 10 deaths and 534 injured. Among the affected families in the region, 9.73 percent or 11, 11,130 were 4Ps beneficiaries.

Moreover, the Social Security System (SSS) coverage among economically active

The PhilSys will simplify public and private transactions, promotes ease of doing business and enhances integrity of services by eliminating identity fraud, enhances transparency in governance. Once fully implemented, it shall reduce corruption, streamline delivery of social services especially for the vulnerable groups of the population, and strengthen financial inclusion for both public and private services.

population remains low due to affordability concerns among informal sector workers.

The increase in the number of deaths reported in the Cordillera for 2018 was mainly due to the impacts of Typhoon *Ompong* which caused massive landslides in Baguio City and Benguet.

The magnitude of disasters and emergencies combined with Cordillera’s geographic profile—challenged the conduct of disaster response operations. Settlements development in hazard prone areas due to lack of suitable land also render many households vulnerable to earthquakes and rain-induced landslides, considering that 85 percent of the total land area of the region have slopes of more than 18 percent. Supply chains are also affected by accessibility concerns especially when roads are damaged during inclement weather, and services delivery is especially challenging for the region’s 385 GIDA barangays.

***Fragmented and dispersed database for SP beneficiaries.*** The COVID-19 crisis also highlighted inefficiencies in the delivery of social protection programs. Among others, the delivery of assistance was delayed due to: (a) data limitations which prevented efficient targeting and provision of assistance; (b) logistical problems which caused delays in certain localities, especially in GIDAs; (c) the region's mountainous terrain is detrimental; (d) duplicity and overlapping of social protection program and beneficiaries /recipients; and, (e) poor internet access and slow internet connection in GIDAs derailing service provision and digitalization of medical records.

A centralized database will gauge household beneficiaries in the absence of a national level directive on the expansion and/or addition of SP programs' beneficiaries.

In 2022, the DSWD launched the result of Listahanan 3 wherein data generated can

serve as a reference for DSWD programs and services. By sharing the data with other national government agencies, local government units (LGUs), and other stakeholders, targeting systems for various social protection services and poverty reduction programs can be improved.

***One out of four youth in the region have ever thought of committing suicide.*** Mental health concerns especially among the youth was brought to light during the pandemic with 21.4 percent of youth aged 15 to 24 having suicidal thoughts in 2021 and 8.2 percent having tried to off themselves. In contrast to previous years, more young women than men have either thought of suicide (31.1 percent vis-à-vis 10.3 percent) or tried to commit suicide (12.1 percent vis-à-vis 3.8 percent). The alarming rates of suicidal experiences among the youth signal the need for greater mental health interventions in the region.

# Targets

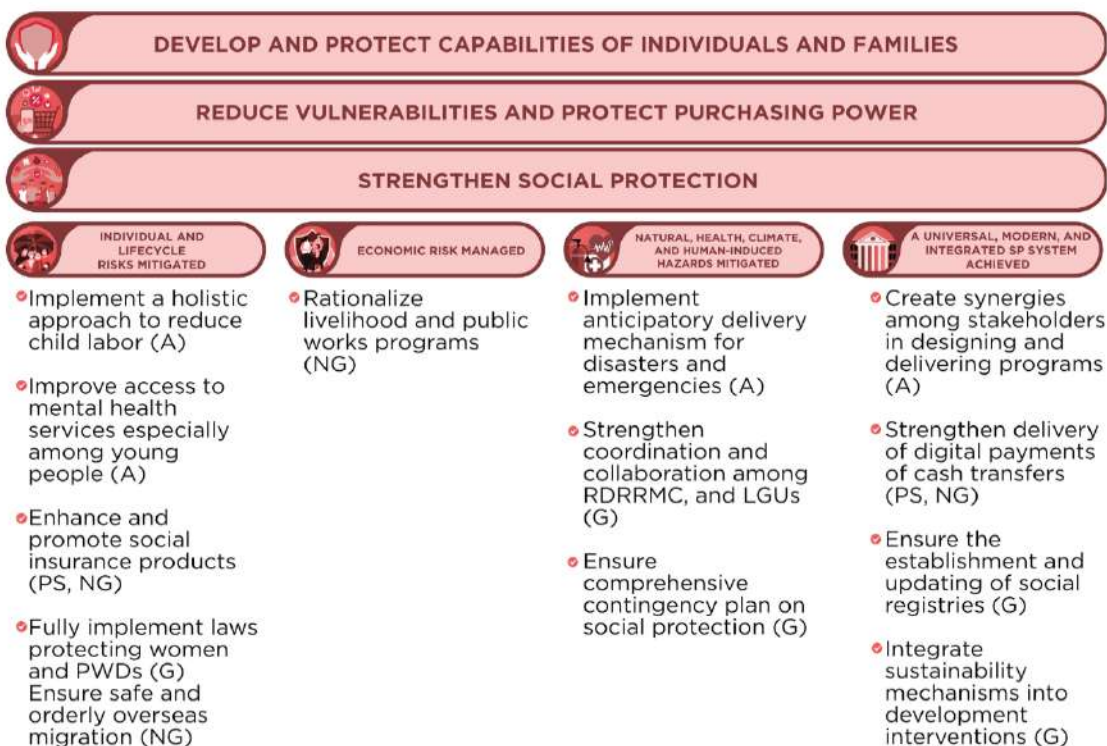
Table 30 Plan Targets to Strengthen Social Protection, 2023-2028

Outcome Indicators	Baseline		Targets						Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	
Percentage of targeted social pension beneficiaries provided with social pension	2022	96.95 %	100%	100%	100%	100%	100%	100%	DWSD
Number of senior citizens who received social pension	2022	107,848	111,239	114,558	121,244	122,456	122,456	122,456	DWSD
Number of children benefited under the Supplemental Feeding Program	2022	47,975	47,973	49,411	50,893	49,339	49,339	55,612	DSWD
Percentage of assisted Trafficked Persons who are integrated to their families and communities	2022	100%	100%	100%	100%	100%	100%	100%	DSWD
Number of trafficked persons provided with social welfare services	2022	44	17	17	17	17	17	17	DSWD
Percentage of clients in residential care facilities rehabilitated	2022	100%	100%	100%	100%	100%	100%	100%	DSWD
Number of Clients served in residential care facilities	2022	185	165	142	135	186	186	186	DSWD
Reception and Study Center for Children (RSCC)	2022	92	53	35	35	35	35	35	
Regional Rehabilitation Center for Youth (RRCY)	2022	33	35	50	50	50	50	50	
Regional Haven for Women and Girls (RHWG)	2022	62	77	25	25	25	25	25	
Number of <i>Pantawid</i> Households provided with conditional cash grant	2022	53,744	59,101	57,803	55,596	TBD			DSWD

# Strategy Framework

Mitigating individual and lifecycle risks, natural, health, climate, and human induced hazards; managing economic risks; and achieving a universal, modern, and integrated SP system are identified outcomes in strengthening social protection in the region. The following strategies will be pursued in order to strengthen social protection of individuals and families from various types of risks:

Figure 15 Strategy Framework to Strengthen Social Protection, 2023-2028



## Outcome 1: Mitigate Individual and Lifecycle Risks

**Implement a holistic approach to reduce child labor.** Child laborers or children at risk aged 5 to 17 engage in helping household-operated farms or businesses to supplement the family income, gain experience or acquire training, and pay for their own schooling. The Inter-Agency Regional Child Labor Committee, chaired by the Department of Labor and Employment (DOLE)-CAR, will

monitor 2,799 child laborers profiled in the region.

The monitoring is a strategy of the Committee to disengage the children from child labor. The DOLE-CAR will assess the needs of the child laborers and refer them and their families to appropriate agencies and organizations for the provision of necessary



assistance and interventions. With the convergence of the different government agencies, the parents of child laborers will receive the assistance that will enable them to start a livelihood.

***Improve access to mental health services, especially among young people.*** Globally, one in seven 10-19-year-olds experiences mental disorder, yet this remains largely unrecognized and untreated.<sup>32</sup> In the Cordillera, difficulty in locating supportive and capable family members or relatives of abandoned young people having mental disabilities causes delays in the delivery of interventions needed. Proper coordination with the LGU concerned shall be facilitated to minimize discrimination of young patients. This will also aid the young people with mental disabilities to participate in the rehabilitation program and tap their willingness in the change process.

The DSWD will strengthen efforts at the local level to conduct Family Development Sessions (FDS) under the 4Ps, monitor Residential Care facilities such as the Regional Rehabilitation Center for Youth (RRCY), Reception and Study Center for Children (RSCC), Regional Haven for Women and Girls (RHWG), and the residential care for children or Bahay Pag-asa, and intensify the Supplementary Feeding Program (SFP).

Together with the Philippine Health Insurance Corporation (PhilHealth), it shall

lobby for the fast-tracking of the development and approval of the mental health package.

***Enhance and promote social insurance products.*** The Social Security System (SSS), Government Service Insurance System (GSIS), and PhilHealth are the agencies tasked with administering social insurance in the country. These agencies provide income support to government/private sector employees and their families in times of contingencies like death, old age, and sickness.

As a partnership engagement towards a holistic social protection program, DSWD's 4Ps household-beneficiaries are automatically covered in the National Health Insurance Program (NHIP) and are entitled to the wide range of health care benefits. 4Ps beneficiaries can expect smooth and unhampered availment of benefits as their information can now be accessed by accredited healthcare providers at the point of service.

To augment the daily subsistence and other medical needs of senior citizens, indigent senior citizens are provided with a monthly non-contributory stipend amounting to Php 500.00. In addition, eligible beneficiaries are entitled to a monthly centenarian cash gift amounting to Php 100,000.00.

***Fully implement laws protecting women and persons with disabilities.*** The LGUs shall initiate the crafting of local ordinances

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<sup>32</sup> Adolescent Mental Health, World Health Organization (WHO).

localizing national social welfare and development laws, while the DSWD shall monitor the localization of these laws.

In response to the emerging priority for the provision of social protection to Persons with Disabilities (PWDs), and the recognition of their human rights, together with the funding of allocation of the government, the DSWD adopts the Cash-for-Work (CFW) scheme in extending social protection interventions for them.

Assistance to Individuals in Crisis Situations (AICS) serves as a social safety net to support the recovery of individuals and families suffering from unexpected life events or crises. Among the various vulnerable sectors it caters include Women in Especially Difficult Circumstances (WEDC) and persons with disabilities.

The provision of psychosocial intervention and/or direct financial/material assistance may enable them to meet their basic needs in the form of food, transportation, medical, educational, and burial assistance.

***Ensure safe and orderly overseas migration.***

Overseas Filipinos shall also have social protection. Social security programs shall include the Recovery and Reintegration Program for Trafficked Persons and the facilitation of clearance for Minors Travelling Abroad (MTA). This is a comprehensive package of programs and services, enhancing the psychosocial, social, and economic needs of the beneficiaries. It is implemented in coordination with other concerned agencies such as the Department of Justice.

Distressed and undocumented Overseas Filipinos are more vulnerable to abuse and exploitation. Being undocumented hampers their availment of health services and protection from abuse and exploitation. To address this, the DSWD will sustain its Social Welfare for Distressed Overseas Filipinos and Trafficked Persons Sub-Program.

## Outcome 2: Manage Economic Risks

***Rationalize livelihood and public works programs.*** The Special Provisions of the R.A. 11639 or the “General Appropriations Act (GAA) Fiscal Year (FY) 2022”, provides that the KALAHI-CIDSS-KKB shall implement and provide Cash-for-Work for no income or low-income families, homeless/street families, returning Overseas Filipino Workers (OFWs), indigenous peoples, PWDs, families in conflict-affected communities, and other indigent or

individuals or families in difficult circumstances who are vulnerable, at risk, or affected by the COVID-19 pandemic, climate change and disasters, among others. The Sustainable Livelihood Program (SLP) of the DSWD seeks to improve the program participants’ socio-economic status by building capabilities and bridging livelihood opportunities for its target communities and individuals.

## Outcome 3: Mitigate Natural, Health, Climate and Human Induced Hazard

***Implement anticipatory delivery mechanism for disasters and emergencies.*** The LGUs with all the concerned agencies shall ensure the availability, accessibility, and readiness of resources, food and non-food items, and administrative support necessary before and during disaster operations at all levels. At the same time, early recovery services particularly Cash for Work, Emergency Cash Transfer, and Food for Work shall be in place to assist the LGUs in providing their recovery and restoration needs. Moreover, local governments must be warranted with evacuation facilities and prepositioned goods. Conduct of Information, Education, and Communication (IEC) activities on disaster risk reduction and Capability Building Activities, such as Camp management and Individually Displaced Person protection, Disaster Response Operations Monitoring and Information Center (DROMIC)

reporting, relief operations, volunteers, women and child-friendly spaces, Comprehensive Emergency Program for Children and psychosocial support shall also be prioritized.

***Strengthen coordination and collaboration among RDRRMC and LGUs.*** The Cordillera Regional Disaster Risk Reduction Management Council (RDRRMC), through the Office of Civil Defense (OCD), allocated Php 25 million for the construction of a regional warehouse and logistics hub in the province of Kalinga.

This will enable the provision of immediate assistance and will further develop and maintain primary and secondary logistics hubs in the region. These facilities will be used for the prepositioning of food and non-food items to support the needs of affected

individuals and families and augment the resources of the provinces.

Another innovation in reducing casualties related to hydro-meteorological hazards in the region was the creation of the Cordillera Regional Dam Safety Committee. This shall ensure the safe operations of dams, as well as the preparedness of communities downstream from potential consequences.

The Cordillera RDRRMC pursues to reduce new and existing disaster risks in the region through the implementation and continuity of the four thematic areas of Disaster Risk Reduction and Management: Disaster Prevention and Mitigation, Disaster Preparedness, Disaster Response, and Disaster Rehabilitation and Recovery. It shall continue to implement the updated

Cordillera RDRRM Plan that upholds national and international accepted principles of disaster risk management aligned to sustainable development and poverty reduction strategies, policies, plans, and budgets.

***Ensure a comprehensive contingency plan for social protection.*** Major social protection programs shall be fully implemented to maximize results. This can be done through DSWD's continuous provision of technical assistance and resource augmentation to LGUs, establishing an integrated social registry, database and harmonized beneficiary registry, and expanding the digital delivery systems for SP programs.

## **Outcome 4: Achieve a Universal, Modern, and Integrated SP System**

***Create synergies among stakeholders in designing and delivering programs.*** Promote financial literacy for better awareness of financial instruments. The vulnerable sectors become more resilient when they are informed and aware of the various PAPs of the government. This shall be possible through the conduct of capacity-building, trainings, orientations, and values formation activities.

The development management capacities of LGUs to undertake social services delivery can be strengthened by establishing functional Primary Care Provider Networks

and Health Care Provider Networks in UHC Integration Sites in the region.

All senior citizens, persons with disabilities, 4Ps beneficiaries, and individuals who are 21 years old and above, shall also be enrolled in the mandatory membership and exclusive social health insurance program benefit of PhilHealth.

***Strengthen delivery of digital payments of cash transfers.*** Considering the region's difficult terrains, the marginalized and vulnerable sectors are exposed to hazards when travelling to provincial centers to avail

of SP services, particularly cash assistance. With the aid of digital platforms, cash transfers or digital payments will be possible and SP services will be accessible. This requires the provision of reliable internet services particularly in areas outside of urban hubs.

The PSA-CAR shall continue to hold special Philippine Identification System (PhilSys) registration activities aside from mobile registration teams that go to the communities to ensure that the target population will be listed in the national identification system. Having a PhilID shall simplify access to public and private transactions and boost efficiency in availing government services.

***Ensure the establishment and updating of social registries.*** Utilize an interoperable electronic medical record (EMR) system to digitalize health records for easy access, health planning, service delivery, and benefit payment.

A single and updated social registry of beneficiaries, especially among PWDs,

enables a fully maximized coverage of SP programs. Social registries provide information that will determine one's potential eligibility for one or more social programs without requiring the individual to physically visit the hospitals, offices, and other SP centers. Through this, it will be convenient for the vulnerable sectors to be eligible in one or more SP programs based on the assessment of their needs and conditions.

***Integrate sustainability mechanisms into development interventions.*** Government interventions and continuous implementation of PAMANA projects in conflict-affected communities shall be strengthened to promote development and peace. Provision of continuous relief assistance, cash or food for work, and emergency shelter assistance to internally displaced people (IDPs) will be provided. Culture and gender-sensitive health policies, programs, projects, and activities shall also be integrated.

# Legislative Agenda

Table 31 Legislative Agenda for Strengthening Social Protection, 2023-2028

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>House Bill 3267</b>	Cordillera regional autonomy will make possible the allocation of more resources for the region’s SP programs, compared to the current situation wherein CAR is allocated less government resources due to its small population. It will also allow better integration of IKSPs in SP service delivery and improve on its cultural sensitivity.	CAR Congressmen
<b>Magna Carta of Child Development Workers Bill</b>	<p>Out of 1,176 barangays in the region, there are 386 Child Development Workers (CDWs) with plantilla or permanent positions earning an average monthly salary of Php 4, 398.23.</p> <p>The proposed law will uplift the well-being of the CDWs in the region and ensure the appropriate ratio of CDWs to children in every day care center.</p>	DSWD
<b>Disability Support Allowance Act*</b>	<p>The results of the 2020 CPH showed that a total of 150,757 persons or 9.2 percent of the total household population aged five years old and over in CAR had at least one domain or category of functional difficulty regardless of severity.</p> <p>The DSA seeks to provide for the universal disability allowance and appropriation of funds for the P2,000 monthly social pension of persons with disabilities. This is inclusive of the 83,094 females and 67,663 males with at least one domain or category of functional difficulty in the region.</p>	DSWD
<b>Evacuation Center Act*</b>	<p>At present, there are eight evacuation centers in the region. With the mountainous terrain of the region, it is difficult to bring people from the mountains to towns where evacuation centers are located.</p> <p>The establishment of permanent and typhoon-resilient evacuation centers will ensure that classes are not disrupted after a disaster, and that affected families will be closely monitored.</p>	DSWD, OCD

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>An Act Providing for a National Program of Action and Investment Plan for the Prevention of Adolescent Pregnancy</b>	This aims to institutionalize social protection for adolescent parents; and, serves as the national framework for inter-agency and inter-sectoral collaboration at all levels to address the health, cultural, socio-economic and institutional determinants of adolescent pregnancy.	DSWD, PopCom
<b>Full Implementation of EO 417</b>	This will direct the implementation of the economic independence program for PWDs in the region which will ensure that they are given equal economic opportunities by enhancing their social skills and vocational capabilities.	Persons with Disabilities Sectoral Council, DSWD
<b>Internet and Digital Content Safety and Online Protection for Children Act</b>	This shall provide social protection to children from all forms of violence, abuse and exploitation, especially those committed through the use of information and communications technology.	DSWD, DICT
<b>Social Welfare and Development Agencies (SWDAs) Bill</b>	Seeks to strengthen DSWD's regulatory functions over public and private individuals, agencies and organizations engaged in social welfare and development activities; and, grants benefits and incentives to registered, licensed and accredited SWDAs in recognition of their importance and invaluable contribution in social welfare and development.	DSWD
<b>Magna Carta of Children (MCC) Bill</b>	<p>The MCC is a comprehensive children's human rights law that seeks to advocate for the Filipino child, through the recognition, protection, fulfillment and promotion of the rights of Filipino Children, especially those belonging in the marginalized sectors of the society. It conveys a framework of rights for children based directly on international law.</p> <p>Once enacted before the 19<sup>th</sup> Congress ends its term, it shall pave way for the creation of the Philippine Commission on Children and the Child Ombudsman.</p>	Council for Welfare of Children (CWC)

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>Crisis Intervention Program Bill</b>	<p>The program acts as a Social Protection and Safety Net that provides immediate intervention to the effects of economic shocks, disasters, and calamities especially on specific vulnerable groups. It aims to:</p> <ul style="list-style-type: none"> <li>• Institutionalizes the Assistance to Individuals to Crisis Situation (AICS) Program</li> <li>• Create the Crisis Intervention Program Management Office (CIPMO) under the DSWD</li> <li>• Establish cross-matching database for clients, including those receiving help from <i>Malasakit</i> Centers online and offline</li> </ul>	DSWD

*\*Adopted from the National Legislative*



PART III

**Transform  
Production  
Sectors to  
Generate  
More Quality  
Jobs and  
Competitive  
Products**



# 07

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**Modernize agriculture and agribusiness**





# 7 Modernize Agriculture and Agribusiness

The Cordillera Administrative Region's preferred future for its agriculture sector is characterized by sustained growth that lifts Cordilleran farmers out of poverty. This is possible through innovation and adoption of appropriate modernized technology solutions supported by strategic and synchronized government support and the protection of strategic agricultural and fisheries production areas. Furthermore, the region's agriculture sector will be led by young agripreneurs who are guided by sustainable consumption and production practices and sustainable indigenous knowledge and practices.

## Assessment and Challenges

The role of agriculture in development is significant in a region where almost a third of the labor force are skilled agricultural, forestry, and fishing workers. The region also has the advantage of a semi-temperate climate that is conducive to the production of temperate vegetable crops like cabbage, broccoli and white potato. The sector's performance is challenged, however, by constraints in production and marketing compounded by its vulnerability to natural hazards and climate change.

***The region's agriculture sector exhibited a negative growth trajectory and contributed least to the region's economy.*** As with most regions in Luzon, the agriculture sector contributed the least to the region's economy at an average of 9.6 percent share to the regional gross output and employs a smaller number at around 40% compared to the services and industry sector. The COVID-19 pandemic has had a significant effect to the region's agriculture sector, aggravated by its

high-vulnerability to natural disasters resulting to an unstable output growth from 2017 to 2021. Across regions, CAR's contribution to the national GVA in AFF also remains the lowest at an average of 1.65 percent share from 2017-2021.

While the region recorded significant improvements in its poverty situation, farmers posted the highest poverty incidence of 20.4 percent in 2018 among the eight basic sectors in the region.

The region continues to be challenged by various factors that hamper its potential to develop its agriculture and agribusiness sector.

***Irrigation development increased but at a slow pace.*** As of December 2021, 56.9 percent of the potential irrigable area in the region has been developed. This translates to 105,507 hectares out of the 185,406 hectares potential irrigable area. The irrigated areas include

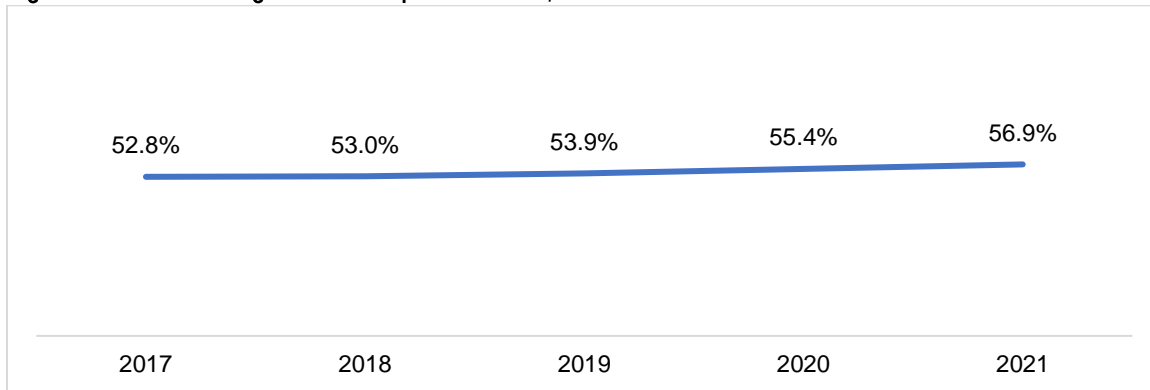
those under the National Irrigation System (NIS) (18%) and the Communal Irrigation System (CIS) (79%), the latter being either NIA-assisted, privately developed or assisted by other government agencies. In the region, communal irrigation systems irrigate areas for rice and other areas for vegetables, corn, flowers and other high-value crops.

Across the provinces, Kalinga and Apayao have the highest potential irrigable area accounting for 24 percent and 18 percent, respectively. The province of Abra has the highest share of its potential irrigable area developed as of 2021 at 77 percent, while the developed potential irrigable area in Mountain Province and Apayao remain lowest at 44 and 35 percent, respectively.

The importance of irrigation facilities cannot be over-emphasized in CAR with its limited agricultural lands and its steep topography. Yet, irrigation development remains at a slow pace with at most 1.5 percent increase year-on-year. (Figure 16)

Irrigation facilities are among the critical economic infrastructure that are damaged during typhoons, sustained monsoon rains as well as earthquakes. During the Magnitude 7.0 North Western Luzon Earthquake in July 2022 alone, the estimated cost of damage and losses on irrigation in July 2022 was Php 48.71 million, bulk of which are located in the province of Abra.

Figure 16 Status of Irrigation Development in CAR, 2017-2021



Source: National Irrigation Administration (NIA)-CAR

**Inadequate agri- infrastructure support.** Investments on public goods for the AFF sector have been inadequate or have not been rationalized. These aggravate the challenges related to high logistics and marketing costs and huge postharvest losses. Moreover, irrigation investments were mainly focused

on areas geared towards rice-based production systems. There has been low support for small-scale irrigation needed in high-value crops (HVC) production. Further, many existing irrigation systems require rehabilitation or restoration to improve efficiency and retrofitting to ensure climate

resiliency. The poor road conditions in the region contributed to the high cost of inputs and post-harvest losses. In addition to the difficulty in transporting the agricultural products, the limited post-harvest facilities resulted to high spoilage and reduced the quality of farm produce.

**Agricultural productivity remains low.** The region's major challenge is the limited land for agricultural production, hence the need for technologies that increase yield considering upland conditions. This further aggravated by the relative inadequacy of irrigation support to smallholders.

Amidst this, CAR has demonstrated a sustained dominance in the production of high-value semi-temperate vegetables and even cut-flowers. It also has the appropriate temperature and elevation for coffee production which has gained global recognition as it won competitions in Paris (2017 and 2019) and South Korea (2022). Technical assistance, financing and post-harvest support need to be put in place through self-reliance approach to fully realize the potential of coffee industry in the region.

**Low farm income.** In CAR, farmers are the poorest of the basic sectors with poverty

incidence of 20.4 percent in 2018. Increasing farmers' and fisherfolk's productivity through better farming practices, appropriate assistance and off-farm skills building could increase farmers' income beyond the poverty threshold.

**High vulnerability to multidimensional shocks.** The sector remains volatile as it bears the brunt of multidimensional shocks arising from natural disasters, biological hazards (pandemic, transboundary pests and diseases such as the African Swine Fever), and other external shocks such as the ongoing Ukraine-Russia conflict.

A number of typhoons affected the region since 2017. In 2018, crops and livestock losses, damages to irrigation and other agricultural infrastructure due to Typhoon Ompong and Typhoon Rosita amounted to Php 13.48 billion. This is in addition to damages brought by a number of typhoons (Typhoon Maring and Florita) as well as prolonged monsoon rains ("habagat") that followed from 2019 to 2022.

While there are existing early warning systems<sup>33</sup> for farmers in the region, there is still room for improvement in terms of

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<sup>33</sup> The Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) operates a network of weather monitoring stations across the country, including in the Cordillera region. PAGASA issues weather bulletins and advisories to provide farmers with information on weather conditions and potential hazards such as typhoons, heavy rains, and droughts. Several NGOs and government agencies have developed early warning systems specifically for the agriculture sector. For

example, the International Rice Research Institute (IRRI) has developed a crop monitoring and advisory system that provides real-time information on rice crop health, soil moisture, and weather conditions to farmers in several countries including the Philippines. The Philippine Rice Information System (PRISM) is another initiative that provides information on rice production, weather, and crop health to support decision-making by farmers and policymakers.

coverage, effectiveness, and communication. There may still be gaps in early warning systems for certain hazards, particularly for hazards such as landslides and earthquakes that are difficult to predict. There are also challenges in effectively communicating information to farmers, particularly in remote or marginalized communities where access to technology and information may be limited.

Livestock production was also severely affected by the African Swine Fever (ASF) which hit 199 barangays in the region. This reduced the supply of pork in the region, particularly Baguio City and Benguet, both of which source much of their supply from Regions 1 and II. Nonetheless, supply of pork was sufficient in the region's rural areas, where backyard hog raising remains a common practice. Efforts to control the spread of the virus were also intensified since its detection in 2019 through the "Bantay ASF sa Barangay Program" or "BABay ASF Program" of the DA-CAR.

Biological hazards such as the COVID-19 pandemic also had a significant effect on the sector as community quarantines and mobility restrictions hampered the movement of basic goods and commodities. The first two months of the pandemic alone resulted to Php 1.6 billion estimated losses in the agriculture and fisheries sector.

In July 2022, the sector bore the brunt of the Magnitude 7.0 Northwestern Luzon Earthquake as it incurred damages and losses

amounting to Php 315.45 million. These mainly consisted of damages and losses in irrigation systems and farm-to-market roads.

**The high demand for highland vegetables has driven deforestation in the mountains as agricultural lands encroach forests and even into protected areas.** This was observed in the highland vegetable-producing provinces of Benguet, Mountain Province, and Ifugao. Around 70% of the 5,513-hectare (13,620-acre) Mount Data National Park has been converted into vegetable gardens and residential areas, even though it has been designated a protected area since the 1940s. In the town of Buguias, at the foot of Mount Data, farms have sprawled across almost 9,500 ha (23,500 acres), more than half of its 17,588-ha (43,500-acre) land area. Much of that falls within Mount Data's protected area. To ease these, the government has started introducing agricultural strategies by providing farmers with data-driven planting schedules to optimize profits while minimizing environmental damage; and agroforestry, an efficient use of land to combine trees with shade-loving shrubs and crops.<sup>34</sup>

**Women still face barriers in land ownership, employment, other resources and opportunities in the Agriculture, Fisheries and Forestry (AFF) Sector.** These barriers limit their ability to fully participate in and benefit from agricultural production

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<sup>34</sup> Lapniter, K. (2020, March 13). Averting an agricultural and ecological crisis in the Philippines' salad bowl. Mongabay Environmental News.

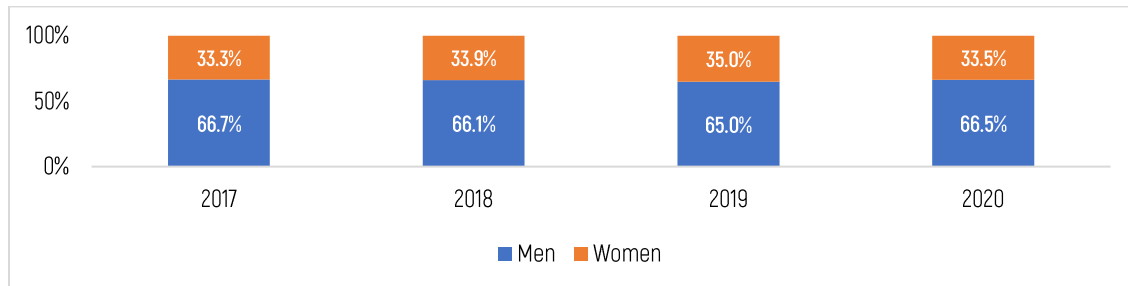


and can contribute to their economic and social marginalization.

For example, in the rice farming industry, women still work long hours on domestic and reproductive tasks. This prevents them from contributing to and participating in more lucrative and productive endeavors. This results from an unfair distribution of unpaid household work that falls disproportionately on women. Women worry about their financial security, especially given their involvement in family finances. Due to lower prices for palay and rising costs of production inputs, they frequently look for additional sources of income. Additionally, access to public services like training and extension programs may be limited for women.<sup>35</sup>

On land ownership, the husband, as the traditional head of the family, is given priority when applying for land titles. As of 2020, more agricultural land free patents were granted to men than women, with 495 and 407, respectively. On access to employment opportunities in the AFF sector, two-thirds of employment in the agriculture sector in the region was held by men from 2017-2020 (Figure 17) This shows that traditional gender roles and discrimination against women in accessing certain types of work or resources along with other challenges still exist. From 2015-2019, women farm workers received PhP 245 in real wages per day, PhP 12 less than the regional average and almost PhP 20 less than the real wages of men farm workers who received PhP 264 per day.<sup>36</sup>

**Figure 17 Proportion of Men and Women employed in the Agriculture, Fisheries, and Forestry (AFF) Sector, CAR: 2017-2020**



Source: PSA-CAR

<sup>35</sup> Enhancing Gender Outcomes of Different Rice-Related Agencies through Gender Analysis of Rice Supply Chain and Advocacies (PCAF, 2022)

<sup>36</sup> Women and Men in the Cordillera Administrative Region 2022

# Targets

Table 32 Plan targets to modernize agriculture and agribusiness

Outcome Indicators	Baseline				Targets				Lead Agency
	Year	Value	2023	2024	2025	2026	2027	EOP 2028	
Poverty incidence among primary producers (farmers) reduced (%)	2018	20.4			9.5			9.5	PSA
Subsistence incidence among primary producers reduced (%)	2018	6.2						1.5-2.0	PSA, NEDA <sup>37</sup>
Growth in AFF Gross Value Added increased (% in 2018 constant prices)	2021	-1.7	0.2-1.0	0.2-1.0	0.5-3.0	0.5-3.0	0.5-3.0	0.5-3.0	PSA
<b>Chapter Outcome 1: Efficiency of AFF production enhanced</b>									
Growth in AFF Labor Productivity increased (%)	2020	-10.4	2.3-5.5	2.3-5.5	2.3-5.5	2.3-5.5	2.3-5.5	2.3-5.5	PSA
Post-harvest losses of key commodities decreased (%)	2021								DA
Rice		24.95	10-14	10-14	10-14	10-14	10-14	10-14	
White Corn		n.d	5	5	5	5	5	5	
<b>Chapter Outcome 2: Access to markets and AFF-based enterprises expanded</b>									
Number of FDA accredited food manufacturer, trader, distributor increased	2022		Increasing						FDA
Manufacturer		269							
Trader		13							
Distributor		7							

<sup>37</sup> Targets were estimated by NEDA considering national targets and past trends

Outcome Indicators	Baseline				Targets				Lead Agency
	Year	Value	2023	2024	2025	2026	2027	EOP 2028	
<b>Chapter Outcome 3: Resilience of AFF value chains improved</b>									
Proportion of primary producers covered by agricultural insurance to total number of primary producers registered in the RSBSA (%)	2021	33.4	37.6	38.9	45.7	48.1	50.8	53.3	PCIC <sup>38</sup>
Number of farmers provided with crop insurance	2022	11,577	Increasing						PCIC

## Strategy Framework

The Plan pursues a whole-of-society approach in modernizing agriculture and agribusiness, emphasizing the crucial role of both the government and private sector in enhancing the efficiency of AFF production, expanding access to markets and AFF-based enterprises, and improving the resilience of AFF value chains. This will be complemented with strategies to strengthen agricultural institutions that will enable the modernization of the region’s agriculture and agribusiness.

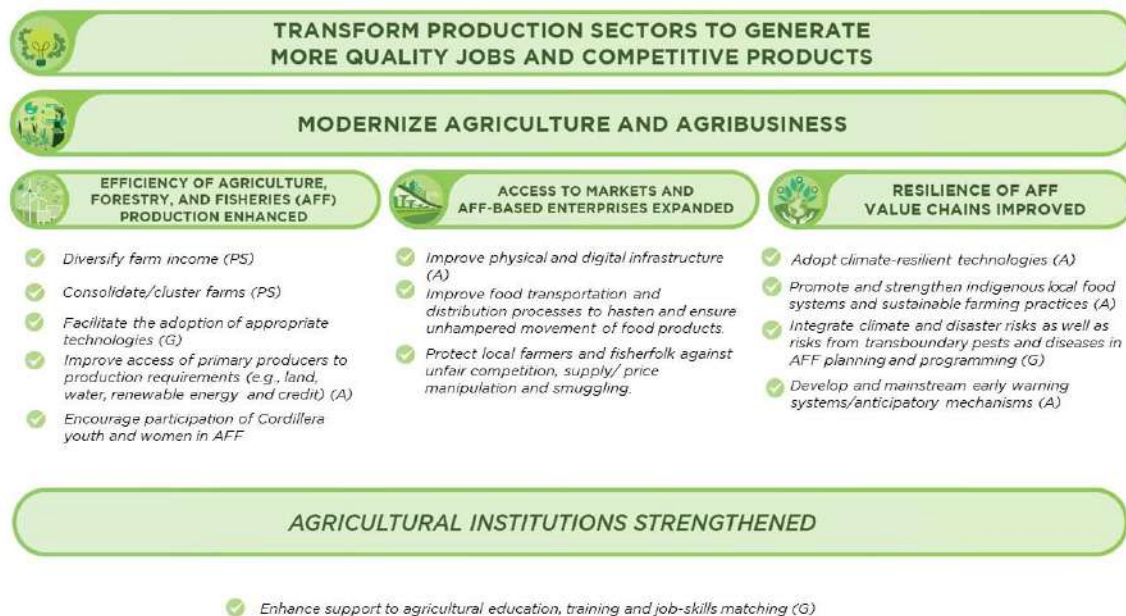
To ensure the competitiveness of Cordillera products in the domestic and export markets, agricultural labor and land productivity as well as food safety and quality standards should be improved. These must be coupled with the improvement of physical and digital infrastructure support facilities to provide an enabling environment for farmers and fisherfolk towards the modernization of the regions agri-fisheries sector.

Towards this end, the following strategies and programs can be promoted in support of the regular programs of government agencies:

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<sup>38</sup> Adopted national targets

Figure 18 Strategy Framework to modernize agriculture and agribusiness



## Outcome 1: Efficiency of AFF production enhanced

**Diversify farm income.** By adopting an entrepreneurial mindset, farmers in the region can identify opportunities to add value, differentiate their products, and reach new markets. This can help build a more sustainable and resilient agricultural economy in the region.

This strategy entails expanding product offerings beyond traditional crops such as rice and vegetables. Specialty crops such as coffee, heirloom rice, cacao, strawberries, and other high-value crops will be promoted as these command a premium price in the market.

These will be guided by existing commodity roadmaps and development plans such as the CAR Coffee Industry Development Plan and the ongoing initiative to craft an Heirloom Rice Development Plan.

In addition to their cultural and ecological importance, heirloom rice varieties also have economic potential as consumers are willing to pay a premium for high-quality heirloom rice. This can provide a source of income for local farmers and communities. These varieties are more resilient to pests and diseases than modern varieties and are adapted to local growing conditions. Preserving these varieties can help ensure that local communities have access to diverse and nutritious food sources. The cultivation and marketing of heirloom rice varieties can help promote sustainable economic development in the region.

Raising livestock can provide a diversified income stream but this should consider native breeds of pigs or chickens that are adapted to the local environment. With the

growing demand for organic products, transitioning to organic farming practices may be considered to increase yields, reduce input costs, and command higher prices in the market. Farmers may also consider agroforestry or integrating trees into their farms, such as coffee, cacao, fruit trees, which can provide additional income from fruits and other forest products.

The region has a rich culture and history, and offers many unique opportunities for agri-tourism. Farmers can offer guided tours of their farms, providing visitors with an up-close look at how crops are grown and harvested. This can include hands-on experiences such as harvesting vegetables or rice, planting crops, or feeding livestock. Workshops and classes on sustainable agriculture practices, such as composting, natural pest control, and water conservation may also be offered. This can provide visitors with valuable learning experiences while promoting sustainable farming practices. By leveraging on agri-tourism, farmers in the Cordillera region can diversify their income streams while promoting sustainable agriculture and cultural heritage. It is important to work closely with local tourism boards and organizations to develop a well-planned and coordinated approach to agri-tourism that benefits both farmers and visitors.

**Consolidate/cluster farms.** Consolidating or clustering farms in the Cordillera region can have several benefits, including increased efficiency, improved access to resources, and enhanced market competitiveness.

Collaboration with other farmers, processors, or retailers will also increase reach and access to new markets.

This strategy will enable cooperatives to consolidate production and marketing activities, and will ease access to credit and other forms of assistance. Increased production efficiency brought about by consolidation of output and resources will also result to economies of scale and greater capacity to respond to demand. One priority commodity that can benefit from such consolidation is the heirloom rice, the revival of which ensures the preservation of the Cordillera rice terraces and way of life.

In CAR, FCAs practice exchange of labor in their farms through “*Ob-ob-fo or Ug-ug-bu*” and “*Aluyan*”. These are regularly practiced in Mountain Province (Bauko and Bontoc) and in Benguet (Itogon). This can be replicated by FCAs in other provinces.

In addition, the Farm and Fisheries Clustering and Consolidation (F2C2) Program will give FCAs more access to credit, capital, support services, technical assistance as well as modern facilities, equipment, and technologies, and value-adding activities from the DA. These will ultimately increase agricultural productivity, innovation and efficiency as well as improved profits. Collaboration between the FCAs and the government also showcases a type of Bayanihan that is directed towards improving agriculture and enhancing the livelihood of Cordillera farmers and fisherfolk.

***Facilitate the adoption of appropriate technology.*** This will help farmers in the region to increase their productivity and incomes while promoting sustainable agriculture practices. It is important to work closely with farmers and other stakeholders to identify the most appropriate technologies for the region and ensure that they are effectively adopted and integrated into farming systems.

First, farmers need to be aware of the latest advances in agricultural technology and how they can be applied to their specific crops and farming systems. Providing training and education programs can help farmers understand the benefits of new technologies and learn how to use them effectively.

Second, establishing demonstration plots can allow farmers to see the benefits of new technologies firsthand. This can include showcasing new crop varieties, pest management techniques, and irrigation systems.

Third, farmers also need access to credit and financing to invest in new agricultural technologies. Government and non-governmental organizations can provide low-interest loans and other financing options to support the adoption of new technologies.

Fourth, public-private partnerships can help facilitate the adoption of new agricultural technologies by promoting collaboration between farmers, research institutions, and private sector companies. This can lead to the development of innovative solutions that are tailored to the needs of farmers in the region.

Lastly, researchers and agricultural extension workers can facilitate the transfer of new agricultural technologies from research institutions to farmers by providing technical support and advice to farmers on how to effectively use new technologies.

This strategy also entails coming up with appropriate and affordable technologies that are contextualized for upland conditions. Owing to its steep topography and difficult terrain, agriculture in the region remains labor intensive. Through the initiatives of government agencies (DA-CAR, NIA-CAR, BFAR-CAR), farmers and fisherfolk have greater access to technologies such as solar powered irrigation systems which are designed to irrigate a minimum of 10,000 hectares of rice land per area.

Mechanization of farm and post-harvest operations is essential in the attainment of modernization and improved productivity for the agriculture and fisheries sector. With the slow pick-up and adoption of appropriate technology, which are also mostly in Benguet, government will continue to address gaps and study the suitability of existing technologies and innovations to local needs and conditions.

***Improve access of primary producers to production requirements.*** Given the limited agricultural production area in the region, the conversion of prime agricultural lands into other uses must be strictly monitored. The reclassification of forest lands that are agriculturally developed as alienable and disposable, as long as these are not in hazard-

prone and environmentally critical areas may also be considered.

On the other hand, provincial irrigation offices in the different parts of the region will closely monitor irrigation water availability in the different communal and national irrigation systems to ensure that farmers are able to get their supply of water for the dry season. The use of rain catchment basis and small water impounding systems will also help farmers hurdle the negative impact of drought to their crops that should be harvested during the dry months. NIA-CAR will also closely coordinate with the Cordillera Federation of Irrigators Associations to effectively address the drought-related problems of farmers in the different provinces during the dry spell season.

As most of farmers are not aware of the various loan products offered by financial institutions (e.g. Agricultural and Fishers Financing Loan Program and Agricultural Competitiveness Enhancement Fund of the Landbank of the Philippines), they rely on informal creditors and input traders. Hence, promotion of these formal financial institutions will be intensified among farmers and fisherfolks.

On insurance, the Philippine Crop Insurance Corporation (PCIC) has four provincial extension offices located in the provinces of Abra, Ifugao, Kalinga and Mountain Province.

With the need to mitigate losses and ensure speedy recovery from natural and economic

shocks as well as outbreak of pests and diseases, the Philippine Crop Insurance Corporation (PCIC) will implement index- and weather-based insurance schemes to provide adequate and timely compensation to primary producers. Greater digitalization of insurance programs will also be pursued for faster transactions and provision of indemnity payments.

The government will continue to expand the coverage of the Production Loan Easy Access (PLEA), which offers low interest rates and requires minimal collateral and lesser documentary submissions. In Agricultural insurance as a component of the PLEA will protect farmers against losses arising from natural calamities, plant diseases and pest infestations, thereby minimizing losses.

***Encourage participation of Cordillera youth and women in AFF activities.*** With the aging population of farmers in the region, there is need to engage the youth to participate in agri-fishery activities by providing incentives, technical assistance, trainings, scholarships, and other support services.

Providing education and training programs can help equip youth and women with the skills and knowledge needed to engage in agriculture. This can include technical training on farming practices, as well as business and entrepreneurship skills. Access to financing and resources is critical for youth and women to establish and maintain successful farming enterprises. Providing access to credit, land, and other resources can help overcome the financial and structural

barriers that may be preventing them from engaging in agriculture.

The DA-CAR will also continue providing assistance to young agripreneurs (Yaggies) through the Kadiwa Agribiz Assistance for Youth and OFWs (KAAYO), Youth in Agripreneurship Program (YAP), Agri-Negosyo (ANYO) Loan Program, Kapital Access for Young Agripreneurs (KAYA), and Entrepreneurial Mind Setting and Business Plan Development, among others.

Women in agriculture may also avail of uncollateralized and zero-interest loans to finance capital requirements of their start-up or existing agri-fishery income-generating activities in the supply chain or combination of agri-fishery and off-farm enterprises through the AgriPinay Loan Program of the Agricultural Credit Policy Council of the DA. The DAR-CAR shall also provide incentives to qualified graduates of agriculture-related courses by awarding each graduate a maximum of three hectares of agricultural land. Scholarships will also be provided to students who will take up agri-fishery-related courses.

Capacity building and mentorship programs for youth and women will provide them with the support and guidance to succeed in agriculture. This may include pairing them with experienced farmers or business mentors who can provide advice, share best practices, and offer guidance on overcoming challenges. Creating opportunities for youth and women to network and collaborate with other farmers and stakeholders can help build

their confidence, expand their knowledge, and create new business opportunities.

Celebrating the successes of youth and women in agriculture can help raise their visibility and inspire others to get involved. This involves awards and recognition programs, as well as showcasing success stories through media and public events. The Young Farmers Challenge (YFC) of the DA will be sustained to further encourage the youth to put up ventures in line with agricultural development and food production.

It is also important to recognize that youth and women face unique challenges and barriers when it comes to engaging in agriculture. A number of strategies to promote women empowerment in the AFF sector were also identified in the Updated Gender Equality and Women Empowerment 2019-202. These include the participation of women in local councils including agriculture-related organizations or associations for their voices and experiences to be considered in local development planning and to link them to information on programs and services.

Providing support and resources through purposive targeting of women in big-ticket programs particularly foreign-assisted programs such as the International Fund for Agricultural Development (IFAD) and the World Bank. Making women in the AFF sector central in these programs has successfully connected women to markets and value chains which is a big departure from the traditional way of isolated livelihood



projects for women that were not sustainable and remained on the sidelines. Special projects that address specific needs of women, such as special credit windows for women;

and effectively making men and women co-owners of CLOAs address root causes of women's marginalization shall also be sustained.

## **Outcome 2: Access to markets of AFF-based enterprises expanded**

### ***Improve physical and digital infrastructure.***

This will significantly impact on the productivity, efficiency, and sustainability of farming operations. Investing in irrigation and water management infrastructure will ensure that farmers have access to a reliable and adequate water supply (see Chapter 13).

Improving road and transportation networks can help farmers access markets and essential services more efficiently. The concreting and improvement of unpaved and existing Farm-to-Market Roads will further improve and enhance economic activities in the region. The Farm-to-Market Road Development Program (FMRDP) of the DA-CAR will be continued as the potential agricultural production area in the region is not fully maximized due to limited access. Under the i-Build component of the Philippine Rural Development Project (PRDP) Scale-Up, the construction of FMRs will also be prioritized.

Investing in post-harvest infrastructure will also reduce post-harvest losses and improve the quality and marketability of agricultural products. This can include the construction of storage facilities, processing plants, and transportation networks.

Improving digital connectivity and access will improve farmers' access to critical information and services, such as weather forecasts, market prices, and agricultural extension services. This can involve the expansion of broadband and mobile networks, as well as the development of digital platforms and tools.

Investing in energy infrastructure can help farmers access reliable and affordable sources of energy for irrigation, processing, and other agricultural operations. This can include the construction of small-scale renewable energy systems, as well as the expansion of existing energy networks.

Lastly, investing in research and development can help drive innovation and technological advances in agriculture. This can involve the establishment of research and development centers, as well as partnerships with academic and research institutions.

### ***Improve food transportation and distribution processes to hasten and ensure unhampered movement of food products.***

Improving the road network in the region can help facilitate the transportation of food products to markets and AFF-based enterprises (see Chapter 13). The use of

appropriate transportation modes, such as refrigerated trucks, can help reduce food spoilage during transportation and ensure that products reach markets in good condition. Establishing market linkages between producers and buyers can help ensure that food products reach their intended markets. This can include developing market networks and supply chains, establishing local food markets, and connecting AFF-based enterprises with buyers and distributors. Technology and innovation can play a significant role in improving food transportation and distribution processes. This can include using mobile applications to track the movement of food products, and adopting innovative packaging solutions that can help extend the shelf life of food products.

***Protect local farmers and fisherfolk against unfair competition, supply/ price manipulation and smuggling.*** The Philippine Competition Commission (PCC) through its Investigation Station (iStation) for Northern Luzon located in the University of the Philippines Baguio City will primarily serve as workstations to facilitate the conduct of investigation work, field missions, surveillance, interviews, and market monitoring until the launch of permanent regional offices in the future. In addition, PCC will collaborate with other government agencies and the private sector for activities such as competition-related research, advocacy, and capacity-building programs.

The Local Price Coordinating Councils (LPCC) in each province or municipality shall be strengthened to closely monitor prices of agricultural commodities and processed goods, and coordinate and rationalize programs intended to stabilize prices and supply at the local level.

### **Outcome 3: Resilience of AFF value chains improved**

***Adopt climate- and disaster-resilient technologies.*** In the region, crop climate calendars need to be developed to augment traditional crop calendars by not only specifying planting and harvest schedules but also describing phenological states, cultivation practices and weather and climate requirements that any crop faces throughout a cropping season. Simplified technologies that aim to predict weather patterns should also be made accessible to farmers.

Advanced farming technologies from Korea shall also be promoted through the Smart Greenhouse Project of Philippines (SGPP) under the Bureau of Plant Industry- Baguio National Crop Research, Development and Production Support Center (BPI-BNCRDPSC) under the DA-CAR. The first state of the art greenhouse in the country will serve as the model for a modernized farming system that will contribute to achieving a food secure and resilient region.

Good practice options for climate-change adaptation (CCA) identified in Benguet and Ifugao may be adopted in other provinces in the region. In Benguet, some of the good practices include: a) seed production in greenhouses; b) integrating lemon in vegetables farms for slope protection, soil fertility improvement through composting; c) planting of heavy rainfall tolerant crop varieties; d) small irrigation facilities to support vegetables production; and e) forest enrichment by planting fruit and forest trees and fallow cropping after rice.

In Ifugao, good practices include: a) community nursery for indigenous fruit trees; b) planting of coffee, rambutan, and pomelo for forest enrichment and slope protection; c) integration of vegetables in rice production; d) homestead gardening; e) riverbank rehabilitation by planting bamboos; and f) planting alternative crops in the abandoned rice fields.

These good practices will be combined with knowledge and science-based approaches to climate change adaptation. It is important to foster partnerships between farmers, government agencies, and other stakeholders. This can help create a more integrated and coordinated approach to agriculture that is better able to withstand natural disasters.

***Promote and strengthen indigenous food systems and sustainable farming practices.***

Time-tested local food systems have proven to be useful especially during the COVID-19 pandemic as indigenous communities demonstrated resilience amidst the

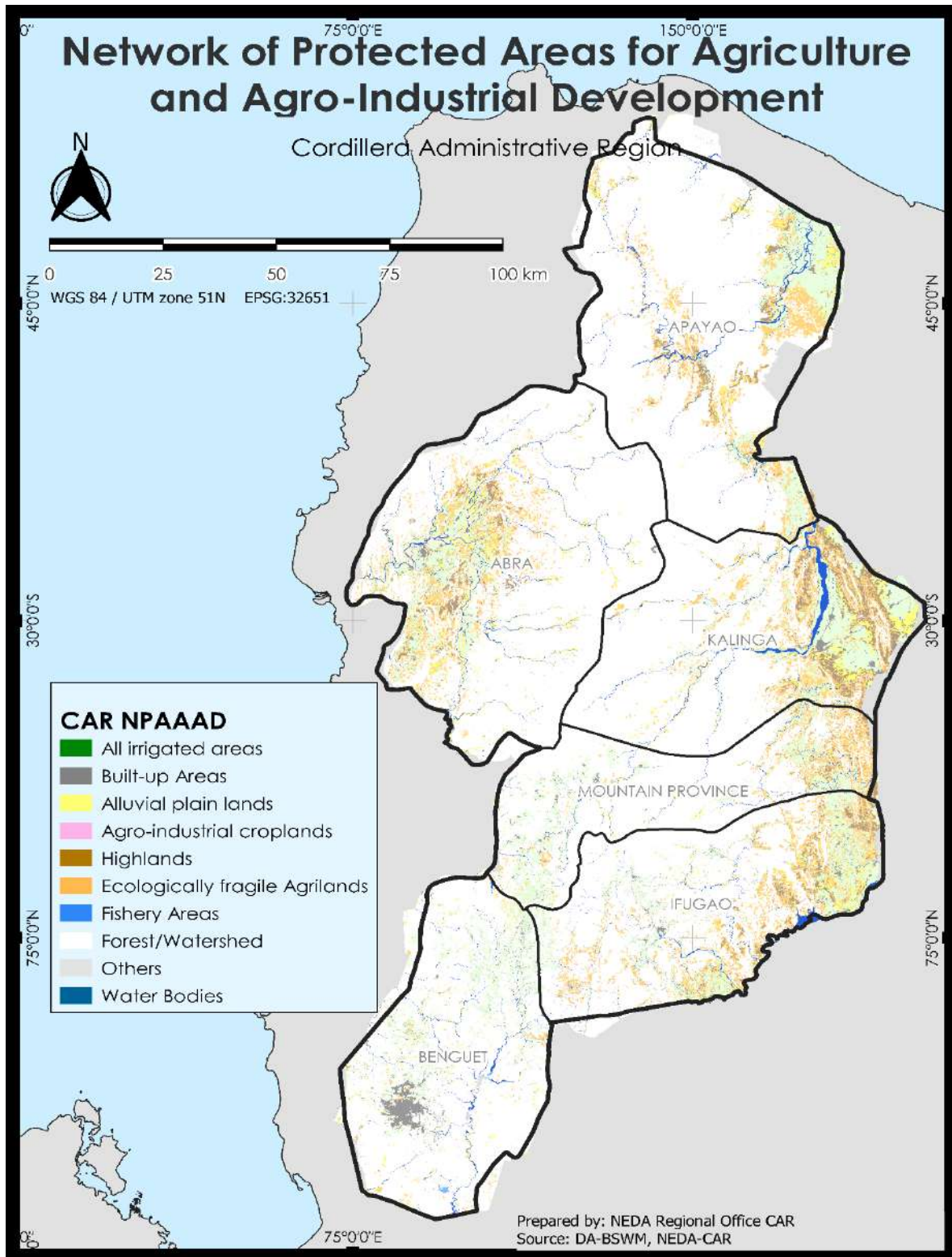
implementation of the enhanced community quarantine which hampered the movement of food commodities. To this day, many households in the region rely on agricultural subsistence farming as their main source of food. However, these local food systems are slowly disappearing as more of the region's population patronize the consumption of processed food. Hence, there is need for the government to promote these as it campaigns for a healthier lifestyle among Cordillerans. (see Sub-Chapter 6.1)

Through the initiative of the private sector, traditional recipes from the different indigenous communities in the region were documented in a book entitled, "Heirloom Recipes of the Cordillera" published by the Philippine Task Force for Indigenous Peoples' Rights (TFIP) and Partners for Indigenous Knowledge Philippines (PIKP). The book contains recipes using rice, root crops, vegetables meat, and fish snails and crabs as main ingredients, preparation of preserves and drinks and beverages of Cordillera ancestors passed on to the present. This, along with existed documented local food systems shall be promoted in schools.

To address the unsustainable expansion of agricultural lands, farmers will be encouraged to adopt sustainable agricultural practices that can increase productivity without encroaching into forest lands. Urban agriculture, agroforestry and agri-tourism will also be promoted as alternatives to the intensive agriculture practiced in the region, to balance both the community's needs for livelihood and environmental protection. Further development and promotion of agricultural areas such as the EKGC will also be in accordance with the Strategic Agriculture and Fisheries Development Zones (SAFDZ) and the Network of Protected Areas for Agriculture and Agro-Industrial Development (Sub-chapter 6.1).

***Integrate climate and disaster risks as well as risks from transboundary pests and diseases in AFF planning and programming (G).*** AFF planning and programming should incorporate climate change adaptation and disaster risk reduction strategies. This can include developing early warning systems, establishing emergency response plans, and building resilient infrastructure.

Map 11 Network of Protected Areas for Agriculture and Agro-Industrial Development



In addition to climate and disaster risks, transboundary pests and diseases can pose a significant threat to the AFF sector in the region. These pests and diseases can spread rapidly across borders and can cause significant damage to crops and livelihoods. As such, AFF planning and programming should also consider strategies to prevent the introduction and spread of transboundary pests and diseases through multi-level biosecurity measures. This can also include developing surveillance and monitoring systems, establishing quarantine measures, and promoting sustainable pest management practices.

By taking a holistic approach to planning and programming, the region can build a more resilient and sustainable agricultural sector that can adapt to and withstand the challenges.

***Develop and mainstream early warning systems/anticipatory mechanisms.*** Climate and weather forecasts act as valuable information that farmers can use in making decisions. Forecasts can be a risk management tool if farmers can use the information such that their decision will allow them to minimize the losses or take advantage of climate variability. Forecasts on the occurrence of drought, dry and wet

season, frost and typhoon greatly affect decision-making in farm households. Hence, forecasts must be accurate so as to effectively address the microclimatic condition of upland and lowland areas in the region.

Early warning systems can be developed that are tailored to the specific needs of the agriculture sector in the Cordillera. These systems may include weather monitoring and forecasting, soil moisture monitoring, and crop monitoring. Once the early warning systems are in place, it is important to establish effective communication channels to ensure that farmers are able to receive and act on the information provided. This may include mobile phone alerts, radio broadcasts, and community meetings. To ensure that farmers are able to effectively use the early warning systems, it is important to provide training and education on how to interpret the information and take appropriate action. This may include workshops, training sessions, and on-site demonstrations.

It is also important to monitor and evaluate the effectiveness of the early warning systems on an ongoing basis to identify areas where improvements can be made. This can help ensure that the systems remain relevant and effective over time.

## Outcome 4: Agricultural institutions strengthened

*Enhance support to agricultural education, training and job-skills matching.* This strategy emphasizes the need to integrate agriculture in basic education curriculums to promote awareness among the youth and address negative perceptions towards agriculture.

The curricula for agricultural education and training programs must be updated to reflect the latest industry trends, technologies, practices and provide space for transdisciplinary, problem and practice-based approach to learning agricultural science and entrepreneurship. This can help ensure that students are equipped with the skills and knowledge they need to succeed in the modern agricultural workforce. Experiential learning opportunities, such as internships and apprenticeships, can help students gain practical experience and develop the skills needed to succeed in the agricultural sector. Partnerships between educational institutions and industry stakeholders can help facilitate these opportunities.

To ensure that graduates of agricultural education and training programs are able to find employment in the sector, it is important to support job-skills matching.

This may include providing career counseling and job placement services to students, as well as working with industry stakeholders to identify employment opportunities and needed skills.

Public-private partnerships can help to promote collaboration between educational institutions and industry stakeholders, and facilitate the development of relevant education and training programs. These partnerships can also help to ensure that the skills and knowledge taught in these programs are aligned with industry needs.

The Agricultural Training Institute (ATI) under the DA-CAR will also continue providing short courses on agriculture and fisheries (e.g. agro-entrepreneurship, aquaponics food production, organic agriculture, agricultural crops production and fruit growing). This is in collaboration with other government agencies, state universities and colleges and non-government organizations.

The Technical Education and Skills Development Authority (TESDA) in the Cordillera Administrative Region (CAR) will also continue offering various agriculture-related courses that are aligned with industry standards and are recognized by employers in the agriculture sector

# Legislative Agenda

Table 33 Legislative Agenda to modernize agri-fishery and agribusiness

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<p><b>Support to the Cordillera Regional Autonomy Bill</b></p>	<p>The establishment of the Cordillera Autonomous Region in the Cordillera will ensure that agriculture-related policies and programs are responsive to the needs of the region.</p> <p>This will enable the region to craft policies that are responsive to the unique needs of the Cordillera farmers and fisherfolk.</p> <p>Through Cordillera autonomy, it would have more control over its own economic development and could prioritize agriculture as a key industry, with a focus on sustainable and inclusive growth. This could lead to policies and investments that support small-scale farmers, promote sustainable agriculture practices, and increase access to markets and financing.</p>	<p>RDC, NEDA-CAR</p>
<p><b>Amendment to PD 705</b></p>	<p>The National Irrigation Administration's (NIA) definition of potential irrigable area as lands with slope of 3 percent and below is disadvantageous to the region, with its steep topography characterized by slopes of 18 percent and above. This results to a low irrigation budget for CAR compared to other regions. As of 2021, only 56 percent of potential irrigable area has been developed.</p> <p>Alienable and disposable (A&amp;D) land in CAR is only 15% of its total land area. CAR is 85% forest land, with mostly sloping terrain, and is consequently prone to rain-induced landslides. These characteristics render it unfriendly to agricultural activity, and limit production areas.</p> <p>As such, in order to ensure food security by increasing agriculture production, there is need to increase A&amp;D lands in the region at sustainable levels. The DENR has completed its forestland boundary delineation assessment (FLBD), which identifies forest lands that are viable for conversion to A&amp;D, and this reclassification will be completed through legislation.</p>	<p>NIA, DENR</p>
<p><b>FMR Development and Acceleration Bill</b></p>	<p>The unique terrain of the Cordillera region, characterized by mountainous terrain and narrow roads, presents several considerations in the implementation of this bill. This should be considered in the allocation of road budgets. For instance, the construction of FMRs in the region should incorporate appropriate engineering solutions that are specific to the unique terrain. This may include slope protection measures, drainage systems, and the use of appropriate materials that can withstand the region's weather and geological conditions. At present</p>	<p>DA</p>



LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>Regulation of road openings</b>	This aims to regulate proposed Farm-to-Market Roads (FMRs) with road openings such that resources will be prioritized for the improvement/concreting of existing FMRs in the region.	DA, DPWH
<b>Review the guidelines in the conversion of prime agricultural lands to other uses.</b>	In the interest of food security, guidelines on the conversion of prime agricultural lands to other uses, such as for settlements, commercial or industrial purposes, should be reviewed to ensure that prime agricultural lands will be preserved, especially if these are provided with agricultural production and marketing facilities, e.g., irrigation, farm to market roads or post-harvest facilities.	DAR, DHSUD



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**Revitalize Industry**





## Chapter 8

# 8 Revitalize Industry

CAR is one of the few regions that is considered as industry-driven based on the 2021 GRDP results. Although this may bode well for the region greater efforts must be made to hasten the development of local industries particularly MSMEs to become a key driver for economic growth. Sustained and ideal growth largely depends on the maturity of MSMEs as the backbone of the regional economy. Some of the priority actions that need to be pursued are: updating of the Regional Micro, Small and Medium Enterprises Development Plan (RSMEDP) 2017-2022; promoting the Regional Inclusive Innovation Center (RIIC) as an essential facility for MSMEs; strengthening the partnership of national agencies, local government units, and private sector in regulating small- and large-scale mining; strengthening the partnership of national agencies, local government units, and private sector in enhancing the Consumer Network (Consumernet); formulation of the CAR Investment Priorities Plan (IPP) 2022-2028; establishment of Economic Zones including IT parks in the countryside, among others.

## Assessment and Challenges

### Assessment of Performance

***The region's industry sector contributes 25.2 percent of the total gross regional output.***

While the regional economy is mainly driven by the services sector, the region's industry sector is a critical economic driver of the region. Manufacturing accounts for 51 percent of the total industry output while mining and quarrying contributes 30 percent (Table 34).

CAR industry output grew by 16.3 percent in 2021, showing recovery from the effects of the pandemic which caused a 14 percent

contraction in industry output in 2020. Gross value added in industry increased to Php 78.423 billion in 2021, a 16.3 percent growth from the previous Php 67.451 million in 2020.

***The region's industry sector is concentrated in Baguio City and the Province of Benguet.***

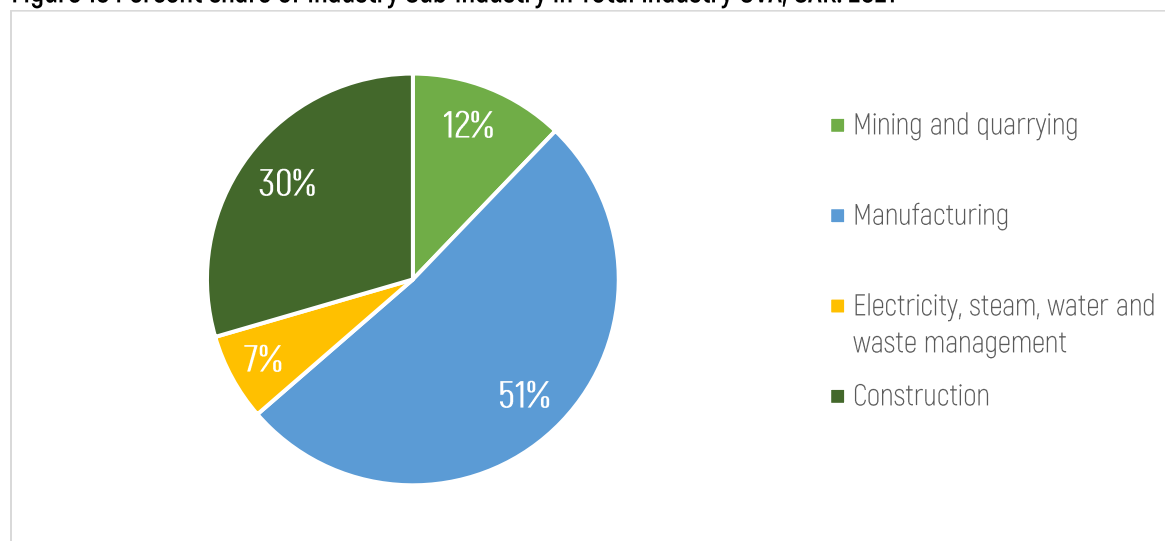
The provincial product accounts show that 49 percent of the total regional industry output is from Baguio City while 22 percent is from Benguet. This indicates the need to strengthen industries of other provinces.

**Table 34 Industry Gross Value Added and Growth Rate, CAR Provinces: 2018 to 2021 (in 2018 constant prices)**

Indicator	2018	2019	2020	2021	% Share
GVA of industry (CAR, in Php billion at)	79.585	78.169	67.450	78.423	100
Abra	5.550	5.496	5.622	6.545	8
Apayao	2.955	2.928	2.973	3.522	4
Baguio City	42.062	40.679	32.107	38.569	49
Benguet	16.872	17.091	15.363	17.365	22
Ifugao	5.057	4.986	4.789	5.342	7
Kalinga	4.456	4.344	4.082	4.477	6
Mountain Province	2.630	2.642	2.510	2.599	3
Growth of GVA in industry increased (%)	Base year	-1.8	-13.7	16.3	-

Source: PSA-CAR

**Figure 19 Percent share of Industry Sub-industry in Total Industry GVA, CAR: 2021**



Source: PSA-CAR

**Increasing investments for MSME development.** DTI-generated investments grew by 34.1 percent from Php 1.8 billion in 2020 to Php 2.04 billion in 2021 with Mountain Province, Baguio City and Abra recording significant growth in investments from 2020 to 2021. Expansion of operations

among MSMEs as well as their transition to e-commerce and other logistics and financial technologies contributed to the growth in these investments.

PEZA investments also increased by 12.7 percent with three new investors in 2021.

Investments increased to Php 987 million in 2021 from Php 876 million in 2020 as the Baguio City Economic Zone registered three new investors.

There were approximately 1,662 MSMEs in 2021 that were assisted by the Department of Trade and Industry. Although limited operations were still enforced due to IATF restrictions a total of 31,350 were employed in 2021 which is more than 600 percent increase compared to 2020 figures pegged at 4,318.

## Challenges

There are five major challenges that continue to beset the revitalization of industries in the region, these are: high cost of energy; industry-academe mismatch; transfer of technology; unreliable ICT infrastructure; and conflicting laws on Small-Scale mining.

*The high cost of energy* primarily caused by global disruptions have negatively affected production levels of companies and MSMEs. If the closure of several MSMEs during the pandemic was not enough the current high cost of fuel has slowed down the operations of MSMEs.

Another challenge is the *weak linkage between the higher education institutions (HEIs)-provided competencies vis-à-vis industry competency requirements*. It seems that curricular responsiveness vis-à-vis specialization has been one of the challenges

*Metallic mineral export sales continue to be driven up by strong metal prices in the world market in 2021*. Minimal increases in the production of gold and copper concentrate production at 3.75percent and 0.36 percent, decline in silver production by 6.24 percent,

Gold sales growing by 5.91 percent, silver by 9.71 percent and copper concentrate at 54.06 percent from 2020 to 2021. In total, exports for metallic minerals were valued at US\$229 million by the end of 2021, a 21percent increase from the US\$189 million in 2020.

that still hound the industry sector. Accordingly, there is a seeming incongruence as to the manpower produced by the academe with the requirements of PEZA locators. With the presence of an economic zone in Baguio, transfer of technology from locator companies to the host region particularly to local industries seems to be non-existent. Local industries should upgrade and upskill its workforce and be able to supply inputs to certain locator companies.

The *poor state of Information Communication Technology (ICT) infrastructure* (power, internet, space) is another challenge which limits the productivity of industries. This situation depicts state of connectivity in the provinces.

Lastly, **laws on small scale mining need to be updated and the enforcement of mining and environmental laws** as well as the requirements of the Indigenous Peoples Rights Act of 1997 (IPRA) need to be

harmonized in order to shore-up the Gold International Reserves (GIR) of the country as well as expand the revenue-base of the region with the declaration of Minahang Bayan areas and issuance of mining contracts.

## Targets

GVA targets for industry, services and mining and quarrying are expected to increase by 30 to 40 percent by the end of the plan period. Mineral exports for gold, silver, and copper are also expected to increase by 20 percent by 2028. DTI-generated investments pegged at 1743.298 is expected to nearly double in 2028. Negosyo Centers for all the municipalities in the region will have been achieved at the end of the planning period. The number of MSMEs assisted is expected to increase in 2028 by nearly 50 percent. DTI-generated MSMEs employment in 2028 is expected to increase by more than 100 percent. Target in terms of employment in cooperatives is expected to increase by 77 percent by 2028. In terms of share of agriculture in manufacturing exports and share of services in manufacturing exports is expected to increase by 20 percent by the end of the planning period.

**Table 35 Targets to revitalize industry**

Chapter/Sub-chapter Outcome/Result and Indicator	Baseline		Target [2023-2028]	Responsible Agency
	Year	Value		
GVA of industry (in PhP billion at 2018 constant prices)	2021	78,423,257.00	101,098,843.11	PSA, NEDA
Growth of GVA in industry increased (% , 2018 constant prices)	2021 <sup>39</sup>	16.30	6.0-7.0	PSA, NEDA
Growth of GVA in mining and quarrying increased (% , 2018 constant prices)	2021	17.10	4.0-5.0	PSA, NEDA
Mineral Exports				MGB
- Gold	2021	6,014,506,926.00	8,136,776,556.00	
- Silver	2021	151,389,257.00	204,808,235.00	
-Copper	2021	4,585,459,370.00	6,150,806,447.00	
DTI-generated investments	2022	1743.298	3088.36	DTI
- Abra	2022	363.701	644.32	
- Apayao	2022	136.338	241.53	
- Baguio City	2022	153.876	272.60	

<sup>39</sup> 2021 growth is higher than average growth rate due to the low 2020 performance caused by the COVID-19 pandemic



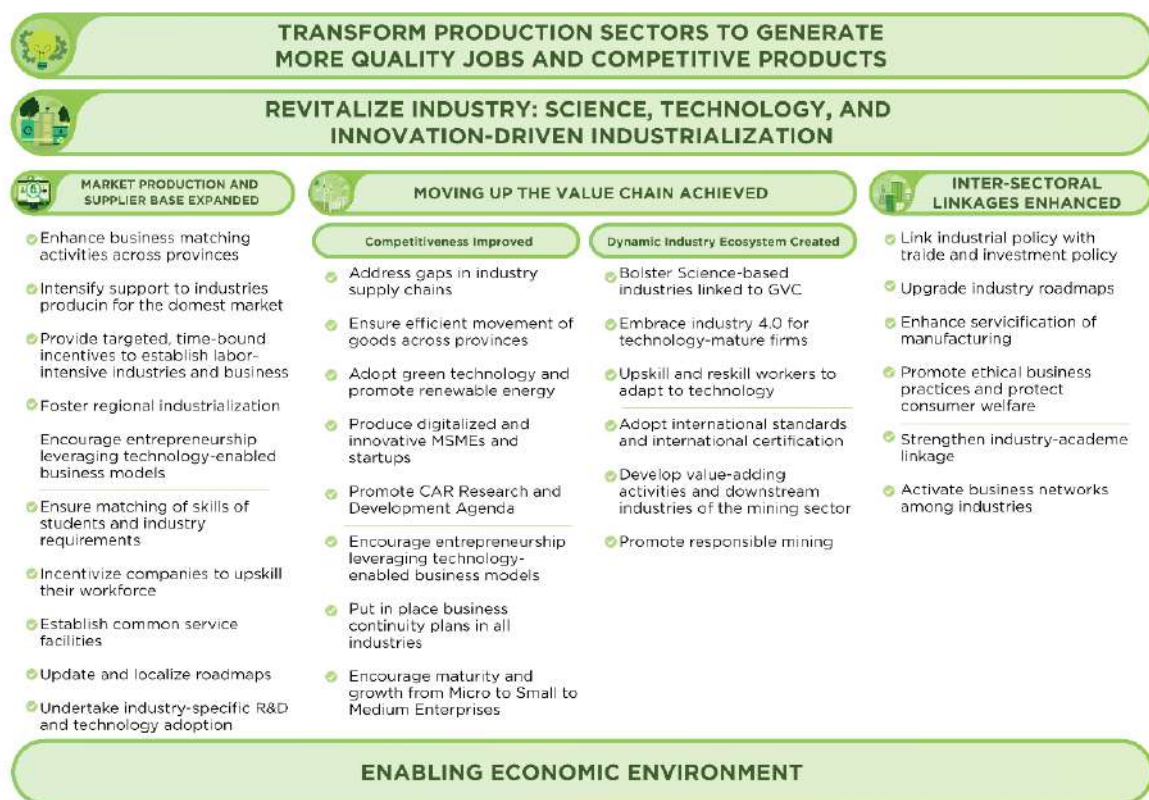
Chapter/Sub-chapter Outcome/Result and Indicator	Baseline		Target (2023-2028)	Responsible Agency
	Year	Value		
- Benguet	2022	138.42	245.22	
- Ifugao	2022	275.903	488.78	
- Kalinga	2022	419.879	743.84	
- Mountain Province	2022	255.182	452.07	
Number of Negosyo Centers established and maintained	2022	54	77	DTI
Number of MSMEs assisted				DTI
- Abra	2022	4535	8034	
- Apayao	2022	3097	5487	
- Baguio City	2022	4638	8216	
- Benguet	2022	4612	8170	
- Ifugao	2022	4017	7116	
- Kalinga	2022	3575	6333	
- Mountain Province	2022	3882	6877	
Labor productivity in industry (in PhP at 2018 constant prices)	2020	710,010	increasing	PSA
Growth of labor productivity in industry (in %)	2020 <sup>40</sup>	-1.0		PSA
DTI-generated MSMEs employment				DTI
- Abra	2022	1826	3230	
- Apayao	2022	2142	3792	
- Baguio City	2022	4786	8475	
- Benguet	2022	2289	4050	
- Ifugao	2022	2823	4998	
- Kalinga	2022	8333	14762	
- Mountain Province	2022	730	1293	
Employment in cooperatives				CDA
- Abra	2021	4188	7419	
- Apayao	2021	1579	2797	
- Baguio City	2021	545	966	
- Benguet	2021	423	749	
- Ifugao	2021	600	1063	
- Kalinga	2021	No Data	No Data	
-Mountain Province	2021	No Data	No Data	

<sup>40</sup> affected by COVID-19 pandemic

# Strategy Framework

The key to revitalizing industry in the region is based on three sub-outcomes which are market production and supplier base expanded; moving up the value chain achieved; and inter-sectoral linkages enhanced. The first sub-outcome concerns upskilling of the workforce and leveraging technology-enabled business models. The role of the private sector is actively participating in business matching activities perhaps through the Philippine Chamber of Commerce Inc. (PCCI), intensify support to domestic industries, encouraging technology aided entrepreneurship. Government is expected to provide the venue for companies to incentivize their workers as well encourage a more cohesive link for industry and academe. In terms of moving up the value chain there are two elements which are MSME growth and industry link up with the GVC.

Figure 20 Strategy to revitalize industry



With regard to the development and maturity of MSMEs government is expected to continue providing technical assistance such as provision of shared service facilities and capability building activities. The private sector is expected to play a major role in enhancing the link between industries and the global value chain primarily to upskilling and reskilling workers to adapt to modern technology. The third sub-outcome which is intersectoral linkages discusses convergent strategies. The expected participation of the private sector is on developing value-adding activities and downstream industries of the mining sector, enhancing servicification of manufacturers, and facilitating the formalization of the SSM sector. For government it is expected to primarily push for an enabling economic environment to upgrade industry roadmaps, strengthen industry-academe linkage, enhancing servicification of services, and activating business networks among industries.

## Outcome 1: Market Production and Supplier Base Expanded

The underlying principle that governs market production and supplier base is the need for local industries to reach optimum levels of production while ensuring that raw materials, quality manpower, and relevant technology are readily available.

***Enhance business matching activities across provinces.*** With the assistance of the private sector businesses usually through the Philippine Chamber of Commerce and Industry (PCCI) in coordination with the RMSMED Council, business matching can be done for mutually beneficial products, services, technologies of MSMEs in the CAR provinces. The CAR IPP is a valuable resource that can be accessed in business matching especially when investment profiles are generated.

***Foster regional industrialization.*** Regional industrialization is spurred with the aggressive development of the industrial

sector in order to generate quality jobs and provide opportunities for the growing labor force. This is consistent with the strategy to provide targeted, time-bound incentives to establish labor-intensive industries and businesses. Focus is on the development of economic zones for the growth clusters Baguio-La Trinidad-Itogon-Sablan-Tuba-Tublay (BLISTT) and Easter Kalinga Growth Center (EKGC), IT-BPM and manufacturing sectors.

***Intensify support to industries producing for the domestic market.*** MSMEs involved in meeting local demand for goods and services need to be provided the necessary support such as capability building activities including technology adoption, links to market networks, and access to micro-financing services.

***Ensure matching of skills of graduates and industry requirements.*** Ensuring the

matching of skills of students and industry requirements is a strategy that both government and academe shall undertake. These entails strengthening the link between the quality of graduates and the requirement of PEZA industries including Business Process Outsourcing (BPOs) firms as well as MSMEs.

There are several region-specific strategies that relate to business skills matching activities: Competitiveness Agenda in Agriculture and Tourism Apprenticeship; OJT programs of HEIs; Fora for PEZA, HEIs, host LGU, DTI and DOST; and HEI to offer courses which locators need such as metals engineering.

#### ***Promotion of the Competitiveness Agenda in Agriculture and Tourism***

***Apprenticeship.*** The global value chain has made trading very competitive with local markets flooded with imported goods and services sustaining the region's competitive advantages in terms of Highland Agriculture and Tourism becomes imperative. Strategic bodies such as the sub-sectoral committee on Agriculture and the Regional Tourism Advisory Council are needed to monitor progress in these sectors.

***OJT programs of HEIs.*** On the Job training programs of higher education institutions need to be closely coordinated with various industries for the upskilling of graduates and enhanced their chances of being employed. Also related to this strategy is the strategy to continue the Upskilling Partnership activities between PEZA and TESDA with DOLE

providing worker's profile for potential employers.

***Fora for PEZA, HEIs, host LGU, DTI and DOST.*** In order to enhance greater convergence between the private sector and public stakeholders it is suggested that a regular interface be conducted to thresh-out industry - academe concerns.

***HEI to offer courses which locators need such as metals engineering.*** In order to facilitate the transfer of technology HEIs should offer specialized courses such as metals engineering and other relevant courses that will satisfy the requirements of PEZA locators.

#### ***Establishment of Negosyo Centers and implementation of the Youth Entrepreneurship Program.***

Republic Act No. 10644, the "Go Negosyo Act", supports LGUs in the establishment of Negosyo Centers. As of 2022, 54 Negosyo Centers have been established in the region to provide assistance to MSMEs in upskilling their labor force and improving their business processes. Another important program that the Regional Micro Small Medium Enterprises Development Council (RSMEDC) implements is the Promotion of the Youth Entrepreneurship Program (YEP). Republic Act No. 10679, otherwise known as the Youth Entrepreneurship Act, mandates the Micro, Small, and Medium Enterprise Development Council (RSMEDC) through the Department of Trade and Industry (DTI) to implement programs involving the youth to become productive individuals through

entrepreneurship. A comprehensive package of interventions is offered to develop the entrepreneurial skills of the youth.

***Intensify support to industries producing for the domestic market.*** The competitiveness of enterprises is supported by the Industry Cluster Enhancement (ICE) Program. The ICE adopts the cluster development approach using the value chain tool that focuses on the selection of a product and adopting the appropriate technology to effectively access the market. The identified priority products or services in CAR are bamboo, Homestyle and Wearables (Furniture, Creative Industries), IT-BPM and E-Commerce, and Tourism/Agri-Tourism. The Bamboo Industry Cluster Enhancement Program that is based on the National Bamboo Development Plan is the first ICE program to be launched in the region.

***Establish common service facilities.*** One of the most cost-effective methods in addressing the needs of MSMEs is through the Shared Service Facilities program of government. Communities are organized as business groups falling into a specific industry cluster and are provided with the appropriate technology and equipment needed such as coffee roasters for coffee cooperatives, loom

weaving equipment and the SSF on Food and Analytical Laboratory at the Kalinga State University Central Science Laboratory.

***Update and localize roadmaps.*** There are several industry development roadmaps that need to be localized to have a positive trickle-down effect at the region and provincial levels. These roadmaps are on Manufacturing, Agribusiness Services (bamboo, coffee, cacao, wearables and homestyles), Artificial Intelligence, Inclusive Filippinnovation and Entrepreneurship, and E-Commerce.

***Undertake industry-specific R & D and technology adoption.*** With Industry 4.0, the growing need to intensify R & D in specific priority MSME industry clusters must be hastened and the necessary appropriate technology developed and adopted. In the age of digitalization and artificial intelligence, MSMEs need to be employing world class technology in order to be competitive. Specifically, R&D should focus on the substantial development of MSMEs in terms of product quality, productivity and production levels.

## Outcome 2.1: Moving Up the Value Chain Achieved on Improving Competitiveness.

### ***Address gaps in industry supply chains.***

In order to address gaps in supply chains which were made manifest during the COVID-19 pandemic, digitalization of industry processes with regard to supply chains must be conducted from production to packaging and delivery. However, appropriate digital solutions must be prescribed so that disruptions will be minimized.

### ***Ensure efficient movement of goods across the provinces.***

The construction of access roads through the Roads Leveraging Linkages of Industry and Trade (ROLL-IT) Program and Farm-to-Market Road Development Program (FMRDP) aim to ensure access to farm inputs and the timely transport of products to markets.

### ***Adopt green technology and promote renewable energy.***

With the increasing losses and damages due to climate change, the adoption of green technologies in the industrial sector shall be intensified. Most economies adhere to the principle of Green Economic Development (GED) where the manufacturing sector promotes environment-friendly production technologies.

### ***Support digitalized and innovative MSMEs and startups.***

With the assistance of DOST and DTI in partnership with the private sector institutions such as the TARA-KI-CAR, the

competitiveness of MSMEs through innovation and personnel capacitation will be sustained.

### ***Promote CAR Research and Development***

***Agenda.*** The CAR R and D agenda is aligned with the needs of MSMEs and industry to increase productivity and promote sustainable operations. It serves to converge research efforts to produce mature technologies for adoption by enterprises and industry.

### ***Development of metals engineering industry.***

As part of expanding the SETUP program of DOST and for local metals engineering businesses to level up in skills and product quality to world class standards, a training program for MSMEs with the assistance of private sector cooperators and PEZA may be established with emphasis on technology transfer for an inclusive supply chain.

### ***Put in place business continuity plans in all industries.***

Business continuity plans (BCPs) are essential in MSME operations for security and resilience specially in times of calamities or emergencies. BCPs in business management systems are meant to reduce business operational risks in human resource management; business processes and functions; supplier and customer management; and communications.

***Promote access to the Pondo sa Pagbabago at Pag-Asenso (P3).*** MSMEs will now have access to cheap and easy credit as offered through the Pondo sa Pagbabago at Pag-Asenso (P3) program of DTI. National conduits and local Micro-Financing Institutions (MFIs) have already been accredited to assist micro entrepreneurs.

***Formulation of the CAR Investment Priorities Plan (IPP) 2023-2028 and updating of Local Investment and Incentives Code (LIIC).*** The IPP provides the private

sector especially entrepreneurs potential investment areas for development including public-private sector partnership opportunities.

LGUs will also be assisted in the updating of their respective Local Investment and Incentives Code to define priority investment areas and incentives which are attractive to the private sector at the same time promote general welfare and public good. Outcome 2.2: Moving Up the Value Chain on the creation of a Dynamic Industry Ecosystem

## **Outcome 2.2: Moving Up the Value Chain on the creation of a Dynamic Industry Ecosystem**

### **Bolster Science-based industries linked to Global Value Chains (GVC).**

Current initiatives towards these includes the SME Roving Academy; National Broadband Plan; DTI's Innovate Program; OTOP Next Gen; and BSP's PalengQR-PH.

***SME Roving Academy as training facility for AIR technologies.*** The SME Roving Academy (SMERA) is a continuous learning program for the development of micro, small and medium enterprises (MSMEs). It is designed to make MSMEs competitive in the domestic and global markets. Its components are: 1) Integration of the business development services for small and medium enterprises (SMEs) at the national and local levels; 2) Establishment of the Provincial, Regional, and National Entrepreneurship Development Networks; and 3) Management of an inclusive promotion program.

### ***National Broadband Plan Implementation.***

Based on the 2021 Digital Quality of Life (DQL) Index, the Philippines scored 48th out of 110 nations. This ranking would improve with the fast-track implementation of the National Broad Band Plan. The IT backbone is important in promoting business and attracting investments into the region.

### ***Promotion of the Innovate Program.***

Innovate is at the heart of DTI's Inclusive Innovation Industrial Strategy (i3S) that aims to increase global competition, resolve regional and global issues on trade, push regional economic integration, and build more resilient industries. Innovate seeks to take advantage of the Global Value Chain where MSMEs are expected to develop new production techniques and business models that would spur production levels.

***Level-up in the value chain through provision of trainings and equipment.***

Upskilling and reskilling of MSME workforce and provision of appropriate equipment support production of quality outputs that leverage local industry linkage with Global Value Chains (GVC).

***OTOPreneurs to level up the products to OTOP Next Gen.*** Providing continuity to the successful Own Town One Product program (OTOP) of DTI is OTOPreneurs to LEVEL UP the products to OTOP Next Gen that focuses now on transforming and innovating product quality, design, packaging and labeling, branding and supply chains.

***Implementation of the Paleng-QR PH platform.*** Bangko Sentral ng Pilipinas (BSP) and the Department of the Interior and Local Government (DILG) have developed the Paleng-QR Ph program. The program aims to institutionalize the digital payments ecosystem in the country by promoting cashless payments in public markets and local transportation, particularly tricycles.

**Embrace Industry 4.0 for technology-mature firms**

***AI (artificial intelligence), Internet of Things (IoT), e-commerce.*** With the advent of AI and IoT, business management has been transformed and levelled-up in terms of managing inventories, personalized shopping experiences and data mining. MSMEs are now ably equipped with the knowledge and skills to search out niche markets, improve

product designs, and innovate processes and services.

***Institutionalization of the StartUp Ecosystem.*** Institutionalizing a StartUp Ecosystem in CAR has been started through the assistance of DOST, DTI and other development partners such as the Technological Consortium for Awareness, Readiness, and Advancement of Knowledge in Innovation – Cordillera Administrative Region (TARAKI-CAR). Initial activities include the capacitation of HEIs to institutionalize a culture of innovation in their programs and curricula.

***Trainings on E-Commerce to level-up the MSMEs in the digitalization track.*** DTI continues to provide MSMEs with E-Commerce capability building trainings. Likewise, BSP's Paleng QR PH Program can also contribute to the upskilling of MSMEs to facilitate online business transactions.

***Localization and implementation of the E-Commerce Roadmap.*** The National Roadmap needs to be localized to have an impact on the local economy. This includes the digitalization of business processes and promotion of online business transactions.

***Establishment of fabrication laboratories (FabLabs) per province.*** The establishment of Fabrication Laboratories will be expanded in all the provinces in cooperation with SUCs and private HEIs. These FabLabs provide technical support and services to MSMEs to improve their products and pave the way to their migration to Industry 4.0. It is also a



venue where students and the wider community collaborate to develop creative and innovative production processes.

***Knowledge, Innovation, Science and Technology (KIST) parks.*** This program is spearheaded by Philippine Economic Zone Authority (PEZA) and is geared towards enhancing the capability of Filipino workers to become multi-knowledge, multi-skilled, world-class workers specializing in production and manufacturing capabilities for a digitalized and export-driven economy.

### **Upskill and reskill workers to adapt to technology**

***Niche Centers in the Regions for R&D (NICER) Program, R&D Leadership (RDLead) Program, Collaborative R&D to Leverage Philippine Economy (CRADLE) Program, Business Innovation through S&T (BIST) for Industry Program.*** These programs of the Department of Science and Technology (DOST) offer institutional grants for HEIs in R&D capacity building to improve their Science & Technology infrastructure. The NICER is a comprehensive package meant to focus on provision of appropriate technology (hardware and software) as well as upskilling the existing workforce with current technology or developing new technologies for licensing and commercialization.

***Operationalize the Regional Inclusive and Innovation Center (RIIC).*** The RIIC aims to connect and integrate innovation and entrepreneurial ecosystems to provide support to MSMEs and industry. It aims to

elevate the competitiveness of the region, create employment opportunities and promote more entrepreneurial activities. The RIIC established an online platform, the Accelerators Towards Transformative Regional Advancement, Competitiveness and Transcendence (ATTRACT) to provide access on innovation and entrepreneurship programs.

***Strengthening the CONSUMERNET.*** The consumer network is an inter-agency body that works with Local Price Coordinating Councils (LPCCs) on promoting consumer welfare.

***Adopt international standards and international certification.*** Industry and MSMEs will be assisted in complying with international certification standards that institutionalizes innovative management systems for cost-efficient operations.

***Develop value-adding activities and downstream industries of the mining sector.*** Value adding activities such as the establishment of metal processing industries must be developed to optimize the benefits from mining and to generate more economies of scale. Advocating for a more inclusive mining industry includes integrating the small-scale mining sector in the formal economy. These initiatives will also consider protection of the environment and the welfare of miners and their families. Also, small scale miners will have to sell their mineral production to the BSP, in accordance with Republic Act 7076, in order to shore up

the countries Gold International Reserves (GIR).

**Promote responsible mining.** The extractive industries in the region will be guided by the

principle of responsible mining where all stakeholders are consulted, environmental safeguards are considered, and benefits are equitably shared.

## Outcome 3: Enhanced inter-sectoral linkages

**Link industrial policy with trade and investment policy.** Programs that implement this policy are the Product Development and Assistance, Food Development Program, and National and Regional Trade Fairs. Product development continues to be emphasized for MSMEs to be able to compete in the local and global markets. One of the enduring trade fairs which DTI conducts regularly is the IMPAKABSAT where the different products from the CAR provinces are showcased in Metro Manila.

**Upgrade industry roadmaps.** Updating of the Cordillera Coffee Industry Development Plan, and Roadmaps for Cacao and Bamboo will provide a guide to converge efforts of all stakeholders in promoting the production, processing and marketing of these priority regional commodities,

**Enhance servicification of manufacturing.** Servicification refers to more production, use, and sale of services by manufacturing firms and is seen as a strategy to increase competitiveness of exports. This entail more interventions towards improving common business services (e.g., marketing, digitization, administrative and finance, promotions, logistics, distribution, assistance in consolidation) to potential exporters. More

focus will be given to organizational development and multi-sectoral partnerships to capacitate smallholders and make value chains inclusive. Advocacy on the Philippine Skills Framework will also support servicification of the industry sector as it will align skills development to current industry needs and emerging market demands.

**Activate business networks among industries.** Institutionalization of the Buy Local Program seeks to provide support to existing local industries. The Buy Local program has been designed to help revive MSMEs that have been severely affected by the pandemic and increasing competition from imported goods.

**Promote ethical business practice and protect consumer welfare.** DTI continues to pursue its mandate to promote consumer welfare through the aforementioned programs. The Bagwis Program provides recognition to MSMEs that uphold the rights of consumers, employ ethical business practices, and comply with fair trade laws. The CEAP is about consumer education and advocacy initiatives meant to raise consumer awareness on their rights and responsibilities. BEAP promotes the establishment of a Consumer Welfare Desk (CWD) in their

MSME establishments as part of their social responsibility to respond appropriately to consumer issues and complaints. Diskwento Caravan is a program where consumers are given access to basic goods and prime commodities at reduced prices by bringing manufacturers and retailers closer to their market. E-Presyo is program designed to promote an efficient, timely and accurate price data for the information and guidance of all stakeholders especially the consumers.

**Updating of the Cordillera Coffee Industry Development Plan, Roadmaps for Cacao and Bamboo.** There are three agriculture produce that the region has comparative advantage and these are coffee, bamboo, and cacao.

Accordingly, there are plans and roadmaps for these commodities. The CCIDP seeks to consolidate all coffee plans to forge convergence among all coffee stakeholders. Moreover, the CCIDP needs to be updated for the period 2023-2028.

**Institutionalization of the Buy Local Program.** Buy Local program has been designed to help revive MSMEs that have been severely affected by the pandemic. The dire situation that MSMEs find themselves in has also been exacerbated by that fact that local economies have been flooded with imported goods.

## Legislative Agenda

Table 36 Legislative Agenda to revitalize industry

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
1. Creation of oversight committee to monitor the implementation of 4IR roadmaps	To promote convergence between and among government agencies and LGUs with regard to implementation of the 4 <sup>th</sup> Industrial Revolution (4IR) roadmaps an oversight body is needed to orchestrate concerted efforts.	DTI
2. Amending the SSM law and other relevant issuances	Increasing the Gold International Reserves (GIR) of the country can be facilitated through amendments of the SSM Law particularly strengthening convergence of government and LGU stakeholders.	BSP, MGB



# 09



## Reinvigorate Services





## Chapter 9

# 9 Reinvigorate Services

The preferred future for the Cordillera region's services sector is characterized by sustained high-growth rate anchored on high value adding, creative and innovative services that will increase economic opportunities and reduce poverty with better quality jobs. This can be achieved through a) differentiated services with higher value-added that are enabled by market expansion and digital transformation of private and public institutions; b) dynamic ecosystem of technology, talent and skills development, intellectual property rights protection, and competition for creativity and innovation; and c) a strong public-private-social partnership to attract more investments in the region.

## Assessment and Challenges

### Assessment of Performance

**Post-pandemic growth rate of the services sector by 5.9 percent generating 66 percent of the total regional economy.** In 2021, the region's services sector generated a GVA of 203.4 Billion pesos (Table 37). Wholesale and retail trade, repair of motorcycles had the biggest share at 27 percent. This is followed by financial and insurance activities with 18 percent share and real estate and ownership with 11 percent share to total services (Figure 21).

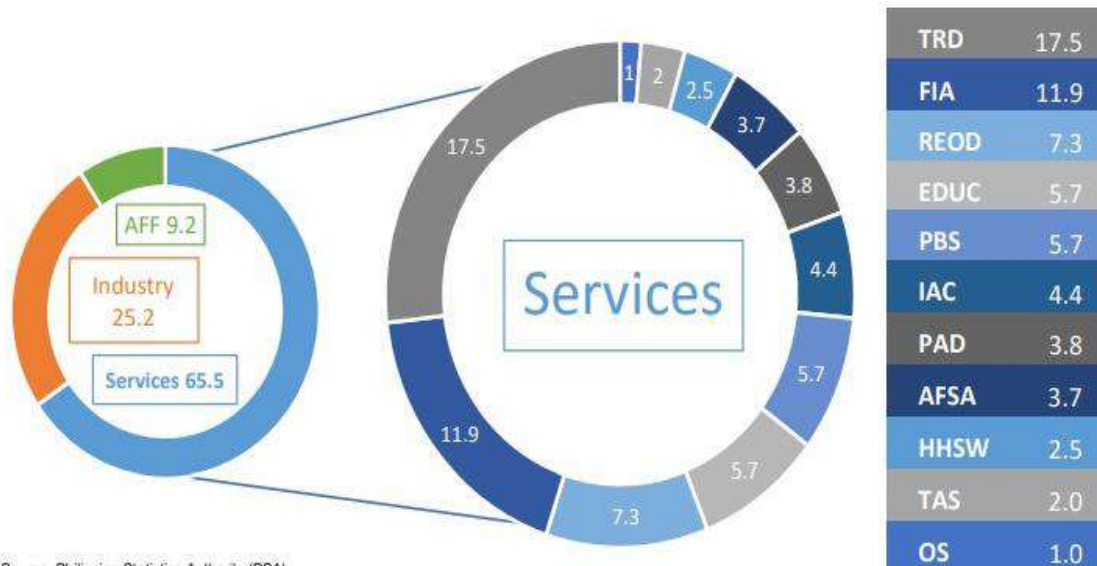
The COVID-19 pandemic in 2020 caused significant setback to the services sector, particularly in education, transport and tourism services, as lockdowns, restrictions on mass gatherings and travel resulted to business closures and unemployment. E-commerce and logistics enterprises emerged as an opportunity during the pandemic, which tempered the economic downturn.

Table 37 Gross Value Added of Services, CAR: 2018 - 2021, at Constant 2018 Prices (Php 000)

Region/ Province	2018	2019	2020	2021
Abra	11,653,747	12,093,154	11,872,529	12,781,672
Apayao	4,398,385	4,628,525	4,524,889	4,899,813
Baguio	104,082,777	111,345,487	93,725,001	99,735,501
Benguet	42,234,556	45,573,473	43,362,601	45,404,885
Ifugao	14,028,323	14,858,488	14,431,076	15,154,388
Kalinga	14,985,566	15,913,088	15,706,142	16,444,118
Mountain Province	8,620,928	9,265,858	8,572,051	9,017,562
CAR	200,006,300.46	213,680,091.92	192,196,309.01	203,437,940

Source: PSA-CAR

Figure 21 CAR GRDP Percent Distribution by Industry: 2021 (at Constant 2018 Prices, in Percent)



Source: PSA-CAR

Legend: Wholesale and retail trade; repair of motor vehicles and motorcycles (TRD); Financial and insurance activities (FIA); Real estate and ownership dwellings (REOD); Education (EDUC); Professional, and business services (PBS); Information and communication (IAC); Public administration and defense; compulsory social activities (PAD); Accommodation and food service activities (AFSA); Human health and social work activities (HHSW); Transportation and storage (TAS); Other services (OS)

**Increased investments in services.** The Securities and Exchange Commission (SEC) reported an increase in investments in 2021 with Partnerships and Stock Corporation’s investments increasing by 135.5 percent and 74 percent respectively in 2021. This growth, according to the SEC, is due to companies that decided to go into services and trading of goods.

**Expansion of services to e-commerce and other logistics and financial technologies.** MSMEs in the region started adopting and investing in e-commerce and other logistics and financial technologies resulting to increasing DTI-generated investments amounting to 294.46 Million pesos, an increase by 34.1 percent, in 2021.

**Tourism continues as a major driver of the services sector.** As the region’s tourism industry has gotten more dynamic, its support activities in the services sector, particularly food and accommodation, transportation, retail and recreational activities, have also gained strength despite global challenges such as inflation and detrimental effects of climate change. With all the provinces posting growing tourist numbers, most LGUs in the region have taken cognizance of the rising popularity of tourism and its benefits to attached local services, and have included tourism among their priority agenda.

As border restrictions were eased in the middle of 2021, tourist arrivals have invigorated business and commerce,



especially in Baguio City. In 2021, total tourist arrivals was at 402,762 or 24.79 percent, a substantial increase from the 335,028 tourist arrivals in 2020. With all the provinces showing an increasing number of tourists, most LGUs in the region have recognized of the growing popularity of tourism and its benefits attached local services; thus, making it as a priority development agenda.

As the tourism sector is reinvigorated, many business activities resumed and contributed to job creation in the 2<sup>nd</sup> quarter of 2022 with the labor force survey indicating a 95.6% employment rate, higher than the 2021 average of 94.2%. This was based from the estimated employed population of 755,000 in the region.

## Challenges

***Vulnerability of the services sector to external shocks and economic stability.*** The services sector continues to deal with the repercussions of the pandemic, global economic challenges such as inflation and disruptions in the supply chain, as well as the challenges brought about by rapid technological change. The COVID-19 pandemic resulted to a negative 10.1 growth rate for the region's services sector specifically for the sub-industries on: other services (-51.4%); accommodation and food service activities (-49.1%); transportation and storage (-27.1%); Real estate and ownership of dwellings (-15.9%); education (-10.9%); and wholesale and retail (-10.1%).

**The implementation of the Mandanas Ruling is expected to provide opportunities for improving service delivery through enhanced decentralization.** Tourism is becoming a significant driver of economic and social development as it stimulates economic growth by generating income, employment, investments and exports. Ecological and farm tourism are also thriving and adopting inclusivity, taking into account its social and environmental contributions to regional development. There is a growing trend towards digitalization as we shift from traditional trading and service delivery to e-commerce. The eased travel restrictions are helping the services sector to bounce back to its pre-pandemic state.

Inflation, fluctuations in peso-to-dollar exchange rate and disruptions in global supply chains continue to interrupt economic recovery. The sector needs to map out supply chains and identify possible exposure to supply and inflation risks. Investors and consumers prefer businesses with stability, value for money and the right environmental and social credentials.

***Limited digital infrastructure and wide digital divide in the region.*** While digital transformation, Artificial Intelligence (AI), Internet of things (IoT), virtual and augmented reality, cloud computing, blockchain and super-fast network protocols like 5G or fifth-generation systems have taken over traditional processes and systems, the

rural areas of the region still do not have stable connectivity to support adaptation towards services digitalization.

***Inadequate or lack of robust credit information system and data gathering mechanisms.*** In addition to existing challenges in competitiveness and digitalization, MSMEs also had to deal with higher costs of raw materials and lending interest rates. The condition therefore highlights the need to facilitate implementation of innovation laws to support local employment and improve data management for efficient services delivery, especially in the rural areas.

***Dispersed systems and processes.*** There is also a need to harmonize or develop convergence among Regional Line Agencies (RLAs) in consulting and addressing development needs of LGUs/beneficiaries in the services value chain. Enhancing existing systems and processes will enable better delivery of services and transactions of development partners, service providers and consumers.

***Services are mainly concentrated in Baguio City and the Province of Benguet.*** There is a need to prioritize the development of services in other provinces of the region with 49 percent of services output contributed by Baguio City and 22 percent by the Province of Benguet (Table 37).

***Out-migration in most capital towns.*** Despite the emerging tourism opportunities in the provinces, people move to urban areas for employment and livelihood. Uneven economic development pushes people to urban areas. Local communities and LGUs have to be capacitated in developing and managing economic enterprises and opportunities for livelihood and revenue generation. It is crucial to create confidence in the economic environment of rural areas and prioritize programs that promote investments in the countryside.

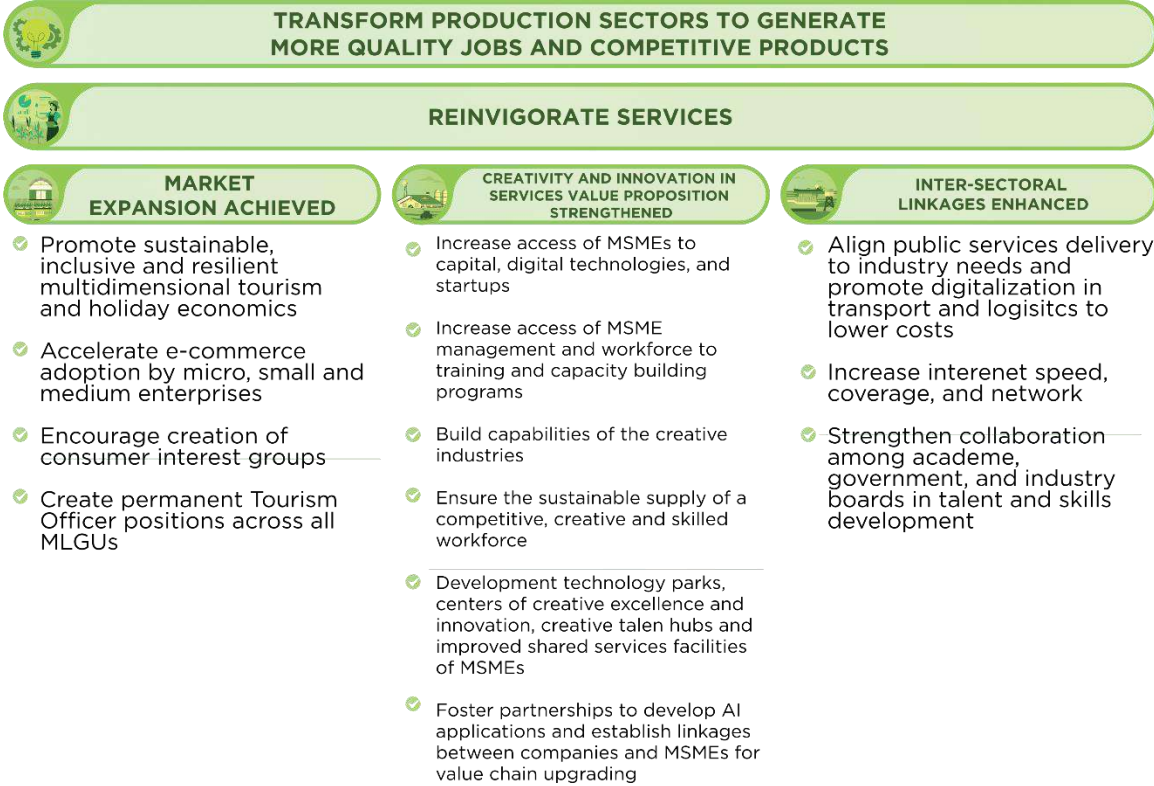
# Targets

Table 38 Plan targets to reinvigorate services, 2023-2028

Outcome Indicators	Baseline		Targets						Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028 (EOP)	
GVA growth rate in the services sector improved (%)	2021	5.9	6.0-6.5	6.5-7.0	6.5-7.0	7.0-7.5	7.5-8.0	8.0-10.0	PSA, NEDA
Growth of labor productivity in services (in %) improved	2020	8.6	increasing						PSA
Labor productivity in services (in Php at constant 2018 prices)	2020	711,831	increasing						PSA
Contribution of tourism to GRDP improved	2021	1,688,781,486	1,790,108,375	1,798,552,282	1,806,996,190	1,815,440,097	1,823,884,005	1,840,771,820	DOT
Visitor arrivals in the region increased	2021	418,092	443,178	445,268	447,358	449,449	451,539	455,720	DOT

# Strategy Framework

Figure 9.2 Strategy Framework to Reinvigorate Services



Reinvigorating the region’s services sector will require expanding the market to create more opportunities for stakeholders in the services sector. Creativity and innovation are also critical in strengthening service sector’s capabilities. An enhanced inter-sectoral linkage will generate inclusivity and cooperation among major stakeholders towards improved productivity through the creation of more quality jobs and competitive products in the region.

The following strategies will be implemented to achieve the sector and subsector outcomes and targets:

## Outcome 1: Market Expansion Achieved

**Promote sustainable, inclusive and resilient multidimensional tourism and holiday economics.** Expand product development by crafting new and innovative products, and services for tourists to experience and buy as

well as engage site owners to improve their respective tourism areas. This is among the strategic programs under the National Tourism Development Plan (NTDP).

Develop tourism circuits to highlight inter-relationships and common tourism opportunities among the cities and municipalities that are part of adjacent destinations or circuits. The DOT-CAR developed 11 circuit tours (See Map 12 Tourism Circuits in CAR.) to help promote destinations that loop between the different provinces and cities of the Cordillera.

These regional circuits should also be harmonized with adjacent region's tourism strategies and destinations for better complementation and enhanced tourist experience especially for international tourists.

Promote inclusive growth through expanding community participation across the full range of facilities and services planned in the tourism circuits and sites by partnering with local and national tour operators to assist these service providers in developing tour packages. This will also strengthen traditional tourism products that anchor on nature, culture and adventure.

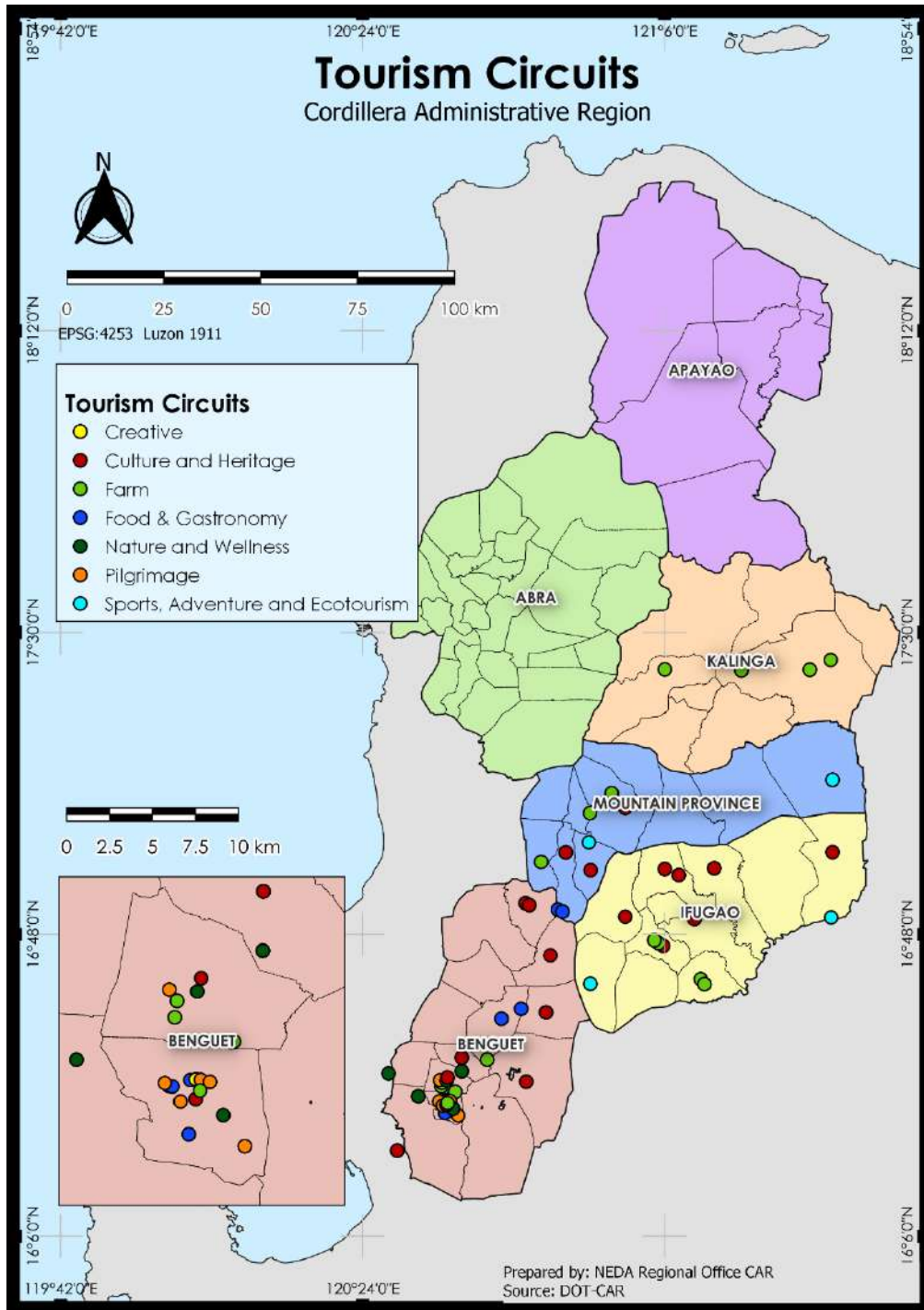
Improve provincial access roads to tourist destinations and interconnect tourism

circuits through the implementation of tourism infrastructure projects. The Tourism Road Infrastructure Program (TRIP) will promote sustainable tourism, restore and rehabilitate cultural and historical sites that will ensure local and foreign tourists enjoy destinations without compromising environmental sustainability. This will support the development and promotion of other tourism sites outside of Baguio and Benguet areas.

Strengthen opportunities in farm tourism or agri-tourism as a supplementary activity to farming and additional source of income. This emerging trend improves the overall quality of tourism experience and enables agri-entrepreneurs to maximize the potentials of their land, and employ more people while contributing to the country's food security.

Promote provincial festivals to showcase products and events in a province which will promote tourism opportunities and further attract visitors and investors. Highlighting regional and provincial festivals is a means to promote local tourism and a holistic approach to encourage more investments in the sector.

Map 12 Tourism Circuits in CAR



***Accelerate e-commerce adoption by MSMEs.*** Capacitate MSMEs to adopt to the government's digitalization initiatives. The SEC, CDA and DTI will continue to provide trainings to their stakeholders on digital reforms in their systems such as innovations on the enhancement of the Cooperative Business Matching Information System (CBMIS) of the CDA.

Promote e-commerce partnerships with the private sector in the use of digital platforms to increase sales. These includes DTI-developed digital systems to link sari-sari stores to manufacturers and automatically record enterprise data on sales and purchases.

Foster partnerships with other agencies including private entities for the continuous improvement of access of MSMEs to digitalization especially in the provinces. DTI's digitalization program will help MSMEs adopt digital financial services. The Central Business Portal is a platform that helps new business owners to register their companies in a one-stop online portal. LGUs

are also shifting to digitalization in the issuance of business permits. Local SMEs are expected to attract and serve more local and foreign trade partners, and clients with these innovations.

***Encourage creation of consumer interest groups.*** DTI encourages consumer organizations to enlist and be recognized to revitalize their involvement in the development of policies and programs that promote consumer rights and responsibilities and other consumer-related programs. These are implemented through a Memorandum of Agreement (MOA) with recognized consumer organizations (RCOs).

***Create permanent Tourism Officer positions for financially-capable LGUs, especially for first to third-income class MLGUs.*** Opening of tourism offices with regular positions in the LGUs for continuity of programs. This enables integration of tourism as an economic driver in the tourism value chain at the grassroots level.

## **Outcome 2: Creativity and Innovation Services Value Proposition Strengthened**

***Increase access of MSMEs to capital, digital technologies, and start-ups.*** Provide access to various loan programs for MSMEs to aid in finance and information services, training and marketing such as the activities of the Small Business Corp. (SBC), the financing arm of the DTI, that is responsible in implementing policies and programs to assist MSMEs. The Securities and Exchange

Commission through the Office for the Advancement of Strategic Investments in SMEs (OASIS) may be tapped by SMEs to secure their funding needs through the capital markets.

Improve and establish market linkages to promote and showcase products through online and digital platforms such as the online registration & regulation, and the

Cooperative Business Processes Facilitated through the Value Chain Program of the CDA, and the Co-opbiz as the cooperative global business marketplace.

Operationalize the Regional Inclusive Innovation Centers (RIIC) to build local innovation ecosystems from which will emerge technology innovation, research commercialization, new products and services, and new business models. This will further address industry and societal issues and will generate better employment opportunities, more entrepreneurial activities and sustainable economic prosperity in the region.

***Increase access of MSME management and workforce to training and capacity-building programs.*** Strengthen capacity-building programs through the Youth Entrepreneurship Program (YEP) of DTI which taps the young demographics of the country to promote entrepreneurship. The Kapatid Mentor Me of DTI, on the other hand, boosts the entrepreneurial capacity of MSMEs through coaching and mentoring with large corporations on the various aspects of business operations.

Promote technical vocational programs as an option for post-secondary education. TESDA is rebranding the programs with DTI's MSME programs. This will address the administration's priority sectors on agriculture, tourism, manufacturing, transportation and logistics, health, IT-BPM, creative industries, energy and construction.

***Build capabilities of the creative industries.***

Encourage innovation and increase productivity through Creative Festivals that will promote creative industries of communities to generate livelihood and alleviate poverty. These would include arts and crafts, music and film festivals that showcase local artists and indigenous themes or materials. Baguio City has already been declared as a UNESCO Creative City in Crafts and Folk Arts, making it a conducive environment for growth in the digital arts.

Set-up enabling mechanisms for the creative industries with the enactment of the Philippine Creative Industries Development Act (PCIDA). This will provide government support to boost the creative industry through infrastructure, research and development and innovation, and digitalization assistance and incentives.

Strengthen the protection of the creative works of artists and creatives through the Intellectual Property Office. This will also promote the region's culture and talent to encourage investments in the creatives industry.

Implement the Cordillera Weaving Industry Development Plan 2022-2028 to pave the way towards a sustainable, resilient, globally competitive and advanced weaving industry as one of the creative industries of the region.

Encourage support for the digital creative industry such as content creation, as a continuously growing and income-generating sub-sector, including service exporting. Content creation boomed since



the pandemic with initiatives to create a sustainable digital economy by promoting, sharing and protecting original content.

***Ensure the sustainable supply of a competitive, creative and skilled workforce.***

Ensure productivity, quality and global competitiveness through assessment and certification of competencies of skilled/middle-level workers through the Philippine TVET competency assessment and certification system (PTCACCS) of the TESDA. The system provides information on the pool of certified workers for required skills and occupations nationwide.

Create courses that are aligned with the Philippine Skills Framework (PSF) by training providers. The TESDA will ensure scalability and quality of programs by introducing proper assessment and adherence to training regulations. TESDA shall ensure proper training of course developers and faculty of academic institutions.

***Develop technology parks, centers of creative excellence and innovation, creative talent hubs, and improve shared services facilities of MSMEs.***

Promote and increase the use of Shared Services Facilities (SSF) through the Fab Labs as a platform for co-creation and academe – industry – government collaboration to enable MSMEs to develop new products, add value to existing ones and generate new streams of income.

Develop and increase Knowledge, Innovation, Science and Technology (KIST)

Parks in State Colleges and Universities (SUCs) to leverage on in-demand courses required by various industries. This will ensure that skills and jobs needed by industries are matched to the courses offered by the academe. PEZA will initiate MOUs with the academe to enable partnerships with foreign universities in bringing their degree programs, skills training, and technology to their local KIST partners, thereby attracting foreign students to make the region an education hub of the country.

***Foster partnerships to develop AI applications and establish linkages between companies and MSMEs for value chain upgrading.***

Assist MSMEs in using different AI tools and use data-driven science to improve their efficiency and productivity. The creation of the National Center for AI Research (NCAIR) will be the focal hub for R&D collaboration between universities, industries, multinational companies, RDIs and startups.

## Outcome 3: Inter-sectoral linkages enhanced

### ***Align public services delivery to industry needs and promote digitalization in transport and logistics to lower costs.***

Localize the E-Commerce Roadmaps in the provinces and municipalities to highlight its role in economic development and present the trends in e-commerce development that will open opportunities for MSMEs and communities. Further, DTI is looking into reforms and improvements involving container deposits for trucking companies, farm-to-market roads and other issues in the logistics sector.

Implement the Anti-Red Tape Law to streamline the operations of government and improve digital and IT communication for ease of doing business. One-stop shop services of government agencies also lessens time and costs for faster transactions. This also complements the Ease of Doing Business (EODB) Act which also promotes the automation of business registration processes.

### ***Increase internet speed, coverage and network.***

Build and operate broadband facilities to offer internet services in underserved and unserved areas. Use direct access to all satellite systems, whether fixed, mobile, international or domestic, to connect local businesses and tourism areas with developing markets. DTI in partnership with the DICT to strengthen infrastructure and logistical systems to enable the growth of the digital creative industry.

### ***Sustain operation and modernize the Baguio Airport to reinvigorating services particularly tourism and trade.***

Aside from its critical role as a lifeline facility in times of disaster, the modernization and full operationalization of the Baguio Airport can potentially increase the region's access to international tourism and trade as it links to other airports such as the Cebu and Clark Airport International Airports.

### ***Strengthen collaboration among academe, government and industry boards in talent and skills development.***

Revise existing curricula or design new courses based on the needs of the industries. The implementation of internship programs for students and trainers will provide better linkages of industries' labor needs with the course and skills trainings offered by the academe. TESDA opened the Cordillera State Institute of Technical Education (CSITE), which endeavors to bring about greater industry-academe collaboration and critical partnerships with local and international institutions to forge mutual skills benchmarking standards, program exchange, and internship training to equip graduates with competencies and preferred job access.

Develop and increase the number of colleges and universities with Center of Excellence (COE) and Center of Development (COD) institutions in growth centers as the IT-BPM sector requires more knowledge-intensive workers than other industries.

Develop a centralized governance mechanism to bring efforts (e.g. Skill surveys, PSF development) from all the agencies which are leading talent reform initiatives.

Strengthen the implementation of the National Strategy for Financial Inclusion (NSFI) 2022-2028 that will promote inclusive

digital finance, strengthen financial education and consumer protection, enhance access to risk protection and social safety nets and enhance MSME financing ecosystem in the region. This will require support from the government agencies and Local Government Units to align this strategy with their respective functions and mandates

## Legislative Agenda

Table 39 Legislative Agenda to reinvigorate services

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
Update RA 10372 (An Act Amending Certain provisions of RA 8293, otherwise known as the "Intellectual Property Code of the Philippines, and for Other Purposes")	This aims to commercialize technologies and support the development of creative industries and its attached services which are emerging opportunities in the region.	DTI-IPO
Internet Transactions Act	This aims to define the scope and coverage of internet transactions, apart from the sale or exchange of digital products, and lay down the code of conduct and qualifications for businesses that wish to engage in e-commerce in the region.	DTI, DICT
A Framework Act to Define the Elements of the National Quality Infrastructure (NQI) and the Competent Institutions that Perform Functions Thereof	This aims to ensure that the national standards for products and services are consistent with international standards. This will protect the application of indigenous knowledge and promote uniqueness of regional products and services.	DTI
An Act Institutionalizing Industry Cluster-Based programs and projects through Inter-Local Cooperation and People's Participation (HB 06135)	This is based on the One Town, One Product program of the government, defining the role of LGUs in advancing industry clustering strategy. This will enhance integration of services within the region.	DTI
Open Access in Data Transmission act or House Bill 8910	This bill aims to allow more players to build broadband networks by simplifying the market entry process and promoting infrastructure sharing. This will augment the need for connectivity especially in remote areas of the region.	DICT
Amend RA 9593 (Tourism Act of 2009)	RA 9593 promotes tourism as an essential driver for sustainable local development. This strengthens	DOT, TIEZA

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
	<p>potentials of tourism in communities with the integration of tourism development programs in their local plans. The amendment aims to make the creation of tourism officers in the LGUs mandatory for financially-capable LGUS, as provided in the existing law.</p>	
<p><b>Update RA 7925 (An Act to Promote and Govern the Development of Philippines Telecommunications and the Delivery of Public Telecommunications Services)</b></p>	<p>RA 7925 promotes local exchange or landline telephones and allows for cross-subsidy to expand landline installation across the country. The updating aims to cover the emergence of new digital technologies in the region.</p>	<p>NTC</p>
<p><b>Support on the Cordillera Autonomy bill</b></p>	<p>The bill aims to promote regional development in the Cordilleras through equitable share of benefits from its own resources. It will increase economic benefits while upholding the unique culture and heritage of its people.</p>	<p>RDC-CAR</p>

# 10

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**Advance Research &  
Development,  
Technology, and  
Innovation**





## Chapter 10

# 10 Advance Research and Development, Technology and Innovation

By 2028, the region will be an autonomous, resilient, and innovative Cordillera where most Cordillerans have a technopreneurship mindset. Regional institutions that promote high digital literacy among the population shall be present along with an integrated government system. There will be less barriers to entry in markets as healthy market competition levels the playing field for businesses and spurs innovation and development. Infrastructure resilient to natural disasters shall be present, created through research, development, technology and innovation.

## Assessment and Challenges

Innovation across sectors accelerated in response to COVID-19 and its effects. These innovations were mostly evident in health, education and industry. Research and development provide the logic of innovations in transforming different sectors and their players – medical institutions and healthcare providers, academic institutions and teachers, and micro, small and medium enterprises, among others.

Research and development (R&D), technology and innovation then play a significant role as the country's growth driver not only in the medium term but also in the long run. Though several policies that were passed in the past years now provide the initial foundation for innovation to spur growth, this sector will continue to focus on strengthening R&D and knowledge creation, improving innovation infrastructure in the region, and scaling-up technology adoption, utilization and commercialization while ensuring that R&D outputs, technology and innovations are responsive to the needs of its users. This aims at creating an enabling environment that will foster the region's innovation ecosystem enticing entry of new enterprises or industries, create more quality jobs, accelerate poverty reduction and improve the overall quality of life.

### Assessment of Performance

***Creation of R&D and innovation bodies in the region.*** The creation of regional R&D innovation bodies was initiated to create avenues for collaboration among the consortia, academe, private sector and government. The Cordillera Regional Development Council (RDC) established the Regional Research, Development and

Innovation Committee (RRDIC) in 2018 as one of its support committees. This emphasized the important contribution of innovation in the region's growth and competitiveness and harmonized major R&D policies, plans and programs in the region. In 2022, the RRDIC endorsed the Cordillera Regional Research, Development and Innovation Agenda (CRRDIA) 2023-2028 which provides the focus and direction for research and development efforts. The document addresses specific outcomes that are targeted in the region's development plan to guide the RDC and other policymakers, funding and donor agencies, institutional leaders and researchers from public and private sectors in choosing researches they would support.

The Regional Inclusive Innovation Center (RIIC), an initiative of the DTI-CAR and DOST-CAR under the RRDIC, together with its implementing arm, the Technological Consortium for Awareness, Readiness and Advancement of Knowledge in Innovation (TARAKI) - CAR, were also established as innovation drivers that would connect and integrate the innovation and entrepreneurial ecosystem in the region. To improve its market branding, the RIIC and TARAKI-CAR launched the website for the RIIC-Accelerators towards Transformative Regional Advancement, Competitiveness, and Transcendence (ATTRACT) Cordillera which will serve as an online platform to provide access to innovation initiatives in the region and bring together researchers, innovators and MSMEs. The RIIC-ATTRACT spearheads collaborative programs to generate product, access, or

service innovations that are deemed important to inclusive growth and sustainable development.

***Regional R&D expenditure remains at 0.14 percent of the GDP in 2018.*** The 2021 R&D expenditure to GDP ratio at the national level was at 0.4% which is an increase from the 0.32% in 2018. Though lower than the 1% national target, this is an improvement from 2015 which showed R&D expenditure to GDP ratio at 0.16%. In the Cordillera, the survey for 2021 is still ongoing but as of 2018 R&D expenditure to GDP ratio was at 0.14%. For developing countries, the UNESCO recommends R&D expenditure to be at least 1 percent of the Gross Domestic Product (GDP).

***Innovation included as the 5<sup>th</sup> pillar in the Cities and Municipalities Competitiveness Index (CMCI).*** The introduction of the innovation pillar emphasizes the importance of strengthening innovation policies and programs at the level of the local government units and the use of new technologies in addressing challenges such as business registrations, permits and the like. This would in turn lessen barriers to entry in different industries and promote greater competition among MSMEs in the region.



**Overall S&T-related programs and projects maintained and/or improved its performance.** The DOST Small Enterprises Technology Upgrading Program (DOST-SETUP) and Local Grants-in-Aid (LGIA) continued to generate projects as targeted annually and as of end of plan, respectively. The continued implementation of science and technology (S&T) projects have resulted in the increase in assistance to MSMEs in the region.

**S&T scholars and STEM enrollees increased.** The DOST-CAR exceeded its end-of-plan target for both the number of S&T scholars and STEM enrollees. The number of S&T scholars and STEM enrollees also show an increasing trend throughout the years with CY 2021 having the highest number of ongoing scholars and highest number of enrollees in higher education institutions. This is despite the decrease in the number of S&T graduates in 2020 and 2021 which was caused by the shift in the educational system to the K-12 Basic Education Program that resulted in the cancellation of S&T undergraduate examinations in CY 2016 and 2017.

**Assistance to MSMEs through S&T capacity building activities continued.** The number of S&T capability building activities at 526 is

higher than the end-of-plan target of 407. A total of 13,700 beneficiaries were assisted from these activities which is significantly higher than the 7,759 end-of-plan targeted beneficiaries.

**Innovation hubs established and maintained increased.** Though less than the end-of-plan targets of 6 new and 9 existing technology business incubators (TBIs), the number of innovation hubs increased from 4 established in 2016 to 3 newly established and 6 maintained by the end of 2021. A Memorandum of Agreement (MOA) was signed between Department of Information and Communication Technology (DICT) and the Local Government Unit (LGU) of Baguio City to boost its Smart City Project which will construct the first Smart City System in the country.

**Improved Intellectual Property (IP) applications/registrations.** DTI-CAR was recognized as the region with the highest filings under the Juana Make a Mark Program of the Intellectual Property Office of the Philippines from 2019 to 2021. "Juana Make a Mark" is a trademark registration incentive program that allows the eligible MSMEs to have their trademarks registered at a reduced cost.

## Challenges

**Digital literacy needs to be improved.** There is a need to provide trainings for teachers and other professionals on technological skills for online learning and for digital literacy. There

also remains a digital gender gap when it comes to media and digital literacy education as women are still underrepresented in the ICT sector. With the growing use of social

media, digital literacy among women and girls is imperative to prevent online harassment and to ensure safety and security.

***Low adoption of emerging technologies.***

Acceptance and adoption of emerging technologies as well as application of Information Technology (IT) solutions still need to be promoted especially among industry leaders and businesses in the Cordillera. From 2015-2021, extension services provided by the Abra State Institute of Science and Technology (ASIST) resulted in the most number of technologies adopted by end users by source of technology-institution and outside institution at 111, followed by Benguet State University (BSU) with 93 and Kalinga State University with 65. Apayao State College (ASC), Ifugao State University (IfSU) and Mountain Province State Polytechnic College (MPSPC) had the lowest number of end-user-adopted technologies at 44, 21 and 12, respectively.

***Limited digital infrastructures result in limited connectivity especially in remote areas.***

As of 2022, DICT's Free WI-F for All-Free Internet Access in Public Places Program has a total of 46 active sites in CAR. Most of these are located in Baguio City with 17 active sites, Abra with 11, Kalinga with 8, Benguet and Ifugao with 5 each. There are no active sites in Apayao or Mountain Province. The Regional Government Network (GovNet), which aims to interconnect government agencies in the country, has 72 active GovNet sites in Baguio City and La Trinidad areas only. Internet penetration rate is highest in Baguio City, Benguet and Mountain

Province. This is made possible through the presence of carrier/service providers (PLDT, Smart, Globe and DITO) in the areas.

The mountainous terrain remains a challenge to the establishment of connectivity infrastructure.

***Intellectual property (IP) management remains weak.***

In the IT sector, many potential patents by Cordillerans are bought off or sold to bigger (Manila-based) companies. There are also many who wish to file patents but lack the necessary technical skills to complete filing until registration. This is also worsened by the lack of IP practitioners/ IP drafters and IP agents/IP law firms in CAR to offer IP services to Inventors.

Additionally, in CAR, there is only one IP office to cover all six provinces and though IPOPHIL initiated the establishment of help desks in other regions in 2022, CAR has yet to have its own.

With the drop in patent filings brought about by the pandemic, there was a need to implement a fully digitalized process of filing for patents, copyrights, etc. but the digital process is not maximized as clients have limited internet connection and digital literacy which explains the low turnout of patent applicants filing online.

***Limited knowledge of LGUs on DOST and other NGA programs on R&D and STI.***

There are LGUs in the region that are unaware of DOST and other NGA programs that provide funding and technical support to MSMEs

which results to low turn-out of beneficiaries. As businesses are mostly found in the Baguio City and Benguet area, business/industry activities in remote areas remain low affecting the turnout of beneficiaries for DOST-led programs and projects.

**Limited international and domestic collaboration.** Opportunities to collaborate among international and domestic institutions have weakened also due to the pandemic. This resulted in lower knowledge transfer especially for State Universities and Colleges (SUCs) and other Higher Education Institutions (HEIs).

## Targets

Table 40 Plan targets to advance research and development, technology and innovation

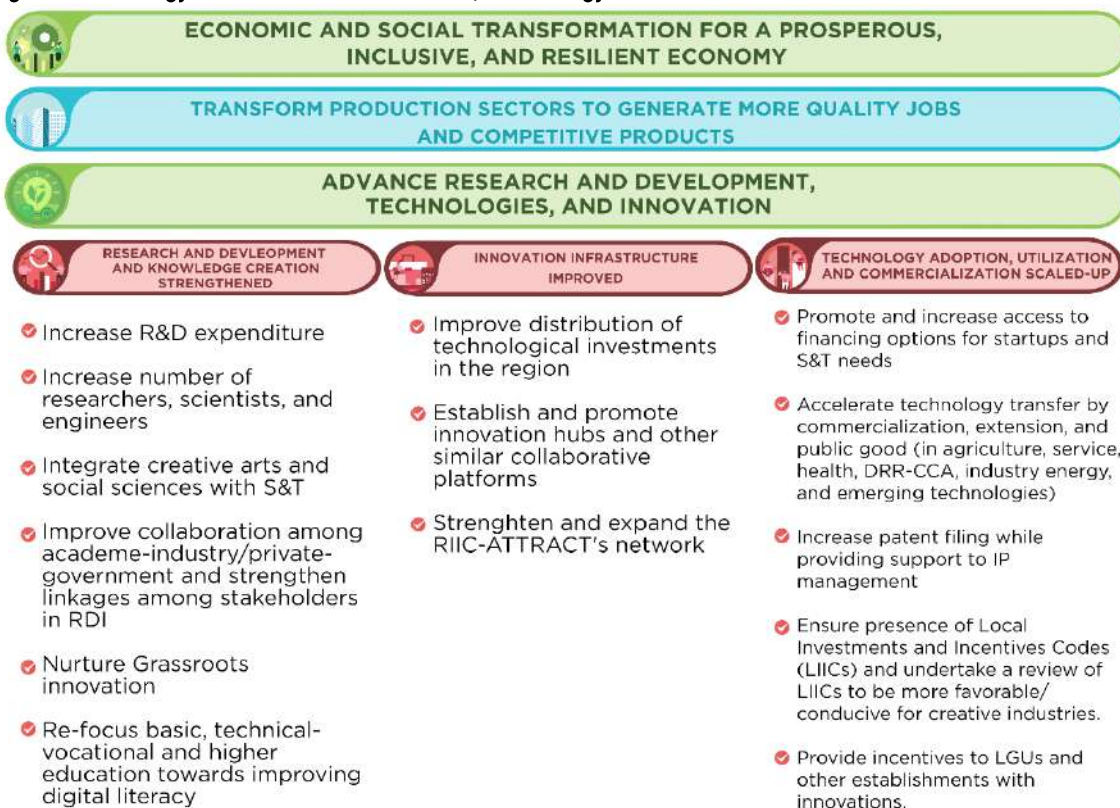
Outcome Indicators	Baseline		Targets							Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	EOP	
<b>Sub-chapter Outcome 1: Research &amp; Development and Knowledge Creation strengthened</b>										
R&D expenditures as % of GDP	2018	0.14% (regional)	increasing							DOST
Gross domestic expenditure on R&D (GERD) in CAR	2018	₱434M	Increase by ₱30M annually							DOST
<b>Subchapter Outcome 2: Innovation infrastructure improved</b>										
Number of ICT Councils established	2022	1	1		1	1	1	1	1	DICT
Establishment/maintenance of innovation hubs in the region	2022	17 (DOST)	increasing							DICT, DOST, DTI (FabLabs), CHED
<b>Subchapter Outcome 3: Technology adoption, utilization and commercialization scaled-up</b>										
Number of filed patents, copyrights, utility model, industrial design, trademarks*	2021	443	increasing							IPOPIL

\*No regional targets.

# Strategy Framework

There have been gains in previous efforts towards the improvement of this sector. But R&D, technology and innovation continue to play a vital role in rebuilding and transforming the production sector and in making sure that development is inclusive. Outcomes and strategies included in this following strategy framework are aimed at addressing the challenges faced by R&D, technology and innovation in the region. This means focusing efforts towards three outcomes: (1) R&D and knowledge creation strengthened; (2) innovation infrastructure improved; and (3) technology adoption, utilization, and commercialization scaled-up.

Figure 22 Strategy Framework advance R&D, technology and innovation



## Outcome 1: Research & Development and Knowledge Creation strengthened

**Increase R&D expenditure.** Initiatives to increase public and private R&D expenditures must be continued in the region. The inclusion of innovation as a pillar in the CMCI to further stimulate competition should be supported and complied by the

region's LGUs as these will encourage R&D spending. To further encourage public and private R&D spending, R&D Institutions must ensure that R&D outputs address user needs. As R&D outputs become more responsive to the needs of the different

sectors, more users will be interested in engaging in R&D projects with HEIs and other government institutions, encouraging knowledge creation and an innovation culture that would in turn lead to greater R&D spending. Strengthening basic R&D is also needed to encourage fields such as creative arts and social sciences to produce physical products or technologies and to initiate researches covering areas outside of science, engineering and the like. Increasing awareness through information, education and communication (IEC) activities regarding the availability of R&D funding and calling for research proposals shall also be a strategy to ensure that researchers know where and how to access funding for possible R&D projects. Promoting R&D that is aligned with the region's CRRDIA 2023-2028 shall also address the needed R&D and innovation gaps in the region. Encouraging R&D niches or specializations in the HEIs will be another approach towards this end. (See Chapter 4.2) Encourage knowledge transfer towards knowledge creation through collaborations among HEIs and other international and domestic institutions through online or face-to-face collaborations especially as travel restrictions are now being eased. This will be achieved through programs and projects that include IEC components and provide opportunities for R&D funding programs as well as R&D capacitation such as the Science for Change Program (S4CP) which focuses on the capacitation of R&D institutions and industrial competitiveness and through the regional consortia which include CIEERDEC, CorCAARD; CRHRDC.

Additionally, the RRDIC needs to maintain the Systematic Exploration of Available Research and Development Institutions in the Cordillera Highlands (SEARCH). The SEARCH is an information management system that serves as the official repository of researches, researchers, institutions, intellectual properties and patents and R&D facilities undertaken or found in the region. The system is shared among research institutions and encouraging RDIs to populate the said system, ensuring that this is accessible to stakeholders and that information is up-to-date will provide the region with data that can facilitate research topic selection and approval.

***Increase number of researchers, scientists, and engineers and retain science and technology (S&T) professionals.*** This strategy aims to expand the region's R&D network and pool of S&T professionals which would lead to greater knowledge creation and technology development in the region. Programs and projects will include the S&T Fellows Program; Balik Scientist Program; and S&T Scholarship, among others. These programs encourage

***Integrate creative arts and social sciences with S&T.*** Creative arts and social sciences are important in bridging the gap between S&T and innovation as these incorporate not only critical thinking but creative thinking. This strategy focuses on engaging both S&T human resources and those from the creative arts and social sciences in collaborative activities. With their involvement, there will be greater focus on beneficiaries or users of

products, processes and policies and allow more discourses that empower and fuel discovery and innovation. Courses that put together creative arts, social sciences with S&T should be part of the curricular reform in education. Among the programs that implement this strategy are DOST's Technology Business Incubation (TBI) Program for Technopreneurship; CHED's programs that will initiate related curricular reforms in HEIs; and, DICT's Empowering, Promoting, and Invigorating the Digital Creative Industry (EPIC).

***Improve collaboration among academe-industry/private - government to strengthen linkages among stakeholders in RDI.*** Public-private collaborations will be supported and recognized especially on R&D, technology and innovation. Existing RDI bodies will be encouraged to widen their reach through online platforms to further provide avenues for information sharing, cooperation and trust which will foster the innovation ecosystem in the region. This strategy would involve implementing projects under the S4CP such as the DOST's Collaborative R&D to leverage Philippine Economy (CRADLE); DICT's Technology for Economic Development (Tech4ED) or the Digital Transformation Center and website; and the ATTRACT of the RIIC-CAR which aims to co-create solutions for challenges faced by MSMEs in the region's innovation ecosystem.

***Nurture grassroots innovation.*** The region's culture and practices play a great part not only in the management of its natural resources but also in sustaining the livelihood

of local communities. This shows the potential of local communities to come together and share ideas in transforming their indigenous knowledge systems and practices into innovations and initiatives that can address local issues and concerns. To nurture this, programs such as the Grassroots Innovation for Inclusive Development (GRIND) by DOST can be started in the region to promote community-led solutions that will be responsive to the region's priorities, needs and values and that can lead to product development, prototyping and patenting. The promotion and strengthening of indigenous food systems is also among the strategies that can foster grassroots innovation. (See Chapter 7) With the region's rich culture and traditions, support to indigenous arts and crafts and local artists will also be a strategy to promote and spur grassroots innovation. (See Chapter 17)

***Re-focus basic, technical-vocational, and higher education towards improving digital literacy.*** More courses, trainings and capability building activities that improve digital literacy and upskill the workforce to be armed with Industry 4.0 skills should be made available to increase employability of individuals especially as digital transformation in both public and private entities are now being adopted. Trainings and capability building activities should also be between and among the government, academe and private institutions to encourage knowledge sharing and co-creation. Improving digital literacy should go hand in hand with the establishment of digital infrastructures in the region ensuring that the

population is armed with the knowledge and skills needed to adopt and use technological advancements provided by the government and private sector. Implementing PPAs that will improve digital literacy and competency in sectors of education, industry, and agriculture to take advantage of not only the current technological advancements but also emerging technologies shall be a priority. These will include among others, the DICT's ICT Literacy and competency development program of the government targeted towards achieving a digital workforce and providing digital education.

Among the focus of digital literacy education should be those provided to women and girls as digital devices and technologies become an essential part of their everyday lives. Education and training should be tailored to ensure that everyone is provided information and knowledge that will keep them safe and secure from abuse or harassment online.

Additionally, with the introduction of e-Commerce, another focus for government programs shall be capacitating the public on the use of digital devices and applications, online financial transactions, and data loss prevention. (See Chapter 12)

## Outcome 2: Innovation infrastructure improved

***Improve distribution of technological investments in the region.*** Most technological investments and digital infrastructure needed for R&D, technology and innovation to flourish are concentrated in the areas of Baguio and Benguet. To create a more resilient and robust economy in the different provinces and cities in the region that will promote and encourage digital transformation, several programs and projects must be initiated or should continue to be implemented including the Smart Cities Program, Digital Cities and Provinces Program and the PEZA information and technology centers/parks. (See Chapter 13) Programs to improve connectivity in the areas of Apayao and Mountain Province shall be implemented through the DICT's Free WI-F for All-Free Internet Access in Public Places Program. The Digital Cities Program

shall also be continued targeting the creation of an ICT Council in Tabuk City as the start of efforts towards the development of the Information Technology-Business Process Management (IT-BPM) sector in Kalinga. Considering the mountainous terrain of the region, wireless digital infrastructure and partnerships with private telecommunication companies shall be pursued to establish connectivity infrastructure in the region specifically in the areas of Abra, Apayao, Kalinga and Ifugao.

Investments on the needed infrastructure for innovation in the region, whether human, financial and technological capital, must be provided to create an enabling environment for stakeholders to be encouraged to innovate and initiate R&D. Increasing investments to improve digital infrastructure in the sectors of

agriculture, industry and services shall widen market reach and provide farmers, MSMEs and other enterprises with the opportunity to enhance their processes through digital solutions and other emerging technologies such as artificial intelligence, blockchain, Internet of Things and the like. (See Chapter 7, 8, 9 and 11)

***Establish and promote innovation hubs and other similar collaborative platforms.***

Continuing to establish and maintain innovation hubs and collaborative platforms that are aimed at promoting innovation and technopreneurship will help not only in providing assistance to MSMEs but also in promoting an entrepreneurial mindset among the youth as most of these are found in higher education institutions. TBIs shall be established in other SUCs and HEIs including ASIST in Abra, ASC in Apayao, KSU in Kalinga, MPSPC in Mountain Province. Expanding these programs that establish innovation hubs and collaborative platforms outwards from HEIs to LGUs and other possible partner stakeholders will also be among the strategies needed to improve the region's innovation infrastructure. Among the targets will be the cities of Baguio and Tabuk. Promote the establishment of knowledge, innovation, science and technology (KIST) parks in SUCs. (See Chapter 9) Harmonize services provided by the technology business incubators (TBIs) and other innovation hubs in the region to ensure that services offered respond to the needs of MSMEs and other stakeholders. This can be achieved through coordinated efforts in implementing programs and projects of

different government agencies such as DICT's establishment of digital cities and innovation hubs; DOST's establishment and maintenance of STI facilities and TBIs; and, DTI's establishment and promotion of Shared Service Facilities through Fabrication Laboratories (FabLabs). Establishing

***Strengthen and expand the RIIC-ATTRACT's network.***

With the launching of the region's inclusive innovation center ATTRACT as the digital infrastructure or platform for MSMEs, government and academe to converge, all established R&D and innovation-related virtual platforms in the region shall be linked and strengthened through the RIIC-ATTRACT for easier access to market information, available technology and facilities that can be used by MSMEs and other stakeholders within and among regions. By expanding and linking the RIIC-ATTRACT's with other region's RIICs, a network of innovation enablers can be established for knowledge sharing and co-creation especially in possibly addressing disruptions in the everyday workings of enterprises and the market. The RIIC-ATTRACT shall also contribute in fostering the startup ecosystem in the region by bringing together startups and startup enablers and synergizing efforts to innovate. (See Chapter 8) Mapping out current innovation hubs and other facilities or services needed by startups and MSMEs shall be done to provide valuable information in establishing the needed innovation facilities that are still lacking in the different provinces of the region.



## Outcome 3: Technology Adoption, Utilization, and Commercialization Scaled-up

### ***Promote and increase access to financing options for startups and S&T needs.***

Increasing awareness on available financing options for startups and S&T needs is among the priority of this strategy. Through information, education and communication activities, possible beneficiaries are made aware of this financing options and how they can access them. PPAs to be implemented toward the achievement of this strategy are the Startup funding from SB Corporation, the Technology Business Incubator (TBI) Program, KIST park, programs and projects to be implemented by the Regional Inclusive Innovation Center.

Promoting and accessing the Innovation Fund provided for in RA 11293 or the Philippine Innovation Act is among the fund sources that are new which R&D proponents and innovators such as LGUs, HEIs or SUCs can tap for financing. This is in accordance with the implementing guidelines of the Innovation Fund currently being drafted by the National Innovation Council (NIC) Secretariat.

***Accelerate technology transfer by commercialization, extension, and public good (in agriculture, service, health, DRR-CCA, industry, energy, and emerging technologies).*** Facilitation of adoption of improved technology, its sustained use and commercialization is needed and shall be implemented. In the agriculture sector, this means facilitating the adoption and

development of appropriate technologies fit for upland conditions. (See Chapter 7) Developing and adopting innovative climate-resilient technologies shall also be among the priorities of the government to promote and ensure resilient infrastructure in the region preventing disruptions in supply chain and logistics (See Chapter 8, 13 and 16). Encouraging compliance to international standards that adopt innovation management systems among enterprises shall be done as it is beneficial in promoting trade and investments. (See Chapter 11) Access to and adoption of R&D outputs through the promotion of existing and emerging technologies shall also be among the priorities in the region and shall be promoted through the DICT's Technology Innovation for Commercialization (TECHNICOM); and DOST's SciTech Super Highway.

### ***Increase patent filing while providing support to Intellectual Property (IP) management.***

IECs will continue to be conducted towards greater awareness on IP and its contribution to innovation to increase patent filing. Assistance in the management of IP shall be provided for inventors and innovators in the region to encourage them to file and register patents, copyrights, utility models, industrial design and trademarks. (See Chapter 11) This will be implemented through the DOST-DTI-IPOPHL's SciTech SuperHighway Program, IPOPHIL's Juana Patent & Juana Design Protection Incentive

Program (JPIP), Youth Intellectual Property Incentive Program (YIPI).

With only one IP Satellite Office to serve the entire region, the establishment of Information and Technology Support Offices (ITSO) in higher education and research development institutions is essential. The establishment of IP Help Desks shall be initiated in HEIs to help augment the needed human resource for IP management. IP Help Desks shall be established within DTI or Negosyo Center Offices in the region and in DOST or LGU offices.

***Ensure presence of Local Investments and Incentives Codes (LIICs) and undertake a review of LIICs to be more favorable/conducive for creative industries.***

Ensure that all LGUs have LIICs to stimulate entry of new enterprises at the local level and strengthen the local innovation ecosystem through increased competition and improved incentives. Incentives should include creative industries as possible investment priority areas to encourage the growth of the industry.

***Provide incentives to LGUs and other establishments with innovations.*** To further encourage local government units, incentives must be provided to LGUs and other institutions that adopt and use new or emerging technologies as well as other innovations that are R&D outputs.

# Legislative Agenda

The following policy agenda are deemed necessary to support the strategies provided in this Chapter.

**Table 41 Legislative Agenda to Advance Research and Development, Technology and Innovation**

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>Support the establishment of the Science for Change Program</b>	The bill seeks to institutionalize the Science for Change (S4C) Program provides for greater distribution of innovation investments in the regions including R&D funding, ICT Development and the strengthening of R&D and S&T services through infrastructure and human resource development which are among the needs of CAR.	RDC, Congress
<b>Support to the Cordillera Autonomy bill</b>	The bill seeks to establish the Cordillera Autonomous Region which will empower Cordillerans to pursue sustainable and inclusive growth. It shall be the means for the region to craft policies responsive to the needs of the region's innovation ecosystem including the equitable distribution of investments specifically needed for the improvement of innovation infrastructure and the strengthening of grassroots innovation.	RDC, Congress



# 11

**Promote Trade and Investments**





# 11 Promote Trade and Investments

Transformation of the CAR's productive sector will enable it to benefit from opportunities presented in the Global Value Chain (GVC). Transformation entails elevating product quality, business processes and business climate to enhance competitiveness in the export industry and be at par with global standards, while dealing with our physical constraints as a landlocked region. Private sector engagement is critical in this endeavor, particularly in supporting the MSMEs and easing their access to ready markets both local and abroad.

## Assessment and Challenges

### Assessment of Performance

Table 42 Metallic Mineral Production and Production Value, CAR, 2017-2021

Mineral	2017	2018	2019	2020	2021
Gold					
<i>Production (kg)</i>	3,658	3,118	2,525	2,541	2,736
<i>Value (Php)</i>	7,429,082,125.00	6,598,414,291.00	5,753,783,597.00	7,169,403,601.00	7,716,345,036.00
Silver					
<i>Production (kg)</i>	4,502	5,057	4,696	4,032	4,272
<i>Value (Php)</i>	239,393,556.00	124,233,202.00	112,089,554.00	133,853,990.00	167,457,635.00
Copper Concentrate					
<i>Production (DMT)</i>	65,300	55,424	65,589	47,996	58,710
<i>Value (Php)</i>	4,682,113,790.00	3,589,484,480.00	3,840,838,818.00	2,936,920,632.00	5,555,276,745.00
Copper Metal (MT)					
<i>Production</i>	13,608	9,376	13,781	11,372	9,914
<i>Value</i>					

Source: Mines and Geosciences Bureau (MGB)-CAR

**CAR export sales continue to weaken.** CAR exports metallic minerals and manufactured goods and IT services in its special economic zones, all of which are in Baguio City. However, with the volume of production declining and continuing to suffer from the impact of the COVID-19 pandemic, the region is unable to contribute substantially to total export sales.

The volume of production of metallic minerals increased between 2020 and 2021, but remains to be below production levels in 2017, as gold and copper metal production in 2021 is lower by 25 and 27 percent, respectively, than in 2017. Production was unable to leverage the appreciating value of metallic minerals in the market. The value of gold rose from Php 2.031 million per kilogram in 2017 to Php 2.82 million in 2021.

Likewise, the value of copper concentrate increased from Php 0.0717 million to Php 0.0946. Only the value of silver depreciated

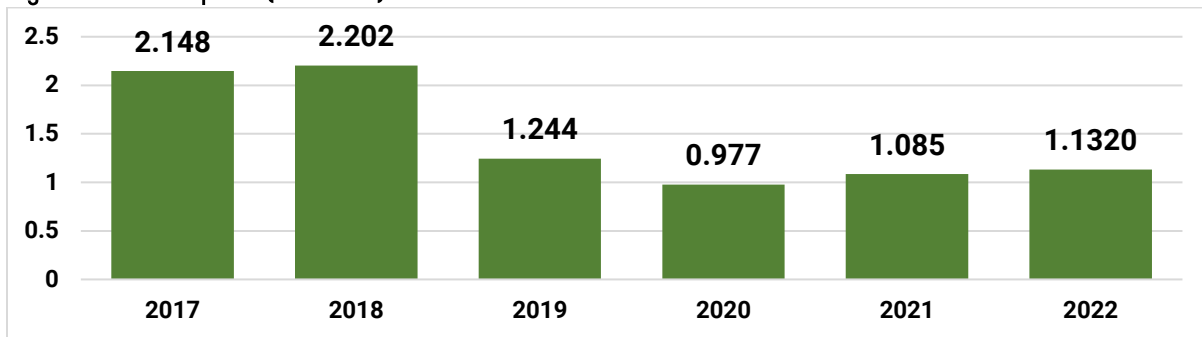
from Php 0.0532 in 2017 to Php 0.0392 in 2021.

**Table 43 Metallic Mineral Exports, CAR, 2017-2021 (in million US \$)**

Mineral	2017	2018	2019	2020	2021
Gold (kg)	7,110.54	11.98	102.74	125.85	133.28
Silver (kg)	169.17	880.61	2.71	0.97	3.34
Copper Concentrate (DMT)	487.95	79.57	231.66	60.29	102.61

Source: MGB-CAR

**Figure 23 PEZA Exports (2017-2021)**



Source: PEZA Baguio

PEZA exports were adversely affected by reduced demand and logistical difficulties during the COVID-19 pandemic in 2020, as well as the closure of a large enterprise, loss of a major client of the rubber and plastics industry, and transfer of production to another region in 2019. PEZA export sales are showing signs of recovery in 2021, but sales during the year are lower by 49 percent than export sales in 2017. PEZA exports are dominated by electronics and semiconductors, which account for 72 percent of total sales from special economic zones.

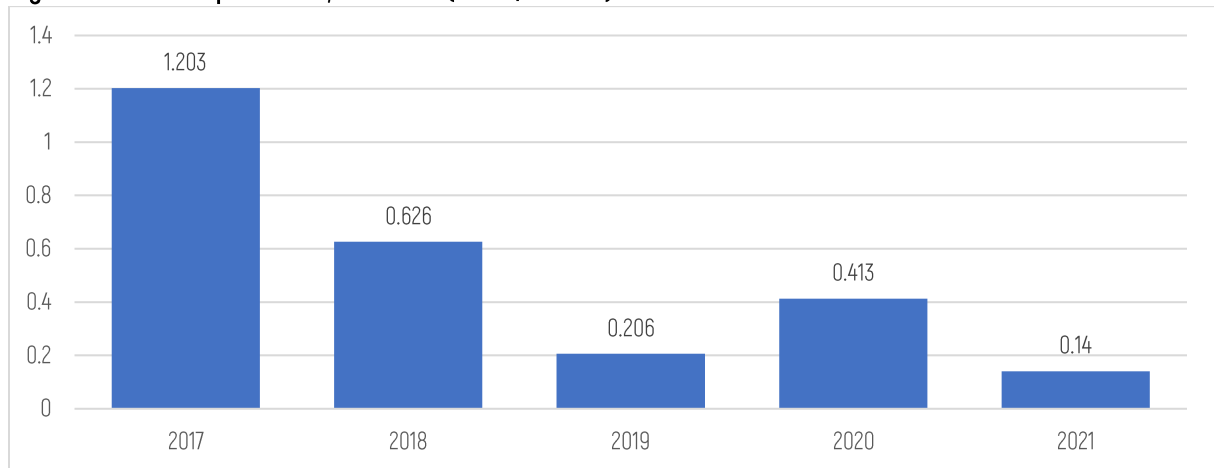
*All of the region's operational special economic zones are in Baguio City.* The operational economic zones in CAR account for most of the region's export sales aside from mineral exports, and they are all located in Baguio City. These are the locators of the Baguio City Economic Zone (BCEZ), firms in the John Hay Special Tourism Economic Zone, SM City Baguio Cyberzone, Neutrino Information Technology Center, and Abanao Square, employing a total of 13,498 persons in 2021. Other proclaimed economic zones in the region, particularly the Abra Agro-Industrial Economic Zone and the Kelly Special Economic Zone in Itogon, Benguet, are non-operational.



While PEZA was able to forge agreements with the municipalities of La Trinidad, Itogon, Sablan, Tuba, and Tublay, Benguet in the BLISTT Regional Growth Center to establish and operationalize additional economic zones in the region that usher in additional investments and generate more employment and export sales, lack of viable sites and expansion area owing to the region's topography and ancestral land claims hinder the growth of economic zones in the region.

**Online sales for both Micro and Medium enterprises in CAR registered more than 100 percent increases in growth rate in terms of E-commerce index, but non-PEZA export sales remain minimal.** The E-commerce index “measures an economy’s preparedness to support online shopping.” (UNCTAD) Based on the Annual Survey of Philippine Business and Industry (ASPBI) for the period 2019 to 2020, the E-commerce index of CAR surpassed the national growth rates pegged at 104 percent for Micro and -31.16 for medium enterprises.

**Figure 24 MSME Export Sales, 2017-2021 (in US\$ million)**



Source: Department of Trade and Industry (DTI)-CAR

However, DTI-assisted MSMEs still struggle to penetrate the export market, registering sales of US\$ 0.14 million in 2021. A slight improvement in sales was observed in 2020 coinciding with the use of online sales and payment platforms after physical stores were closed during the pandemic. Additionally, the recent Digital Awareness Study showed that women entrepreneurs need more knowledge

on how to leverage online platforms in ensuring continuity of their business.<sup>41</sup> Also, only a handful of MSMEs are engaged in the export industry. Interventions are necessary to overcome structural development rigidities in the export industry and pave the way for CAR to substantially contribute to the overall strength of

<sup>41</sup> Philippine Commission on Women (PCW), Addressing the Impacts of the COVID-19 Pandemic to

Women Entrepreneurs, <https://pcw.gov.ph/micro-small-and-medium-enterprises-development/>

Philippine exports in global trade through the development of home-grown industries.

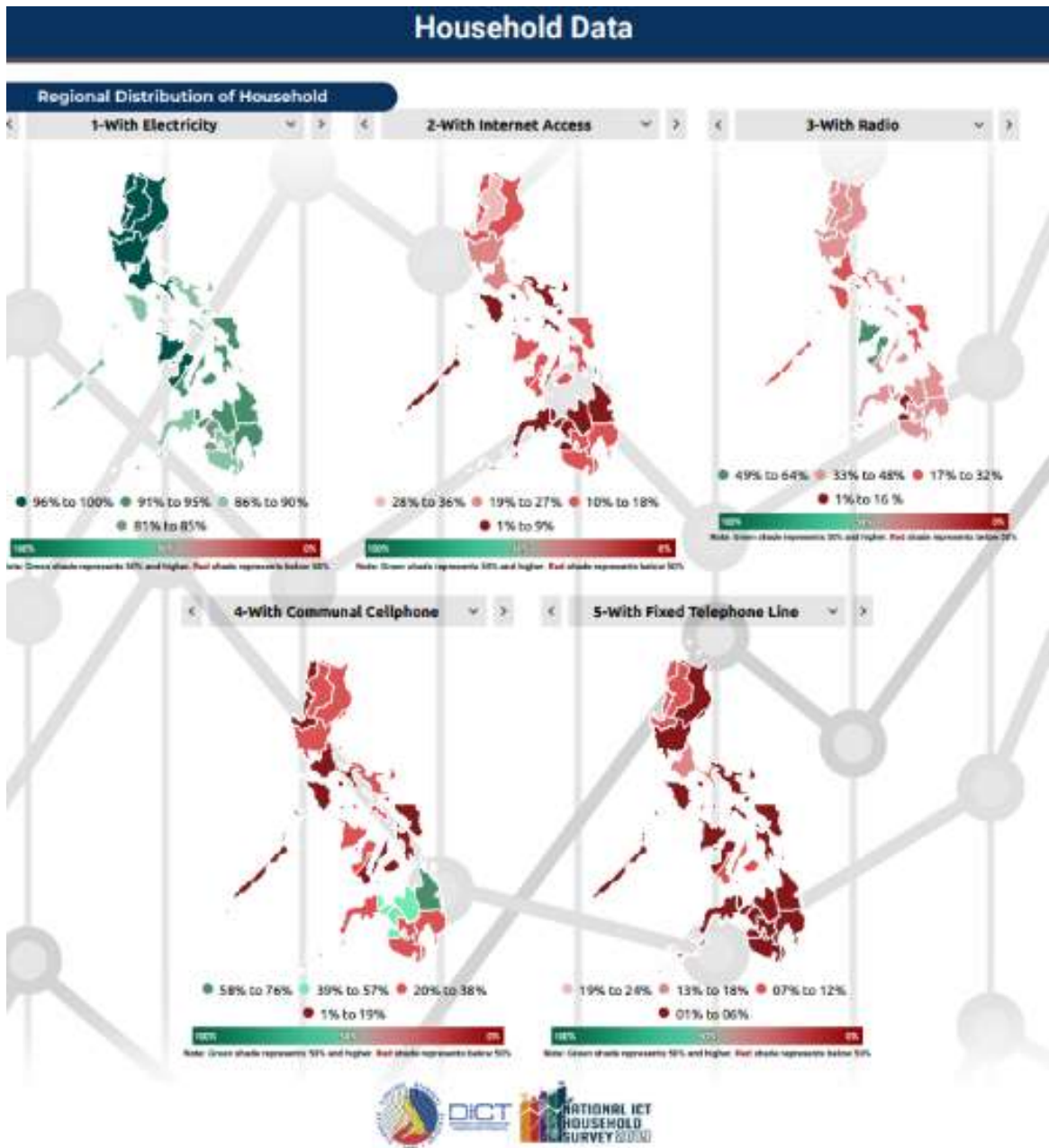
Performing local MSMEs such as the Narda's Handwoven Arts and Crafts that exports loomwoven products to Europe and United States need to be encouraged to innovate and level-up to remain competitive in the export market.

***Limited access to virtual platforms and inadequate digital infrastructure.*** Another clear and present difficulty is the limited accessibility of households, local industries and business to virtual platforms due to inadequate ICT infrastructure. Based on the 2019 NICTHS, only 24 percent of households in the country own a computer. While 30 percent of these households reside in CAR, the region continues to lag behind in terms of ICT development. Coupled with the lack of reliable ICT facilities and services is the challenge on cybersecurity and safeguards against online fraud. With 87 percent of the

population in CAR using their cellphones to communicate and transact business, lack of data protection mechanisms exposes the population and businesses to cyber-attacks and similar online incidents.

***The region's landlocked nature adds to logistical challenges.*** CAR may only be accessed through land, and has limited options for air transport, considering that it only has one small airport. Its access roads that skirt its mountainous terrain are prone to landslides during inclement weather and other natural disturbances like earthquakes, aggravating the difficulty of transporting goods and raw materials to and from the region. The region's distance from ports that ease the entry of raw materials and exit of local products of other regions has affected the competitiveness of its provinces, cities and municipalities in the Cities and Municipalities Competitiveness Index (CMCI) (*also discussed in Chapter 2*).

Figure 25 Household Access of Internet, Electricity, Radio, Cellphone, and Telephone



Source: DICT-CAR

**Table 44 Investments of DTI-Registered Firms**

Location	2016	2017	2018	2019	2020	2021
DTI (in Php million)						
CAR	2,222.78	1,442.42	1,205.68	4,157.43	1,625.97	2,429.84
Abra	390.030	332.160	388.730	397.493	347.739	838.540
Apayao	287.160	285.020	249.670	276.240	175.879	264.530
Baguio City	367.990	150.060	88.540	35.090	28.782	114.650
Benguet	522.950	289.560	109.610	72.280	28.420	21.640
Ifugao	85.170	55.980	54.190	153.560	387.326	178.100
Kalinga	186.260	105.690	184.870	379.850	576.174	588.140
Mountain Province	383.220	223.950	130.070	155.670	81.652	424.240

Source: DTI-CAR

***Sole proprietor investments continue to be dominated by sari-sari stores.*** While investments from sole proprietor enterprises registered by the DTI increased by 11 percent during the pandemic, and climbed further by 49 percent in 2021, reaching Php 2.43 billion, DTI-registered investments continue to be dominated by sari-sari stores which fall under the micro enterprise category.

Growth was led by the provinces of Abra, Ifugao and Kalinga, with investments in the rest of CAR decreasing by 13 to 61 percent. Baguio City and all provinces, except Benguet and Ifugao, had improved figures in 2021, with Apayao, Baguio City, and Mountain Province investments growing by more than 100 percent.

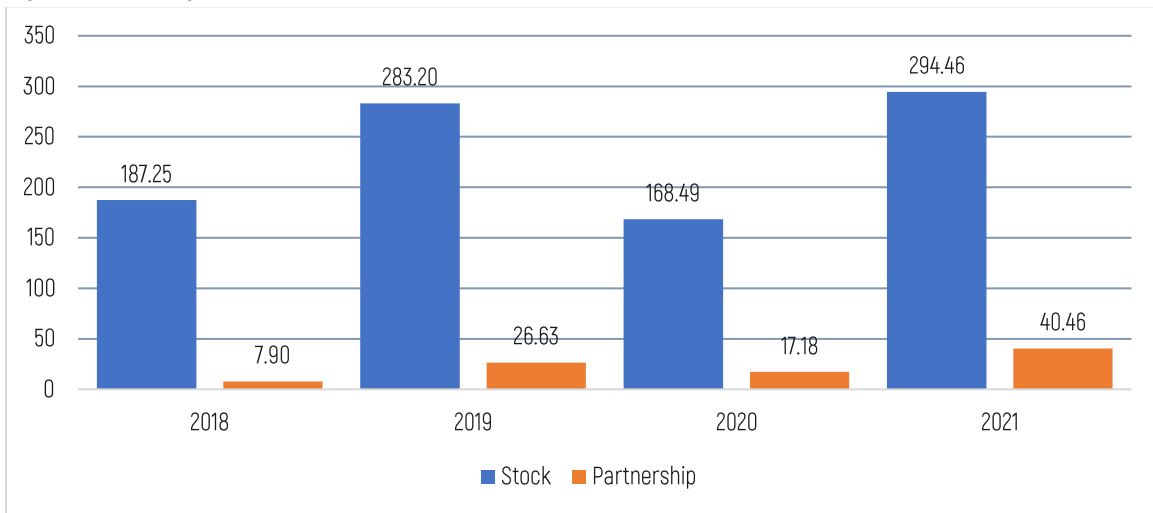
***SEC-registered investments slowed down in 2020 after growing in 2019.*** Stock corporation and partnership investments contracted by 40 percent in 2020, after increasing by 59 percent in 2019, even as more establishments switched towards industries that enjoyed greater demand during the pandemic rather than closing down. Investments rebounded in 2021, increasing by 80 percent. The SEC expects an increase in registration due to the lifting of restrictions in most provinces, the push from government-aligned programs requiring registration, and the opening of more business opportunities. On the nature of registered companies, these remain predominantly stock companies or corporations

**Table 45 SEC registered Investments in CAR: 2016-2021**

	2016	2017	2018	2019	2020	2021
TOTAL			195.150	309.830	185.670	334.920
Stock corporations			187.250	283.2	168.490	294.460
Partnerships			7.900	26.63	17.180	40.46

Source: SEC

Figure 26 SEC registered Investments



Source: SEC-CAR

**Local Investments and Incentives Code (LIICs) are outdated, and absorptive capacity of LGUs remain low.** Investment promotion at the LGU level remains few and dispersed, except in the highly-urbanized City of Baguio. One way of capturing or enticing investors is through the implementation of the LIICs, but LIICs need to be updated to

keep attuned to current trends and the priorities of the present administration.

**Thriving gold black market.** The informal sector continues to grow and thrive through small-scale mining (SSM) transactions as SSM production in the region finds its way to a thriving black market.

## Targets

The region hopes to sustain PEZA exports, as its products, particularly semiconductors and IT services are expected to enjoy high demand even in the coming years. Mineral exports are also expected to grow with the mining industry enjoying support as a major contributor to post-pandemic economic recovery. Gold and silver production are expected to increase by 73 percent, while copper is projected to increase by 74 percent in 2028, with the development of raw mining product processing, among other programs. Export targets for MSMEs are also expected to increase by 56 percent by the end of the plan period. BOI-generated investments pegged at 1,743.298 is also expected to increase by 54 percent in 2028, and it is hoped that medium industries will increase their share in sole proprietor investments

**Table 46 Targets to promote trade and investments**

Chapter/Sub-chapter Outcome/Result Indicator	Baseline		End of Plan Target (2028)	Responsible Agency
	Year	Value		
DTI-assisted exports	2022	0.194	0.3437	DTI
Mineral exports				MGB
a. Gold	2021	6,014,506,926.00	8,136,776,556.00	
b. Silver	2021	151,389,257.00	204,808,235.00	
c. Copper	2021	4,585,459,370.00	6,150,806,447.00	
Total approved investments (PHP million)				PEZA
- PEZA				DTI
- BOI	2022	1,743.3	3,088.362	DTI

## Strategy Framework

At the end of the plan period, the key strategies for promoting trade and investments are: (1) strengthening the export industry of the region which will be achieved by developing export capabilities of the region’s homegrown industries, encouraging innovation to meet international quality standards, protecting intellectual property rights of products unique to the Cordillera and streamlining requirements for export permits; and, (2) increasing total investments and targeting these to boost trade, skills upgrading and sustainability by improving the region’s business climate, enhancing competitiveness of Cordillera LGUs, firming up local government investment policies and programs and defining regional priorities for private sector participation through the formulation of the CAR Investment Priorities Plan 2023-2028.

**Figure 27 Strategy framework to promote trade and investments**



## Outcome 1: Cordillera Export Industry strengthened

***Develop export capabilities of local or homegrown industries.*** Home-grown industries need to anchor their business plans on the comparative advantages of the region. Developing the potentials of MSMEs into exports diversification concerns fortifying sectoral backward & forward linkages. These linkages concern suppliers, producers, ready markets and support industries. Resolving key constraints to export growth and competitiveness of MSMEs could be through programs such as “Usapang Exports” Seminar Series, Mentor Me program of DTI, Trainings on Branding, Food and Drugs Administration License to Operate (FDA-LTO) Registration.

***Protect intellectual property rights of products unique to the Cordillera.*** The role of DTI’s Intellectual Property Office (IPO) is essential in the protection of existing MSME products in the region. IP rights protection is necessary in curbing the rampant intellectual theft that happens when it comes to exports and other local products. This is a reality considering experiences in the garments and textile sector where indigenous designs in weaving become susceptible to intellectual theft. Providing wider information and education on IP rights will be done to increase awareness among innovators and inventors to ensure protection of their IP and encourage more innovations. (See Chapter 10)

***Institutionalize innovation to meet international quality standards and incentivizing MSMEs.*** In order to raise awareness on the need to innovate to be competitive and sustainable, MSMEs should consider compliance to international quality standards such as the ISO 56000. This standard essentially facilitates the institutionalization of an innovation culture in businesses to ensure sustained growth. This may be incentivized through the DTI Bagwis Awards or other prestigious recognitions. Aside from the provision of incentives for higher productivity, MSMEs should likewise be given additional incentives when found compliant to international standards.

***Close Monitoring of MSMEs.*** An integral part of the monitoring of MSME growth is the need for the development of an early warning systems for distressed MSMEs much like the need for Business Continuity Planning. Preventive as well remedial measures must be designed to aid these MSMEs to be responsive and more resilient especially in times of disruptions.

***Fast-track infrastructure and logistics support to facilitate trade and investments and to encourage digital transformation among MSMEs.*** ICT infrastructure is essential and shall be developed through convergence projects with the different agencies of government to bolster and improve the business climate while improving digital literacy to support the

digital transformation of MSMEs and capacitation of the public on the use of digital applications and platforms. (See Chapter 10 and 13)

***Intensify IEC on the sale of gold by small scale miners (SSMs) to BSP.*** Through widespread IEC on the sale of gold to BSP, small scale miners, especially those with mining contracts, will be better informed of tax incentives for selling gold to BSP. This in

turn can encourage responsible mining among SSMs as they are given such incentives to apply for their mining contracts (See Chapter 16), and will boost the country's Gross International Reserves (GIR). The GIR ensures financial stability in periods of economic, financial, and geopolitical volatility.

## **Outcome 2: Total investments increased & targeted to boost trade, skills upgrading & sustainability**

***Improve the region's business climate through enabling policies and private sector engagement.*** Improving the business climate for the region involves the active participation of the private sector led by the Philippine Chamber of Commerce and Industry (PCCI) and its chapters in coordination with the Regional Micro, Small and Medium Enterprises Development Council (RMSMEDC) where government provides the policy support and direction to fortify public and private partnerships. This partnership should be predicated upon the visionary leadership of the private sector and facilitation by the public sector agencies. This strategy also delves on the importance of establishing regional as well as interregional trade agreements where private support is imperative to ensure long-term support. Investment Promotion Agencies or IPAs and the newly created Metropolitan BLISTT Development Authority (MBLISTTDA, discussed in Chapter 2) need to be at the forefront of attracting investors in the region

whether local or foreign. The conduct of export and investment promotion campaigns along with the formulation of the Regional Micro, Small Medium Enterprise Development (RMSMED) Plan 2023-2028 shall be prioritized.

***Leverage inter-region partnerships in developing priority industries.*** Inter-region development planning, undertaken during the previous term by Regions I, II and CAR through the North Luzon Growth Corridor Strategic Plan (NLGCSP), identified complementary strategies and priorities that will promote inclusive development for the three regions.

CAR's enhanced accessibility resulting from major infrastructure in neighboring regions, such as the Tarlac – Pangasinan – La Union Expressway, and the Clark International Airport, may also be highlighted in promoting the region as an ideal investment area.



***Advocate enabling trade agreements and legislation, like the CREATE Law and the Regional Comprehensive Economic Partnership (RCEP).*** The CREATE Law seeks to entice investments by lowering corporate income tax rates and enhancing corporate incentives, as part of recovery efforts from the COVID-19 pandemic. Meanwhile, the RCEP that will eventually reduce tariffs of Philippine exports will ease the entry of MSMEs into export markets. Advocacy on these policies and agreements should be part of the technical assistance provided to the region's MSMEs and LGUs.

***Enhance competitiveness of Cordillera LGUs.*** On raising the competitiveness of LGUs in the Cordillera, the CMCI program continues to provide the barometer for measuring success in the delivery of public services in five thematic areas. Focus is made on economic dynamism essential to the growth of local industries or MSMEs.

Improving economic dynamism considerations are made on the size of the local economy (business registrations, etc.), growth of the local economy, capacity to generate employment, cost of living, cost of doing business, financial deepening, productivity, and presence of business and professional organizations.

For the period 2017-2021, CMCI LGU awardees are Baguio City, La Trinidad, Alfonso Lista, Lamut, Bauko, Besao, and Malibcong. On Economic Dynamism and Government Efficiency, only 30 percent of the total number of municipalities are ranked

best. For infrastructure, on a five-year average only 14 percent or 11 LGUs have the best infrastructure projects. On resiliency, only 16 municipalities at the average are considered resilient. On innovation, there are only 10 LGUs who have introduced innovation in their respective public service programs accounting for only 18 percent of the total number of municipalities.

***Firm up local government investment policies and programs.*** The formulation of the CAR Investment Priorities Plan (IPP) 2023-2028 must be pursued to maximize synergy, align national and local government investment promotion strategies, and make the investment environment credible. The IPP is a complementary guide to the Public Investment Program (PIP), as it serves as the private sector's reference in determining the areas, activities, and commodities to invest in to generate more jobs and income in the region. In integrating environmental, social and governance (ESG) investments, the IPP should reference the Regional Spatial Development Framework (RSDF), KALAHI CIDSS, Regional Recovery Program (RRP), and other sectoral plans in the region such as the Energy Master Plan, Alternative Transport Plan, and Cordillera Coffee Industry Development Plan, among others.

LGU local investments and incentives codes (LIICs) must be updated not only to identify investment areas where government and the private sector can converge but more importantly to align investments to the priorities of the present administration. One of the key investment areas in the LIIC that

need to be aggressively developed is garments and textiles especially tradeable intermediate services where the region has a distinct comparative advantage.

Lastly, there is a need to continue streamlining of processes not only for Business Permits and Licenses but more importantly export permits to encourage MSMEs to take advantage of the opportunities presented by the global market.

## Legislative Agenda

Table 47 Legislative Agenda to promote trade and investments

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
Passage of House Bill 3267	Cordillera autonomy will afford the region a more powerful voice in formulating policies aligned with its unique needs and priorities, while adhering to national directives. With regional autonomy, CAR will be able to manage investments in accordance with its comparative advantages and constraints.	CAR Congressmen
Amendment of RA 7844 (Export Development Act of 1994)	The tax incentives provided in the law may need to be reviewed in light of incentives under new legislations, such as the CREATE Law.	DTI

PART IV

# **Enabling Environment**



# 12

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**Promote Financial  
Inclusion and Improve  
Public Financial  
Management**



## Chapter 12

# 12 Promote Financial Inclusion and Improve Public Financial Management

The region's financial sector is envisioned to become cash-lite and digitalized moving forward from the COVID-19 pandemic. Risks of financial shocks shall be mitigated through financial inclusion initiatives especially among unserved and underserved segments of the Cordilleran population. With full devolution, local government finance shall be strengthened as the region's tax and budget systems shall be made more simple, efficient, and inclusive for the public. Sustainable finance and green financial policies such as pollution tax and Payment for Environmental Services (PES) shall be explored. These are aimed at economic transformation towards a prosperous, predominantly middle-class society where no one is poor.

## 12.1 Promote Financial Inclusion

Financial inclusion lays the foundation for equitable regional development. In the next six years, greater proportion of the Cordilleran population shall have expanded access to a wide range of financial products enabling them to make informed choices on their financial welfare. Digital payments shall be popularized not only in retail but also in government transactions and delivery of social services.

Unbanked and unserved communities shall be reached through wider connectivity and a whole-of-society approach that increasingly involves the private sector in community-driven efforts to serving unmet needs for financial services. Alongside this, financial and digital literacy shall be improved to ensure consumer protection amidst financial technologies and innovations.

# Assessment and Challenges

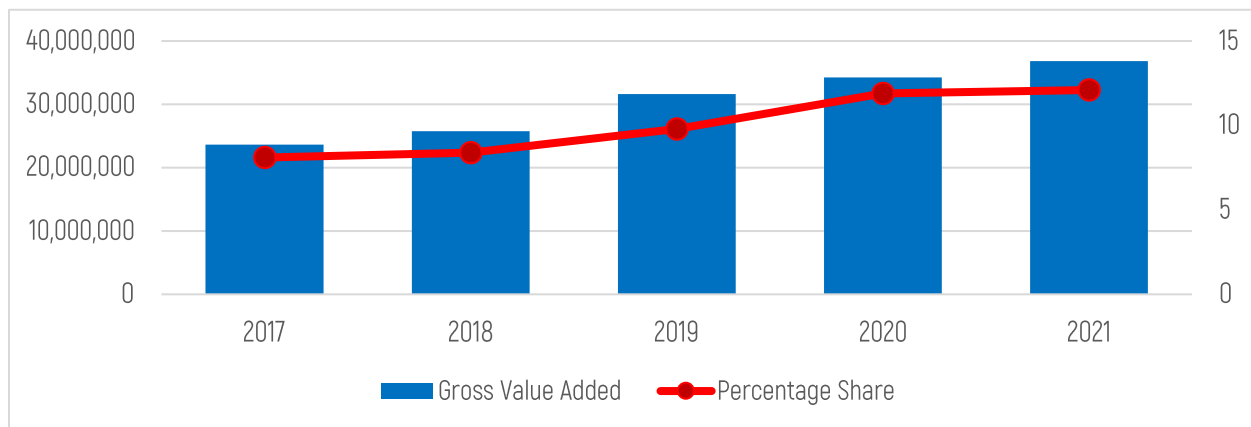
## Assessment of Performance

*The region's financial sector remained stable, contributing positively to the regional economy.* Financial and insurance activities showed steady growth throughout the years even amidst the height of the COVID-19 pandemic in 2020. The Gross Value Added (GVA) of the sub-sector grew in value by 55.7 percent from 23 billion in 2017 to 36 billion in 2021. The percentage share of the sub-industry to the GRDP also grew steadily from 8.1 percent in 2017 to 12.1 percent in 2021 (Figure 28).

Within the services sector in CAR, financial and insurance activities remained the second greatest contributor to the regional economy from 2017 to 2021, next to wholesale and

retail trade and repair of motor vehicles and motorcycles. The region's net loan portfolio also increased by 7.8 percent from 21.1 billion in 2019 to 22.8 billion in 2020. Net loans and receivables from rural and cooperative banks also increased by 59.6 percent from 2019 to 2020 which signals better lending efficiency and greater confidence among borrowers in formal financial institutions. Total deposits in banks similarly increased by 22.9 percent from 103.8 billion in 2019 to 127.6 billion in 2020, with Universal and Commercial Banks accounting for 89.6 percent of the total deposits. Benguet recorded the highest total deposits among provinces at 80 billion, with 62 billion classified as savings deposit.

Figure 28 Gross Value Added in Financial and Insurance Activities, CAR, 2018 constant prices (in PHP million)





***Account ownership improved driven by remarkable growth in e-money accounts.***

Reflective of national trends, access to finance was broadened with increased proportion of the population with transaction accounts. In North and Central Luzon, 56 percent of Filipino adults had transaction accounts in 2021 as compared to 2019 when only 29 percent of the population was covered. This improvement was driven by a remarkable growth in e-money accounts in the country which grew to 27.5 million in 2021 from 5.7 million in 2019. The use of e-banking platforms and online transaction accounts kept the sector afloat even with mobility restrictions during the pandemic. In 2020, financial and insurance activities in the region grew by 8.2 percent which continued through 2021 with 7.6 percent growth. This illustrates how digital payments offer a gateway to financial inclusion to a greater portion of the population through accessible platforms such as mobile phones.

***Policy environment encourages better uptake of digital payments in various streams.***

This includes Labor Advisory No. 26, Series of 2020 by the Department of Labor and Employment (DOLE) which is expected to facilitate the payment of wages and other monetary benefits by private establishments to their employees through transaction accounts and thus expand the Business to Person (B2P) payment stream. In 2020, the Bangko Sentral ng Pilipinas (BSP) released its Digital Transformation Roadmap aimed at promoting financial inclusion through the digitalization of payments and progressive shift towards a cash-lite economy. More

recently in 2022, Executive Order No. 170 was signed mandating all government offices to utilize digital disbursement in all payments for goods and services and offer digital mode of collecting payments for taxes, fees and other charges. EO 170 targets the Government to Business (G2B), Government to Persons (G2P), Person to Government (P2G) and Business to Government (B2G) payment streams.

In addition, Joint Memorandum Circular No. 1, series of 2022 by the BSP and the Department of Interior and Local Government (DILG) sought the adoption of the Paleng-QR PH Program by LGUs aimed at expanding the Person to Merchant (P2M) payment stream. Baguio City was the first in the country to launch the Paleng-QR Program in August of 2022 promoting cashless payments in public markets and local transportation.

The institutionalization of the national ID or the Philippine Identification System (PhilSys) is also expected to boost financial inclusion efforts especially for the marginalized with no government-issued IDs. This encourages low-income families into the formal financial system and reduce their risk to informal lending practices and help them save and invest for the future.

***All provinces in the region have Financial Service Access Points (FSAPs).***

In 2022, 526 FSAPs such as banks, ATMs, and non-stock savings and loan associations (NSSLAs) were listed in the region. A total of 366 banks, 154 ATMs, and 6 NSSLAs are scattered through

35 municipalities in the region including Baguio City and Tabuk City. Excluding Apayao, all the capital towns of CAR provinces have access to at least one of type of FSAP. Continuing efforts to widen financial access points are included in the National Strategy for Financial Inclusion (NSFI) 2022-

2028 as the BSP also continues to pursue proactive regulatory reforms to facilitate this. In 2019, the BSP North Luzon regional office in Baguio City was constructed bringing closer its services and programs to the people of the Cordillera.

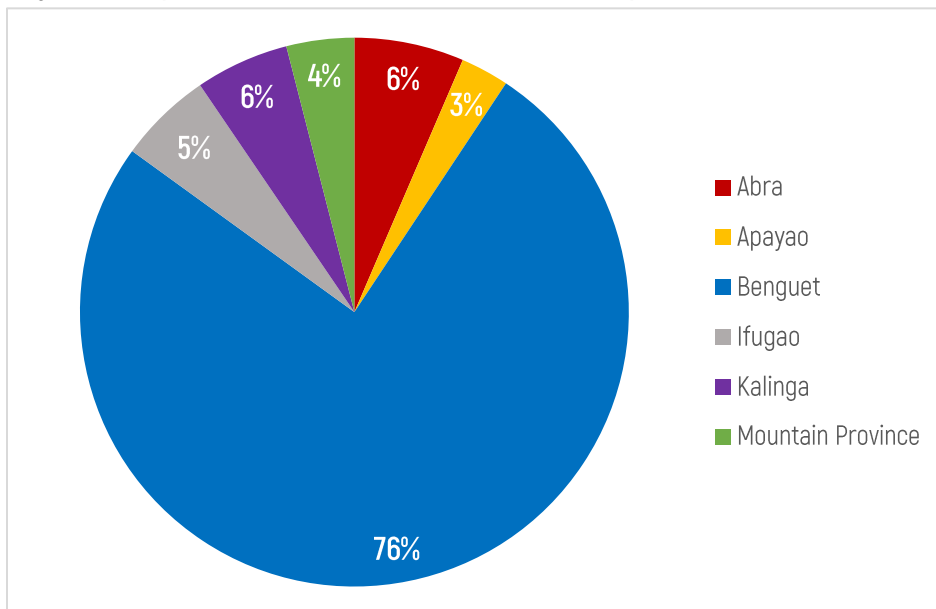
## Challenges

**Socio-economic and demographic factors drive account ownership and financial literacy disparities.** The 2021 Financial Inclusion Survey report indicates that North and Central Luzon residents were less likely to own an account than those of other regions recording the lowest account penetration percentage at 47 percent.

While e-money accounts remarkably grew in 2021, North Luzon adults were more aware of banks, pawnshops, remittance agents, lending

institutions, cooperatives and other financial access points. Digital literacy also hinders the adoption of Digital Financial Services (DFS) particularly to those in Visayas and North and Central Luzon. The relatively low financial literacy in the region and challenges in the adoption of DFS contribute to the high informal savings in North and Central Luzon. Savings in cooperatives was also more prevalent while banks remained the top choice for saving in formal institutions at the national level.

Figure 29 Proportion of Financial Service Access Points per Province in CAR, as of March 2022



Source: BSP

**Digital divide is more pronounced due to the region’s mountainous terrain and limited connectivity.** While several issuances were implemented in recent years to encourage better uptake of digital payments, limiting factors such as slow and limited connectivity and expensive internet subscription rate in the region prevent communities from fully attaining financial inclusion objectives exacerbated by the region’s mountainous terrain. The Paleng-QR PH program piloted in Baguio City necessitates adequate digital support infrastructure which several municipalities in CAR lack. This hinders the onboarding of majority of the region in the digital payments ecosystem which is expected to offer faster and more affordable payment options with greater convenience to Cordillerans.

**Financial Service Access Points (FSAPs) are concentrated in Baguio City and Benguet.** More than half or 75.7 percent of FSAPs in the region are located in Baguio City and

Benguet. Only 2.9 percent of FSAPs in the region are located in Apayao while only 3.9 percent are located in Mountain Province. While all provinces have access to at least one type of FSAP, these are commonly located in capital towns. Majority of municipalities in the region still do not have access to banks, ATMs, and NSSLAs thereby limiting the participation of Cordillerans to the formal financial system. This is reflected in the provincial distribution of loan portfolio and bank deposits in the region as Benguet accounted for the bulk of both indicators largely due to the presence of more banking institutions in the province. The increased participation of the private sector is necessary in community-driven efforts to serve the unmet need for financial services. Harnessing the potential of cooperatives and allowing agent banking are seen as strategic entry points for the private sector to contribute to the attainment of financial inclusion objectives as the region move towards the “new economy” environment.

## Targets

Table 48 Plan targets to promote financial inclusion, 2023-2028

Outcome Indicators	Baseline		Targets						Lead Agency	
	Year	Value	2023	2024	2025	2026	2027	2028		
Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money- service provider	2021	47% <sup>a</sup>	Increasing						53.3% <sup>b</sup>	BSP, CDA
No. of LGUs with ordinances incentivizing or mandating the use of digital payments	2022	1	Increasing						TBD	BSP, DILG

Source of Data: BSP

Outcome Indicators	Baseline		Targets						Lead Agency	
	Year	Value	2023	2024	2025	2026	2027	2028		
through the Paleng-QR PH program										
<b>Number of financial service providers per province</b>	2021	323	333	343	353	364	374	386	BSP, CDA	
<b>Abra</b>	2021	21	22	22	23	24	24	25		
<b>Apayao</b>	2021	10	10	11	11	11	12	12		
<b>Baguio City</b>	2021	69	71	73	75	78	80	82		
<b>Benguet</b>	2021	111	114	118	121	125	129	133		
<b>Ifugao</b>	2021	32	33	34	35	36	37	38		
<b>Kalinga</b>	2021	48	49	51	52	54	56	57		
<b>Mountain Province</b>	2021	32	33	34	35	36	37	38		
<b>Percentage of population financially-literate</b>	2021	35% <sup>c</sup>	Increasing						TBD	BSP

a/ Data for North Luzon from the 2021 Financial Inclusion Survey

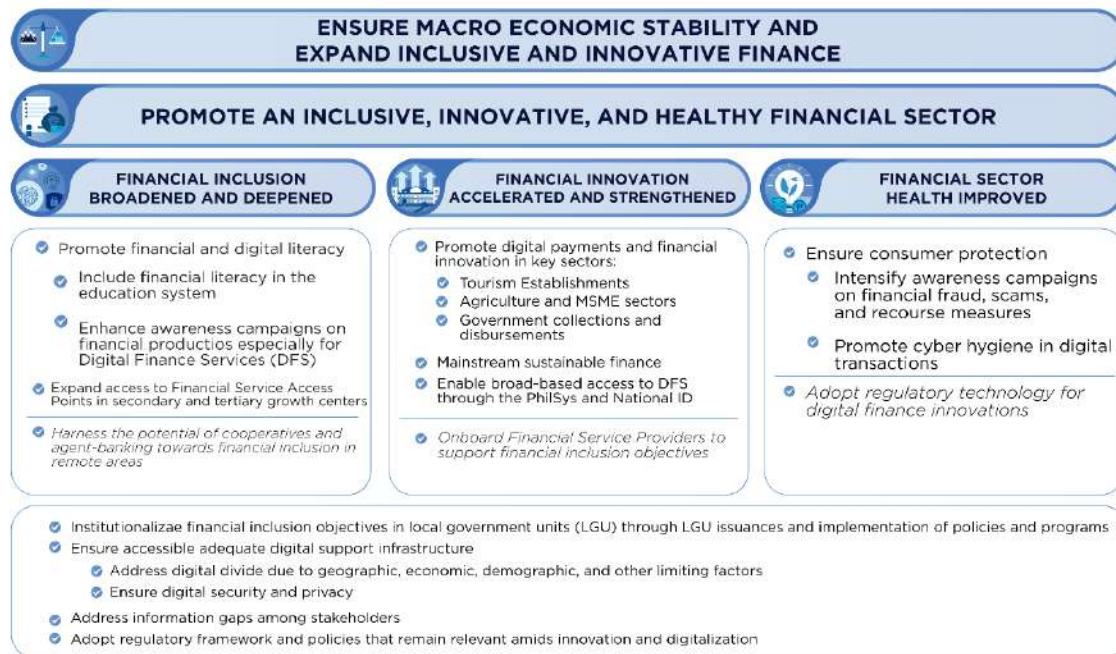
b/ Nationally determined SDG target by 2030

c/ National data from the NSFI 2022-2028

## Strategy Framework

To promote an inclusive, innovative, and healthy financial sector, a whole-of-society approach will be geared towards achieving the mutually-reinforcing outcomes of (a) broadening and deepening financial inclusion; (b) accelerating and strengthening financial innovation; and (c) improving financial sector health (Figure 30). Nine strategies are laid down to attain these outcomes while four cross-cutting strategies are identified focusing on the participation of local government units and ensuring the necessary digital support infrastructure and regulatory framework to provide an enabling environment. The framework also identifies strategic entry points (*italicized*) for the private sector to contribute to the attainment of sector outcomes. The framework is informed by existing strategy documents such as the NSFI 2022-2028 and multi-stakeholder consultations.

Figure 30 Strategy Framework to promote financial inclusion



## Outcome 1: Financial inclusion broadened and deepened

**Promote financial and digital literacy.** The low account penetration and high informal savings in North Luzon signal the need for greater awareness among the population of the benefits of participating in the formal financial system. The academe shall be tapped as partners in Financial Education (FinEd) through the inclusion of lessons, special courses, General Education (GE) subjects, and regular training programs for teachers on financial literacy. The move to make financial literacy lessons mandatory for K-12 and secondary education classes shall also be supported in the region.

Intensified inter-agency awareness campaigns on financial products through the BSP's collaboration with OWWA for

financial literacy sessions in OFW family seminars; with CSC for the creation of a pool of financial literacy trainers from CSC regional offices; and with other relevant agencies such as the DA, DILG, DTI, DSWD, AFP, and BFP for customized financial literacy training programs shall be pursued. The region will also adopt and offer an online Financial Literacy Course under the TESDA.

Alongside financial literacy, the DICT shall also expand community-based campaigns on digital literacy. The agency can leverage on its ongoing Digital Government Program to reach rural areas in the region and provide digital literacy trainings in *barangays*. This shall reinforce financial literacy initiatives especially with the advent of digital banks, e-

wallets, e-money accounts, and other Digital Financial Services (DFS).

***Expand access to Financial Service Access Points in secondary and tertiary growth centers.*** The concentration of FSAPs in Baguio City and Benguet reinforce barriers to reaching traditionally unserved populations. In the Cordillera where the region's mountainous terrain serves as natural barriers in reaching vulnerable populations, adopting the regional spatial strategy in expanding access to financial services beginning with provincial and local growth centers<sup>42</sup> will be effective in reaching a greater portion of Cordillerans and also encouraging more vibrant economic activities in these areas. The promotion of financial innovation techno-hubs can also be explored in Baguio City which ranked 16<sup>th</sup> in 2022 among 33 HUCs in the country for the CMCI's innovation pillar.

A full bank branch shall be established in all capital towns, especially in Kabugao which lack at least one type of FSAP. Local growth centers which are the growth catalysts for the more remote parts of the region shall also have access to different types of financial service providers. Focused efforts shall be made in Lubuagan and Bauko which both currently lack banks and even ATMs.

Access to high-quality bank and financial products is crucial as it does not only ensure the financial welfare of individuals and

households in times of crises but also provide better financing options for local businesses. CAR is close to achieving the demographic dividend with a growing workforce which means that financial inclusion is more important than ever to reap the benefits of increased savings and investments from financially-literate Cordillerans. This lays the groundwork for equitable development in the region necessary for transformative growth.

***Harness the potential of cooperatives, microfinance institutions (MFIs), and agent-banking towards financial inclusion in remote areas.*** Where banks do not exist, cooperatives provide financial services instead to the unbanked population in the region. The government shall take the lead in capacitating small and micro cooperatives through programs such as the Financial Inclusion Through Cooperatives (FIT-Coop) of Landbank and CDA and the Microfinance Capacity Development Program in Agrarian Reform Areas of DAR.

Cooperatives, including non-government organizations (NGOs), thrift and rural banks, and lending companies shall be enjoined and capacitated to become regular members of the Microfinance Council of the Philippines, Inc. (MCPI) to expand their access to technical assistance, resources, and networks to foster better delivery of financial services to unbanked, underserved, and low-income households in the region. Currently, three of the 55 members of the MCPI are located in

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<sup>42</sup> Provincial growth centers or secondary growth centers are provincial capital towns. Local growth centers or tertiary growth centers are service centers

which include: Manabo, Abra; Luna, Apayao; Buguias, Benguet; Alfonso Lista, Ifugao; Lubuagan, Kalinga; and Bauko, Mountain Province.

Baguio City.<sup>43</sup> More organizations especially those that cater specifically to women shall be encouraged to become members to help address the financial inclusion gender gap.

The SEC shall also intensify efforts to promote the accreditation of microfinance NGOs with the Microfinance NGO Regulatory Council (MNRC). Financially excluded sectors especially smallholder farmers shall be linked by the government to local MFIs.

Community-based and offline solutions to broadening access to financial services shall

be intensified through expanding agent banking (AB) in the region where cash agents<sup>44</sup> contracted by banks offer financial services in low-income and rural areas where there is limited commercial incentive to establish a full bank branch or even facilitate micro-banking. This can be promoted in local growth centers which are usually far from capital towns where bank branches are located. The success of this strategy lies on the shared commitment of the government and the private sector in achieving financial inclusion objectives.

## Outcome 2: Financial innovation accelerated and strengthened

***Promote digital payments and financial innovations in key sectors.*** The move towards a “new economy” post-pandemic can be facilitated by the adoption of digital payments and financial innovation in the region. CAR is envisioned as a prime eco-tourism destination in the country. Learning from the COVID-19 pandemic, digitalization in the tourism sector can help businesses stay afloat even amidst travel disruptions. The DOT shall explore instituting options for digital payments in tourism establishments especially in Baguio City, Benguet, and Ifugao where tourist arrivals are the highest in the region. This provides opportunities for the sector to reach greater domestic and

international markets because of the accessibility of mobile phones and interoperability of e-payment systems such as QR codes. CAR shall embrace financial innovations for the sector to keep pace with regional developments such as cross-border and integrated ASEAN QR Payment.

Following the thrust to modernize the agribusiness sector (*Chapter 7*), innovative financing options shall be made available for the region’s agricultural sector which comprises a sizeable portion of the region’s workforce. Agricultural financing in the region shall be improved through the safe adoption of alternative financing options

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<sup>43</sup> This includes the (1) Cordillera Community Microfinance, Inc., (2) Jaime V. Ongpin Microfinance Foundation Inc., and (3) Rangtay sa Pagrang-ay Microfinance, Inc.

<sup>44</sup> Examples of cash agents are retail outlets like small shops, convenience stores, pharmacies, pawnshops and even individuals contracted by banks to offer basic banking services in far-flung areas.

such as online crowdfunding platforms. Similarly, financial innovations for MSMEs such as the BSP's Credit Surety Fund and the Philippine Guarantee Corporation's provision of credit guarantee facilities shall be expanded in the region.

The financial sector is envisioned to become cash-lite in the next six years. This entails the promotion of online systems for government collections and disbursements such as BIR's Internal Revenue Integrated System (*see Subchapter 12.2*). In addition, the delivery of social protection programs such as cash transfers and pensions will be made more efficient through digital financial solutions (*Chapter 6.2*).

***Mainstream sustainable finance.*** As the country transitions to a low-carbon economy (*Chapter 16*), the government shall mainstream sustainable finance especially for the agri-sector and MSMEs in the region. Investment decisions shall take into account sustainable economic activities and projects to the help attain the objectives under the country's Sustainable Finance Road Map. Projects geared towards renewable energy and watershed conservation shall be prioritized for green financing.

***Enable broad-based access to digital financial services through PhilSys and National ID.*** The implementation of the national ID program serves low-income households without access to banking services because of their lack of valid proofs of identity. The BSP's Digital Payments Transformation Roadmap 2020-2023 is supported by the PhilSys especially with the opening of bank accounts among PhilSys registrants from vulnerable sectors. The PSA and BSP shall accelerate the rollout of the national ID and PhilSys-linked account opening in the region in support of financial inclusion objectives.



## Outcome 3: Financial sector health improved

**Ensure consumer protection.** Consumer confidence in the financial system is key to meeting financial inclusion objectives. Various media platforms shall be utilized by financial service providers, private financial institutions (FIs), and government agencies in their awareness campaigns against financially fraudulent activities. More importantly, recourse measures for victims shall be streamlined through Consumer Assistance Managements System (CAMS) with Chatbot functionality as implemented by the BSP.

On top of strengthening cybersecurity measures, cyber hygiene among consumers shall also be promoted. The BSP shall expand its Check-Protect-Report (CPR) campaign and seek partnerships with LGUs and private institutions to localize its cybersecurity awareness campaigns.

**Adopt regulatory technology for digital finance innovations.** On the supply side, FSPs and FIs shall be encouraged to adopt regulatory technology (RegTech) prescribed by the government to ensure safe, quality, and efficient digitalization of financial products and services to cater to client needs and encourage better uptake of DFS particularly in CAR where the population are relatively less likely to enter the formal financial system. And Cross-cutting strategies

**Institutionalize financial inclusion objectives in Local Government Units (LGU) through LGU issuances and implementation of policies and programs.** The policy environment is fertile for the implementation of financial inclusion initiatives at the local level with the passage of EO 170 and the Joint Memorandum Circular of the BSP and DILG on the Paleng-QR PH program. The incorporation of financial inclusion objectives and digital payments in existing DILG programs such as the Seal for Good Local Governance (SGLG) and other assessment toolkits can be explored to encourage increased participation of LGUs.

**Ensure accessible and adequate digital support infrastructure.** The move towards a cash-lite economy requires addressing the digital divide in the region. The DICT shall increase and sustain the active free wifi sites in the region and strengthen partnerships with LGUs to expand access to vital ICT infrastructure and services. Promotion of investments into digital infrastructure in CAR especially for emerging technologies such as satellite internet shall be intensified. Alongside this, the government shall ensure appropriate regulatory framework and RegTech to ensure digital security and privacy as the region becomes more virtually connected.

**Address information gaps among stakeholders.** At the national level, there is a move to address data gaps especially in credit evaluation and promote open financing in the private sector. The region can benefit from this bid to increase sharing of consumer-permissioned data among financial stakeholders such as banks to allow tailor-fitted services and products to individuals and businesses.

However, in CAR where majority of the population remains unbanked and traditional credit scoring, among others, require financial history records, alternative data in

credit scoring models and flexible platforms may be explored by FSPs and private FIs in accordance to appropriate regulatory policies.

**Adopt regulatory framework and policies that remain relevant amidst innovation and digitalization.** Breach in privacy and digital security pose a concern in the onboarding of stakeholders in digital transformation especially in the financial sector. This calls for the adoption of stakeholders of relevant regulatory framework and policies that ensure consumer protection and further encourage stakeholder participation in the digital payments ecosystem in the region.

## Legislative Agenda

Promoting financial inclusion in the region necessitates strong policy support to encourage the participation of stakeholders in financial inclusion objectives and digital transformation

Table 49 Legislative agenda to promote financial inclusion

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
Support the passage of the Digital Payments Act	<p>The legislation mandates the adoption of safe and universal digital payments in all government entities while ensuring that there is adequate financial and infrastructure support to implement this.</p> <p>The legislation is crucial in CAR given the region's topography which limits access to remote areas. Instituting digital payment solutions shall hasten government disbursements and collections especially in rural areas in the region.</p>	BSP
LGU ordinances supporting the use of digital payments through the Paleng-QR PH program	<p>The passage of LGU ordinances supporting the Paleng-QR program concretizes the BSP-DILG JMC No. 1, s. 2022 enjoining LGU participation in the program.</p> <p>Given the region's vision of becoming a prime eco-tourism destination in the country, providing interoperable digital payment options for visitors especially in markets and public transportation through the Paleng-QR program can expand the region's market with the ease of use of such system.</p>	DILG, BSP, LGUs

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>Execution of MOA incentivizing onboarding of stakeholders to digital ecosystem</b>	<p>The government's program on the digitalization of financial transactions will not be possible without onboarding key stakeholders to the digital ecosystem. This includes government entities such as the DICT, DBM, BIR, DTI, and DILG, financial institutions, and merchants.</p> <p>An incentive framework for digital financial transactions in the region will ensure that a digital ecosystem will be established.</p>	BSP

## 12.2 Improve Public Financial Management

As local government units assume devolved functions, their capacity to raise more revenues shall be strengthened to implement programs and projects. With limited fiscal space, other sources of revenues shall be mobilized through pursuing tax regimes for extractive industries and pollution and the institutionalization of Payment for Environmental Services (PES) in CAR. Financial resources shall be maximized by increasing budget utilization rate among government instrumentalities and promoting cash-based budgeting.

The region's tax system shall be made more simple, productive, and equitable to sustain the region's gains in revenue collection which consistently surpassed annual targets. Digitalization of government collections and disbursements shall be a persisting strategy in the next six years to sustain this and improve bureaucratic efficiency further.

### Assessment and Challenges

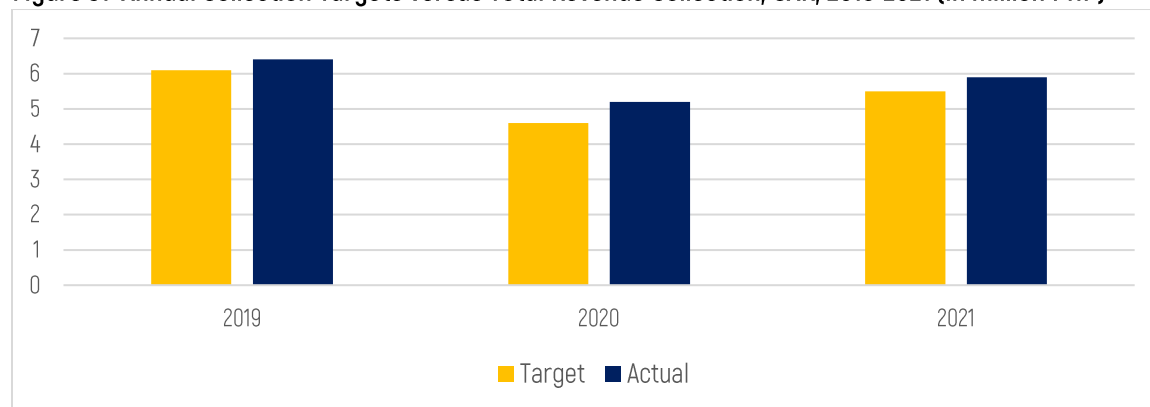
#### Assessment of Performance

***Total revenue collections increased over the past three years, surpassing annual targets.***

From the baseline revenue collection of 4.6 billion pesos in 2016, total revenue collections in the region has increased in the past four years. The region has also consistently

exceeded the collections target set by the Bureau of Internal Revenue (BIR) annually. The expansion of digital payments in the region drove this increase as e-filing and e-payment were made available in addition to accredited agent banks and collection officers.

Figure 31 Annual Collection Targets versus Total Revenue Collection, CAR, 2019-2021 (in million PHP)



Source: Bureau of Internal Revenue – CAR

***Local government units with score rating of at least three in the Public Financial Management Tool (PFMAT) increased.***

Starting with only 9 LGUs in 2013, the region gradually saw improvements in the PFMAT scores of LGUs. In 2017, 31 LGUs had a score of three and above in the PFMAT which grew further to 41 in 2019. A score of three in the PFMAT means that the number of programs, projects, and activities in the approved Local Development Investment Program (LDIP) were based on the Provincial Development Physical Framework Plan (PDPFP) in provinces or CDP in cities and municipalities. This signals better horizontal alignment in local plans although the ideal target is for all

83 LGUs in CAR to have a PFMAT rating of 3 and above.

***The region topped the submission of barangay Devolution Transition Plan (DTP).***

In 2021, all barangays in the region were able to submit their DTPs with the province of Ifugao the first in the country to complete its provincial DTP. A series of trainings and orientations on EO 138 were also conducted in 2021 when the Regional Committee on Devolution (ComDev) and its technical working group concerned with assessing and monitoring the matching of DTPs of NGAS and LGUs were organized.

## Challenges

***Locally sourced LGU revenues declined.*** The ratio of local source of LGU income to total current operating income in the region consistently decreased from the baseline of 20.88 percent in 2017 to 14.88 percent in 2021. The lowest percentage was recorded in 2020 at 14.00 which can be attributed to the closure of various establishments during the height of the pandemic. All provinces in CAR exhibited decline from their baseline values in 2017.

While Baguio City also showed decrease in locally-sourced revenue from 47.9 percent in 2017 to 45.5 percent in 2021, its record still surpassed the national 2021 target of 35.7 percent and even the 2022 target of 37.0 percent. Benguet also has relatively higher locally-sourced revenue than other provinces although it falls short of national target.

***NTA dependency rates of CAR provinces remain high.***

While the NTA dependency ratio in the region decreased to 71 percent in 2021 from the baseline average of 78 percent in 2017, most provinces still had an NTA dependency ratio of above 80 percent. Apayao continued to have the highest NTA dependency rate in 2021 at 93 percent followed by Abra (89 percent); Ifugao (86 percent); and Mountain Province (88 percent). Baguio City had the lowest NTA dependency rate at 41 percent.

The decline in locally sourced LGU revenues exacerbates the dependence of LGUs over national government allocations demonstrating the need for local government and industry competitiveness and increased investments.

**Lower LGU expenditure on social services.** The ratio of expenditure on social services<sup>45</sup> in the region decreased from 37.7 percent in 2017 to 24.37 percent in 2021. With the exception of Apayao and Benguet, all other

CAR provinces including Baguio City and Tabuk City registered decrease in expenditure on social services over the same time period. Abra registered the sharpest decline from 56.3 percent in 2017 to 14.5 percent in 2021 which is nearly a double reduction.

## Targets

Table 50 Plan targets to improve public financial management, 2023-2028

Outcome Indicators	Baseline		Targets						Lead Agency	
	Year	Value	2023	2024	2025	2026	2027	2028		
Percentage increase in total revenue collections	2021	15.3%	Increasing						TBD	BIR
Percentage of LGUs with 20 percent growth rate of locally-sourced tax collections	2021	24%	Increasing						TBD	BLGF
PFMAT score of LGUs improved	2019	2.84	≥3.0	≥3.0	≥3.0	≥3.0	≥3.0	≥3.0	DBM	
Budget utilization rate of provincial LGUs increased	2021	n.d. <sup>a</sup>	Increasing						TBD	COA, LGUs
Percentage of LGUs with improved LDF utilization rate	2021	66%	Increasing						TBD	BLGF
Ratio of Local Source of LGU Income to Total Current Operating Income Increased	2021	10%	15%	15%	15%	15%	15%	15%	BLGF	
Growth in locally-sourced LGU income improved (%)	2021	10%	7%	7%	7%	7%	7%	7%	BLGF	
Y-on-y growth in social and economic service expenditures maintained above baseline (%)	2021	10%	12%	12%	12%	12%	12%	12%	BLGF	
NTA dependency ratio decreased	2021	71%	Decreasing						TBD	BLGF

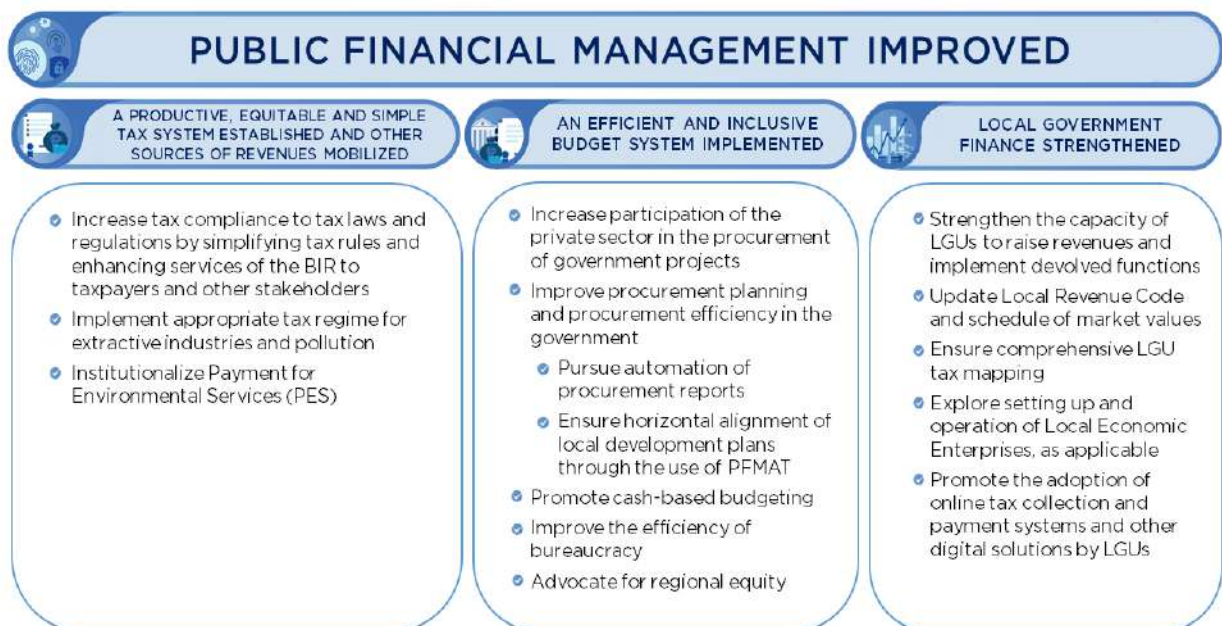
Note: a. N.D. means no regional data is available. Provincial data shall be consolidated to provide average regional estimate.

<sup>45</sup> Social services include education, culture & population control, housing & community sports/manpower development, health, nutrition and development, and social services and social welfare.

# Strategy Framework

To improve public financial management, the region shall pursue the following outcomes: (a) establish a productive, equitable, and simple tax system and mobilize other sources of revenues; (b) implement an efficient and inclusive budget system; and (c) strengthen local government finance (Figure 32). Thirteen strategies are identified to facilitate the attainment of these outcomes taking into consideration the careful use of the region’s resources, the increased participation of the private sector in public procurement, automation and digitalization of processes, full devolution, and the great need to capacitate LGUs in revenue generation and maximizing and diversifying different sources of income and financing options.

Figure 32 Strategy Framework to Improve Public Financial Management



## Outcome 1: A productive, equitable, and simple tax system established and other sources of revenues mobilized

***Increase tax compliance to tax laws and regulations by simplifying tax rules and enhancing services of the BIR to taxpayers and other stakeholders.*** Streamlining service processes and documentary requirements for the convenience of clients facilitate better tax compliance. Digital solutions are being implemented by the BIR as part of its 10-year Digital Transformation Roadmap to enhance its services with its adoption of the Internal Revenue Integrated System (IRIS) and the Enhanced Internal Revenue Stamps Integrated System (IRSIS). Even with mobility restrictions during the pandemic, total revenue collections in the region increased and surpassed the 2020 annual targets. This indicates the effectiveness of e-filing and e-payment channels in the region and efforts of the BIR to reach rural areas through accredited collection officers. Local government units shall also be capacitated and encouraged to develop their digital tax collection systems for more efficient and expedient transactions.

***Implement appropriate tax regimes for extractive industries and pollution.*** The mining industry continues to positively contribute to the regional economy. Among the other sub-industries in the region, only the mining industry was consistent in contributing positive growth in the past three years as it recorded a 1.86 percent share to growth in 2019 which further increased to 6.37 percent in 2021. Despite the industry's

lesser contribution to the GRDP as compared to the manufacturing and construction sub-industries, mining remains to be a source of livelihood and income in the region.

The implementation of an appropriate tax regime that balances economic benefits accrued to host communities and conserving the region's resources is crucial in ensuring that extractive industries such as mining would be sustainable and socially acceptable.

Preserving the region's ecological integrity remain to be a priority in ensuring sustainable development. Towards this end, the implementation of pollution control tax credits and incentives to limit domestic and non-domestic pollution generated from economic and industrial activities shall be explored by the government especially as growth centers in the region begin to urbanize.

***Institutionalization of Payment for Environmental Services.*** CAR hosts thirteen major river basins that supply water for irrigation, hydroelectric power generation, fisheries, and industrial and domestic use in and out of the region. The region is also a major contributor to the Luzon Power Grid owing to its substantial hydropower potential. This makes the preservation of the region's resources crucial not only for the region but also for adjacent regions that benefit from CAR's natural resources.



An equitable and sustainable benefit-sharing scheme in the form of economic compensation for host communities shall be institutionalized in CAR to aid in the conservation of watershed and forest areas in the region. Implementing a mechanism for Payment for Environmental Services (PES)

especially for hydro-projects is equally important to uplift the socio-economic conditions of Cordillerans providing environmental services. In order to initiate this, relevant government agencies shall conduct ecosystem valuation in the region to rationalize PES mechanisms.

## **Outcome 2: An efficient and inclusive budget system implemented**

***Increase participation of the private sector in the procurement of government projects.*** The private sector can be engaged in public procurement as both observers and bidders. The Bids and Awards Committee (BAC) of all government agencies shall be enjoined to ensure private sector representation in pre-procurement and pre-bid conferences for better transparency in public expenditure. Public procurement is a suitable avenue for the private sector to push for recommendations in improving inclusivity in government projects. This includes gender and other social considerations in procurement of goods and infrastructure projects, among others.

All Procuring Entities (PEs) shall also comply with the Government Procurement Policy Board (GPPB) guidelines to simplify bidding documents for goods and infrastructure projects and pursue digitalization. Improving the quality of public procurement systems of government agencies shall encourage more private sector participation in the bidding process to expand quality options for goods and services needed by the government.

***Improve procurement planning and procurement efficiency in the government.*** Public perception on government procurement tends to be unfavorable due to the perceived susceptibility of the process to corruption. In order to increase efficiency and transparency, automation of procurement reports shall be pursued to ensure completeness of vital information for PEs, service providers, and the public. The DBM has piloted the use of revised Procurement Reports in 2022 which shall be adopted by the region in the succeeding years.

Local government units shall ensure the horizontal alignment of their local development plans to allow priority-based and needs-based budgeting in the region. The DBM shall intensify efforts to promote the use of ePFMAT among LGUs especially since the system has become fully computerized for easier access. Relatedly, the DBM shall monitor and evaluate the implementation of the LGUs' PFM Improvement Plans (PFMIPs) in order to increase the score rating of LGUs in areas where they are weak. Improving procurement planning and efficiency through these sub-strategies allows

better use of limited financial resources in CAR.

**Promote cash-based budgeting.** The promotion of cash-based budgeting among NGAs and LGUs can facilitate increased budget utilization rate (BUR) given that contracts for projects and programs intended to be implemented for the fiscal year should be fully delivered, inspected, and accepted by the end of the same fiscal year in this scheme. The DBM shall take the lead in advocating and implementing cash-based budgeting in the region especially for NGAs. Technical assistance shall be provided to agencies towards the implementation of full cash-based budgeting by 2025.

**Improve the efficiency of bureaucracy.** Increased inter-agency collaboration especially for linked government processes promotes efficient service delivery and sharing and leveraging of resources to reduce costs, and ease the burden for the public in

transacting with government agencies. The Anti-Red Tape Authority (ARTA) which also opened a regional branch in Baguio City is at the forefront of pushing for regulatory reforms towards bureaucratic efficiency and streamlining government services such as the of processing business permits and related clearances, certifications, and authorizations (see Chapter 15).

**Advocate for regional equity.** CAR is among the regions with least shares from national government allocations due to the region's relatively small population. This, in part, limits the region's capacity to implement programs and projects that address specific needs. Advocating for regional equity in national government allocations and even infrastructure projects can prompt the region to contribute to the national economy more given greater opportunities to utilize government resources according to the region's priorities and needs.

### Outcome 3: Local government finance strengthened

**Strengthen the capacity of LGUs to raise more revenues and implement devolved functions.** The DILG's capacity development interventions to LGUs shall raise their competencies in revenue generation to help them implement their Devolution Transition Plans (DTP). Alternative sources of financing such as Private-Public-Partnerships shall be increasing promoted to local governments. Platforms to scale up and replicate best practices of LGUs in fiscal management in the region shall also be created.

Local government units shall adopt alternative financing options. This includes the issuance LGU bonds to raise money for public projects when applicable. As the Development Bank of the Philippines moves to pursue the establishment of an LGU credit rating system, more LGUs shall participate in the LGU bond market to explore and diversify fund sources aside from appropriations coming from the national government.

***Updating of Local Revenue Code and schedule of market values.*** LGUs shall update their local revenue code to improve and institute their tax policies and provide means for financial autonomy through more revenue generation initiatives. In addition, LGUs shall also be enjoined to update their schedule of market values to be used as basis for the appraisal and assessment of real properties. These strategies shall be geared towards making LGUs more financially self-reliant.

***Ensure comprehensive LGU tax mapping.*** Another strategy to improve local revenue collection is through comprehensive LGU tax mapping. This enables data-based decision-making and increase LGU income through the enforcement of real property tax.

***Explore setting up and operation of Local Economic Enterprises.*** One possible venture to increase local revenue is the setting up and operation of Local Economic Enterprises (LEEs) not provided by the market. These can range from public utilities, public markets, recreational facilities and even local hospitals and colleges. LEEs can be adopted by LGUs, when applicable, to provide wider access to affordable goods and services, augment LGU revenues, and attract investors.

***Promote the adoption of online tax collection and payment systems and other digital solutions by LGUs.*** LGUs shall be enjoined to adopt online tax collection and payment systems to provide their constituents more convenient options to process tax compliance requirements. This promotes ease of filing and paying of taxes which can increase locally-sourced revenues. As the trend for digitalization in various government processes are set to continue in the next six years, LGUs shall keep pace with the use of digital solutions to improve its delivery of services to the public.

# Legislative Agenda

Table 51 Legislative agenda to improve public financial management

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<p><b>Facilitate the passage of the bill on Cordillera regional autonomy</b></p>	<p>The pursuit of regional autonomy shall also facilitate the region's fiscal autonomy which will allow the region to maximize its financial resources according to its specific development needs.</p>	<p>RDC, CAR Congressmen</p>
<p><b>Enactment of LGU ordinances on Local Economic Enterprises</b></p>	<p>Local Economic Enterprises (LEEs) can be an option for LGUs in the region to fill-in service gaps not adequately provided by the market. With proper management, LEEs can help generate additional revenue for LGUs, overcome market failures such as monopoly, catalyze business activities in rural areas, and provide more affordable services to communities.</p>	<p>DBM, DILG, LGUs</p>

# 13

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**Expand and Upgrade  
Infrastructure**





## Chapter 13

# 13 Expand and Upgrade Infrastructure

Efficient and quality-standard infrastructure remains a major driver of the region's development. Its impact is on economic growth, poverty alleviation and environment sustainability. The Cordilleras aspire to lower household energy rates through production of sufficient green energy thereby becoming a renewable energy powerhouse of the North. Economic activities among provinces, highly-urbanized cities, and growth centers will be spurred with broadened network of high standard roads that incorporates sustainable design, suitable for the mountainous terrain of the region. Individuals are provided easy access to efficient, high-speed and reliable broadband connectivity, allowing them to participate in economic activities enabled by digitalization. Households have access to clean and safe water with adequate treatment facility and sanitation services. Cordillerans are provided access to quality education and health services through building resilient and modern social infrastructure facilities.

## Assessment and Challenges

### Assessment of Performance

One of the development pillars in CAR is regional integration. The goal is to link provincial capitals and key growth centers via an efficient and year-round transportation and communication network. The Cordillera Roads Improvement Project (CRIP) is the major program designed to achieve this goal. Before CRIP, one had to travel outside the region passing through regions I, II and III to reach the northern CAR provinces since most of the region's major roads were westbound to the Ilocos Region and east bound to Cagayan Valley. CAR provinces often get isolated during typhoons and most of its major roads in poor state. With the CRIP, the need to physically integrate CAR's provinces was realized. The CRIP includes 5 road sections of

the Cordillera trunkline, 9 lateral roads to Regions I and II, and 17 strategic roads.

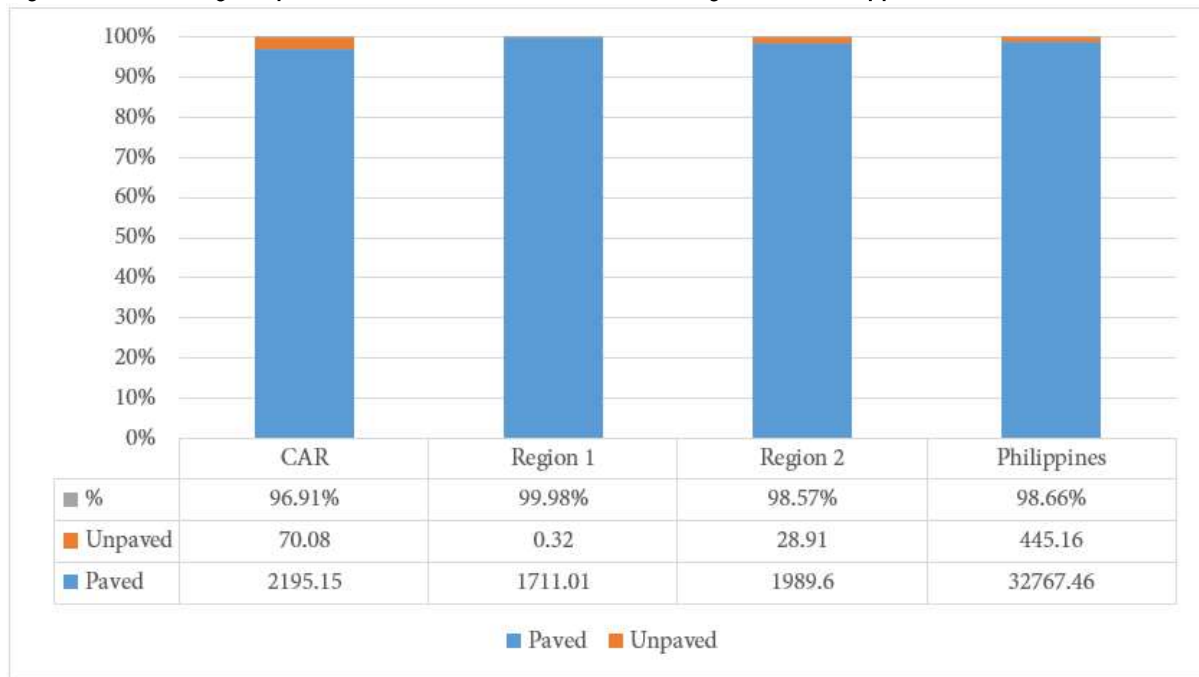
***The CRIP trunkline and laterals have been substantially completed.*** With an overall accomplishment of 96 percent as of October 2021 (See Map 14 Cordillera Roads Improvement Project Map). As a result, travel times are shortened by half, access is more reliable and travel is much safer and more comfortable.

***Infrastructure development significantly contributed to the growth of the industry sector in the region.*** The mobility restrictions caused by the Covid-19 pandemic decelerated the growth of the construction industry from ₱20.97 Billion in 2019 (pre-pandemic) to

₱19.69 Billion in 2020<sup>46</sup>. Despite this, the construction sector remained the second highest contributor to the overall growth of the industry sector with 28.72 percent share of the total of ₱68.54 Billion in 2020. Programs like the Build, Build, Build Program, and tourism and industry roads, also resulted to substantial strides in the area of physical integration in the region from 2017 – 2022 which made the Cordillera considerably at par with the neighboring regions in some major infrastructure areas.

**Pavement of national roads improved.** CAR lagged behind in paved national roads with 78.38 percent in 2016 while neighboring regions and the national average exceeded 90 percent. In 2021, CAR achieved significant gains with 96.91percent of its national roads paved which is comparable to the performance of neighboring regions (Figure 33).

Figure 33 Percentage of paved national roads in North Luzon Regions and Philippines: 2016, DPWH-RBIA



Source: DPWH RBIA

<sup>46</sup> Philippine Statistics Authority – Cordillera Administrative Region. Gross Regional Domestic Product by Industrial Origin 2018 to 2020 at Constant 2018 Prices. <http://rssocar.psa.gov.ph/car-grdp>



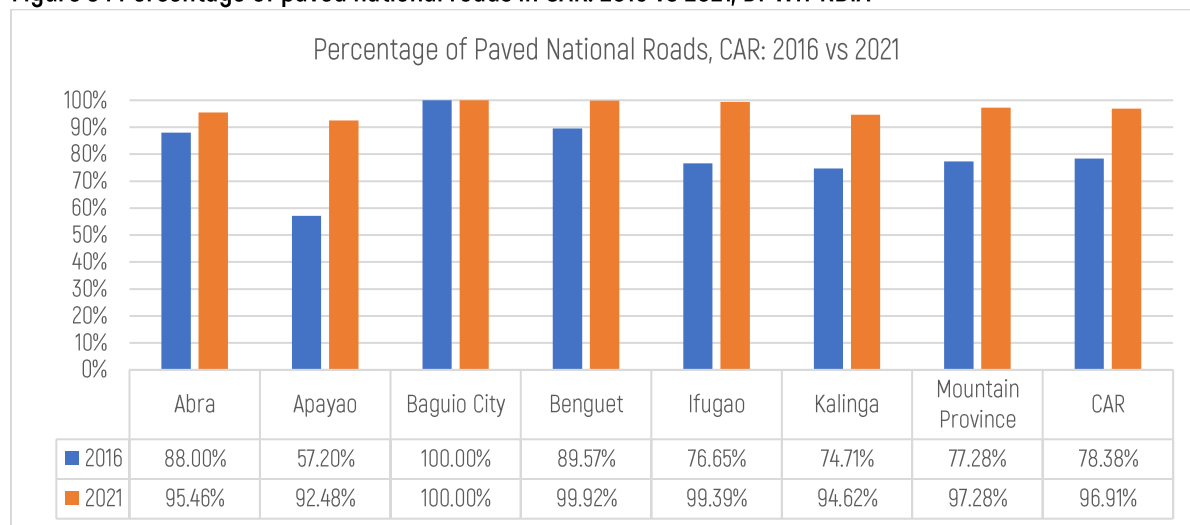
Map 13 Cordillera Roads Improvement Project Map



Increased budget allocations for road development in the region resulted to significant improvements in physical integration within and among the provinces

and city. Figure 33 shows that all CAR provinces and Baguio City achieved considerable progress in paving national roads in 2021 compared to 2016.

Figure 34 Percentage of paved national roads in CAR: 2016 vs 2021, DPWH-RBIA



Source: DPWH RBIA

**Road convergence program contributed to regional physical integration.** In 2021, about 92.60percent of provincial roads were paved, a significant improvement from the 54percent paved roads reported by LGUs in 2017. In addition, the implementation of road convergence programs such as the Tourism Roads Improvement Project (TRIP), the Roads

Leveraging Linkages of Industry and Trade (ROLL IT), and the BLISTT Outer Circumferential Road Project contributed to the expansion of regional physical integration with 502.654 kilometer stretch of completed roads. Additional 1,273.34 kilometers of local roads under these convergence programs are expected to be paved starting 2023 (Table 52).

Table 52 DPWH Implemented Road Convergence Programs , DPWH-CAR

Convergence Program	Total Length (km)		
	Completed	On-Going	Proposed (2023 onwards)
TRIP	333.086	23.324	593.19
ROLL IT	132.392	10.671	594.923
BLISTT	37.176	18.928	85.229
<b>TOTAL</b>	<b>502.654</b>	<b>52.923</b>	<b>1,273.342</b>

Source: DPWH-CAR

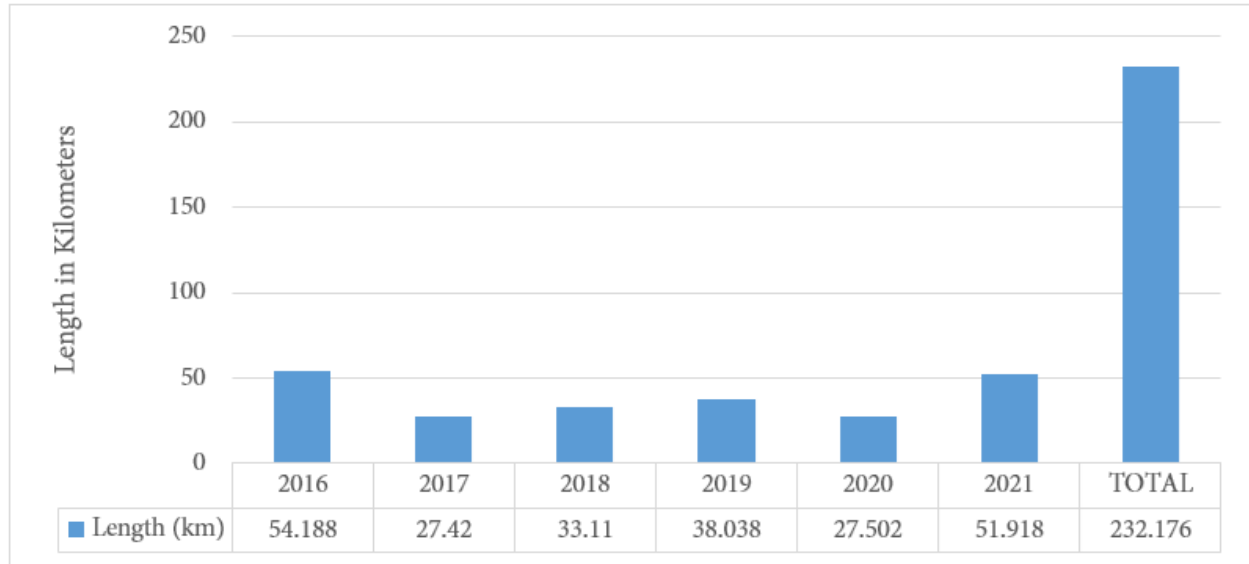
**More Farm to Market Roads implemented.** The Department of Agriculture implemented a

total length of 232.176 kilometers of paved farm-to-market roads in the various LGUs of

the region in 2020-2022 (Figure 35). These FMRs are connected to provincial or national roads thereby improving the integration of the network of roads within the region. These

FMRs reduced travel time for produce to reach “bagsakan centers” and reduced spoilage of agricultural produce during transport.

Figure 35 Length of Farm-to-Market-Roads Implemented by the DA-CAR: 2016 – 2022, DA-CAR

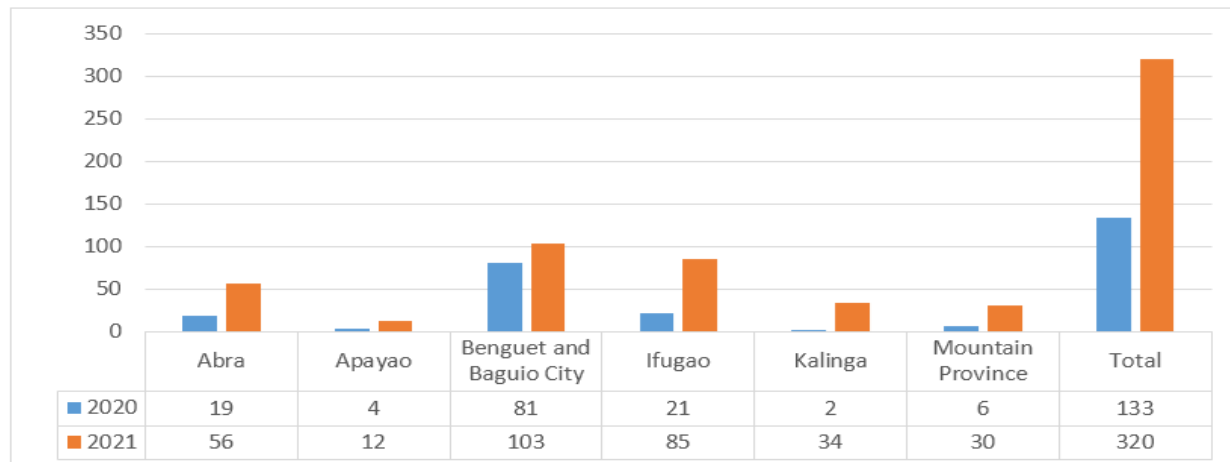


Source: DA-CAR

**Intensifying Information and Communications Technology support provided.** Intensive efforts to improve digital connectivity in the region were implemented to facilitate efficient access to information. Support infrastructure and services were provided by the Department of Information and Communications Technology as evidenced by increase in WiFi for All Active Sites in the Cordillera provinces (Figure 36). In 2021, a

total of 69 sites under the Regional GovNet in Baguio City and La Trinidad were activated. In terms of internet penetration in the barangays, only three LGUs namely: Baguio City, Benguet and Mountain Province have more than 75percent internet penetration rate compared to the other provinces which posted lower than 50percent at the end of CY 2022.

Figure 36 Free Wifi for All Active Sites in CAR, 2020 to 2021



Source: DICT-CAR

**Irrigation coverage steadily increased.**

Competitive and Sustainable Agriculture and Fisheries Sector was aimed as one of the goals and objectives for the planning period 2017-2022. The agricultural sector has always been the provider of vital raw materials and food for the rest of the economy. Developing and maintaining irrigation systems that will support the agricultural development program is a vital infrastructure support component to achieve the goal. Irrigation development is slowly but steadily being developed in the region. An average rate of 2percent annual increase in new irrigable areas are being serviced by the irrigation projects implemented throughout the region. Of the 185,406 hectares potential irrigable area of the region, about 109,390 hectares were irrigated as of the 3<sup>rd</sup> quarter of 2022. The region has four National Irrigation Systems inspite the region being host to 13 river basins. (See Map 16.1 CAR Sub-watersheds in Chapter 16) Inter-regional irrigation projects being implemented mostly irrigate farm areas in the lowlands of neighboring regions.

**Expanded Coverage of Energy Services provided.**

Electrification service coverage in CAR has relatively improved through the years with 93percent or equivalent to 359,069 household connections as of December 2021. This is 1percent lower than the average national household electrification rate. Electrification rate refers to the percentage of people in a given area that have relatively simple stable access to electricity. The government’s forefront policies on renewable energy (RE) and the unwavering efforts of the private sector have secured critical investment for the development of renewables since the implementation of the RE Act (Table 13.2). Also, in line with the government’s initiative on the *Ease of Doing Business Act (RA 11032)*, the improved transparency and shortened processing time for the issuance of the RE service contracts and permits helped the private sector investments for renewable energy. In CAR, the following RE projects have been endorsed and awarded with the Certificate of Energy Projects of National Significance (CEPNS):

Table 53 Awarded Hydropower Projects, CAR, as of December 2021, DOE

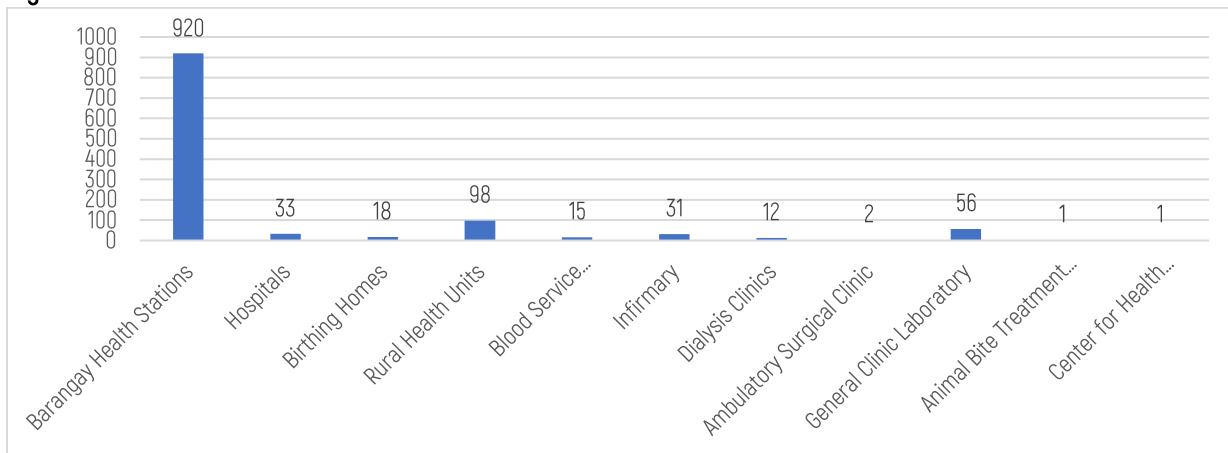
Province	# of Projects	Stage of Contract			Potential Capacity (MW)	Installed Capacity (MW)
		Pre-Dev	Development	Commercial		
Abra	1	1	-	-	5	-
Apayao	5	3	2	-	856	-
Benguet	36	15	9	12	2,112.84	300.25
Ifugao	19	7	10	2	454.71	1.1
Kalinga	17	10	6	1	534.73	1
Mountain Province	12	-	11	1	32.85	14.139
<b>Total</b>	<b>90</b>	<b>36</b>	<b>38</b>	<b>16</b>	<b>3,996.13</b>	<b>316.489</b>

Source: DOE website

The Energy Efficiency and Conservation Office in the LGUs are yet to be established, this is for LGUs participation in the government's program of leading by example in conserving energy by reducing electricity consumption through reasonable and efficient use of electricity.

**Accelerated implementation of Social Infrastructure.** Substantial gains in the implementation of Social Infrastructure Support were established from 2017-2022. Grassroots support particularly 920 barangay health stations were established. These covers 78.3percent of the total 1,176 barangays in the region. Additionally, other private and public-owned social infrastructure were established across the region (Figure 37).

Figure 37 Number of Health Facilities in CAR



Source: DOH Health Facilities registry

## Challenges

### ***Integration of disaster-resilience, gender and culture-sensitive design in infrastructures.***

There is a need to construct infrastructure facilities that are disaster resilient, GAD compliant and culturally- acceptable. Hence, the designs of support infrastructure should consider the unique topography, environment hazards and indigenous culture of CAR. The designs should similarly consider equal utilization by strictly complying to the harmonized GAD guidelines on infrastructure projects.

### ***Road-Right-of-Way and Unpredictable Weather Conditions persists as major project implementation issues in the region.***

Road right of way issues remains to be a challenge in the implementation of infrastructure programs in CAR. Resolution of ROW issues is a complex and time-consuming undertaking which often requires the need for continuous negotiations among stakeholders from various sectors including family members that are affected. Weather related issues remains to be regular set-backs in the implementation of projects.

Unpredictable weather, specifically in rain forest areas, radically shorten the implementation window of infrastructure projects. Better planning considering emerging climate related issues should be upheld to ensure that weather related suspensions are lessened.

***Urban-centric digitalization.*** While there is improvement in the establishment of Free WiFi

in the region, these initiatives are observed to be concentrated in the highly-urbanized areas of La Trinidad in Benguet and Baguio City. Additionally, the subscription-based method of providing free WiFi services to public areas is seen to challenge the sustainability of implementing digital connectivity strategies and measures in the region. Funding for free Wi-Fi sites are dependent on the fees being collected by the National Telecommunications Commission.

### ***Underutilized Air Transport potentials and the need to improve air facilities.***

Chartered, cargo and military flights continued to be catered in the lone community airport in the region – the Baguio Loakan Airport – while the absence of commercial flights remains as an untapped potential of the region for the tourism sector. However, domestic commercial flights with routes between the cities of Baguio and Cebu is expected to boost international and local tourism in the region with Cebu City being an international gateway. Moreover, the commercial utilization of the Baguio Loakan Airport sets to improve the vibrancy of the local economy in the areas of supply chain and the flow of trade, tourism and investment, and eventually job generation.

### ***Inadequate Solid Waste Management, Waste and Sewerage Facilities.***

Solid waste management remains to be a problem for the region. The terrain of the region limits the capability of LGUs to implement the Solid Waste Management facilities in their locality.

In Baguio City alone, the solid waste management facilities have been restricted to waste collection staging areas. The city still resorts to hauling its garbage to other areas outside of the City.

Waste water facilities are also lacking in the region. Existing waste water facilities of LGUs cannot even cater to the total need of the LGU. In the area of provision of safe water to households, there are only 9 organized water districts in the region considering that there are 75 municipalities and 2 cities. Households in areas that are unserved by water districts utilize untreated water from shallow wells, springs, deep wells and other surface ground water sources for their domestic needs. The 2018 Census of Philippine Business and Industry (CPBI) report of PSA shows that CAR is among the bottom regions with the lowest number of Water Supply; Sewerage, Waste Management and Remediation Activities Establishments, second only to BARMM. A total of 18 private and public water facilities in CAR are listed in the report.

***Inequity in the distribution of benefits from the region's water resources.*** The region's watershed had been supporting a majority of the water needs of regions 1, 2 and 3. Several big irrigation projects that were earlier implemented showed that these provided lesser or no irrigation coverage for the region considering that the headwaters and facilities are located in CAR wherein greater environmental ramifications were experienced during project implementation. The reason behind is larger farms are situated in the lower elevations of neighboring regions as opposed to

the situation of CAR where more are marginalized farms due to the topography. In the planning of these development projects, the concerns and needs of the beneficiaries of host regions should be given greater attention. It is accepted that the goods and services provided by these projects are necessities for everyone. But, equity in the benefits from these irrigation development projects should be distributed according to the level of need and contribution of a locality.

***High cost and low social acceptability remain as bottleneck for renewable energy development in the region.*** The high development cost, stringent FPIC process and low social acceptability challenge renewable energy development. The resistance to further development of hydro power projects is due to potential flooding, destruction of agricultural areas and disruption of communities in affected areas. Given the issues, there is need to explore small or mini hydro, and run-of-river projects that are more manageable.

***Support infrastructure in the health and education sector needs to be intensified.*** The School Building Program, a convergence program between DPWH and DepEd is still beset with issues on building permits and occupancy permits. Completed SBP facilities are yet to be formally turned over to the DepEd. Additional classrooms are still needed throughout the region in order to achieve the ideal planning parameters for classroom to student ratio of 1:40 for junior and senior high school and lower for elementary levels. On health infrastructure, the region still lacks specialized facilities catering to kidney

transplant, psychiatric care, special clinical laboratories, and drug abuse treatment facilities among others. Across provinces, Ifugao needs to establish its provincial hospital.

## Targets

With expanding and upgrading existing infrastructure in the region, efficiency of services through better designed and disaster-resilient infrastructure should be elevated. With the long-term goal of inclusive growth, the region needs to level up in becoming a key player in the renewable energy sector and in the global competitive digital economy. Enhancement of the economic areas where the region has an advantage with other regions like industries related to energy, water, tourism and knowledge is also critical. Below are the core indicators being targeted in this medium-term plan:

Table 13.5 Plan targets to expand and upgrade infrastructure, 2023-2028

Outcome Indicators	Baseline		Targets							EOP	Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028			
percent of paved provincial roads increased	2021	92.6%								100	DPWH, DA, LGUs
Ratio of actual irrigated area to the total potential irrigable area increased	2022	59	63	67	71	75	79	83	83		NIA
No. of organized water districts increased (operational)	2022	9								Increased	LWUA
CAR's hydropower contribution to the Luzon Grid increased (MW)	2022	316.489 MW								Increased 666.03 MW (982.519 MW)	DOE

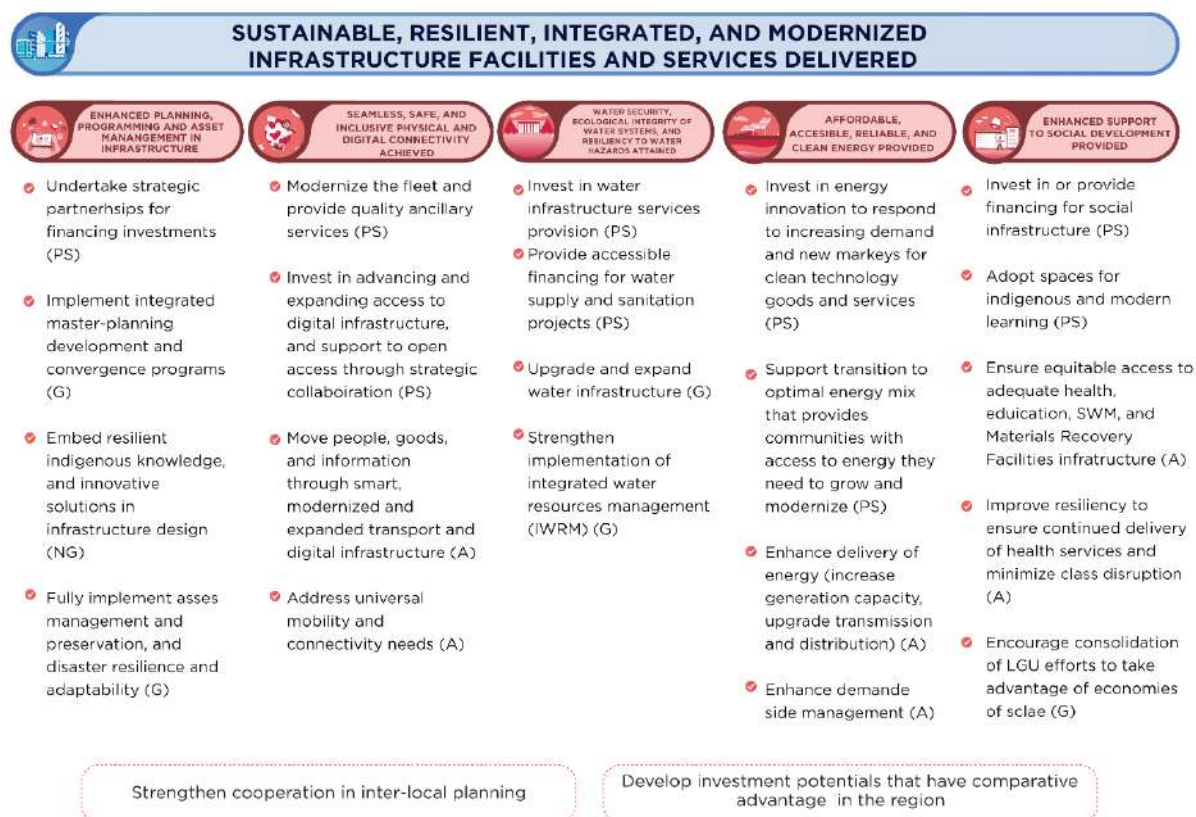


Outcome Indicators	Baseline		Targets							Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	EOP	
percent number of sitios serviced with electricity increased	2022	2.22	1.93	1.90	1.86	1.83	1.80	1.76	1.76	Elec. Coop.
number of HH serviced with electricity increased	2022	3.78	3.42	3.33	3.23	3.13	3.03	2.94	2.94	Elec. Coop.

# Strategy Framework

The expansion and upgrading of infrastructure requires the strengthening of cooperation in inter-local planning. Stakeholders from all development sectors representing both the regional and local governments and the private sector should be involved in the planning, programming and monitoring of development infrastructure projects. It also underscores the development of investment potentials in which the region has comparative advantage. With these bedrock strategies, the concerted effort among the private and public sectors, the regional and local government, will be assured which is vital in realizing the desired outcomes on enhanced planning, programming, asset management and in achieving seamless, safe, and inclusive physical and digital connectivity. Balancing cultural sensitivities, private sector participation and the social responsibilities of both public and private enterprises will spell out the success in harnessing our energy and water resources. Thus, harmonization of local plans and close coordination between stakeholders would ensure synergy and achievement of the strategic objectives of the plan.

Figure 13.6 Strategy Framework to Expand and Upgrade Infrastructure



## Outcome 1: Enhanced Planning, Programming and Asset Management in Infrastructure

**Undertake strategic partnerships for financing investments.** The potentials of Public Private Partnership (PPP) in the region particularly in project funding, implementation and management are numerous. Local and international private companies started funding government projects and demonstrates the trust of the private sector in the fiscal potentials through partnerships with the national and local government. Baguio City for one manifested initiatives to initially develop passenger cable car system connecting Baguio City, La Trinidad and Tuba and eventually other adjacent municipalities utilizing the PPP

mode. The government will benefit from the various expertise and financial partnerships considering that they are expected to have a bigger budget margin for PPP endeavors due to the full devolution efforts

### **Implement integrated master-planning development and convergence programs.**

Integrated local master planning will ensure that the LGUs and the region come up with appropriate development strategies and critical programs and projects that focuses on promoting inter-LGU cooperation and development. The CAR RDP targeted the

formulation of two master plans. First is the “Cordillera National Road Conversion Master Plan” which envisions better planned and enhanced physical interconnectivity and network of local roads that are proposed to be converted into national roads. The plan will ensure the maximum utilization, preservation, cultural considerations like relocating projects that would damage cultural heritage sites, disaster resilience and proper network or linkages of national roads. Also, the “Updated Cordillera Energy Master Plan” is programmed outline strategies in developing the region’s vast energy potentials. Being home to 13 river systems, energy development needs to be carefully planned to consider balance the economics of energy development with cultural sensitivities social acceptability, and environmental sustainability.

***Embed resilient, indigenous knowledge, and innovative solutions in infrastructure design.***

Disaster resilient infrastructure is a critical aspect in achieving sustainable development. The region is prone to rain induced and earthquake induced disasters. Hence, strategically designed public infrastructure that can withstand the impact of natural disasters will greatly benefit the region by reducing the impact of natural disasters to infrastructure.

***Fully implement asset management and preservation, and disaster resilience and adaptability.***

Enhancing infrastructure assets including appropriate rehabilitation and maintenance is necessary in order to ensure utmost utilization and attaining maximum useful life of these public assets.

## **Outcome 2: Seamless, safe, and inclusive physical and digital connectivity achieved**

Realizing seamless physical and digital connectivity in the region poses a great challenge due to its mountainous terrain. Digital connectivity can be enhanced through collaborations and partnerships with the private providers. The implementation of a regional fiber backbone under the National Broadband Plan will be promoted. Parallel to this, partnerships with electric cooperatives and GOCC in utilizing dark fibers from their established fiber optic cables will expand local digital networks.

Physical integration will be expanded by connecting GIDAs to provincial and national roads. Careful planning and programming of local roads must assure interconnectivity with other local roads networks leading to government facilities, tourism sites and other vital support infrastructure.

***Modernize the fleet and provide quality ancillary services.*** Realizing the full implementation of the Public Utility Vehicle Modernization Program (PUVMP) and the Electric Vehicle Industry Development Act (EVIDA) requires cooperation among the private and public transport service providers. Ancillary services that supports these programs need private sector led technologies and services as well. Cashless transactions in the transport sector is progressing.

***Invest in advancing and expanding access to digital infrastructure, and support open access through strategic collaboration.*** The Information and Communications Technology (ICT) sector is a predominantly private led industry. Government

intervention is usually implemented in underserved and unserved areas. In order to develop and sustain availability of ICT services in these areas, the concerted efforts of the private sector in expanding programs of Inter Service Providers and Telecommunication Companies in the CAR provinces will continually be supported and advocated.

***Move people, goods, and information through smart, modernized and expanded transport and digital infrastructure.*** Mobility of people and the transport of goods is very dependent on the availability and functionality of physical and digital support infrastructure. However, the region's present infrastructure are exposed to the effects of climate change and improper utilization which results to higher maintenance. Thus, expansion and modernization of these assets is essential in maintaining the development gains. The region is looking to expand the Cordillera Local Roads Improvement Project (CRIP) to consider linkages with emerging growth centers. The implementation of smart infrastructures will also assure prolonged and full utilization of our infrastructure assets.

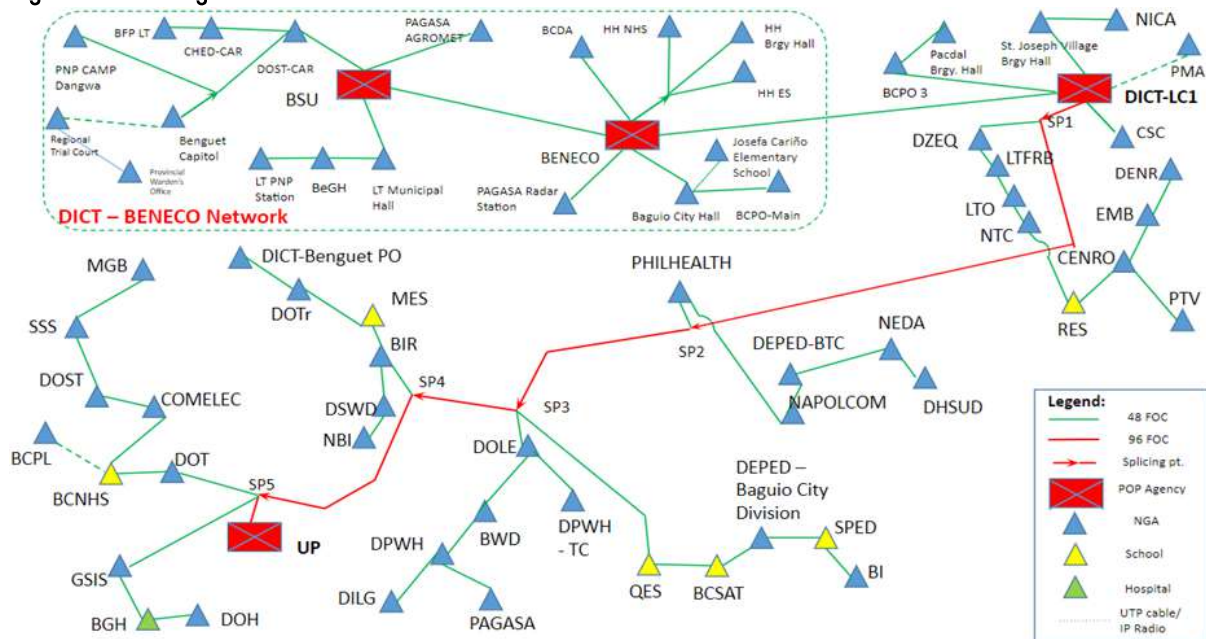
***Development of potential air facilities and improvement of existing air assets.*** CAR is the only land-locked region in the country whose primary access is through its roads. The importance of the Baguio Airport, the only functioning community airport in the region, has proven its important role as a support facility during disasters and transporting passengers. The modernization and improvement of the lone air facility in the

region would require compliance to the standards of its current classification of being a Principal Class 2 airport or even better.

Domestic commercial flights with routes between the cities of Baguio and Cebu is expected to boost international and local tourism in the region with Cebu City being an international gateway. Potential connections with the Clark International Airport should also be considered. Moreover, the commercial utilization of the Baguio Loakan Airport sets to improve the vibrancy of the local economy in the areas of supply chain and the flow of trade, tourism and investment, and eventually job generation.

**Address universal mobility and connectivity needs.** Universal mobility and connectivity can only be achieved if relatively everyone has access to reliable transportation and digital services. Mobility is necessary in almost all our economic, social and as well as personal activities. GAD compliant transportation infrastructure is imperative. The region is also looking to the establishment of Provincial Government Digital Networks in the capital towns to ensure digital connectivity and provision of digital services from the local government.

Figure 38 CAR Regional GovNet



Source DICT-CAR

## **Outcome 3: Water security and ecological integrity of water systems and resiliency of water hazards attained**

### ***Upgrade and expand water infrastructure.***

The region has long been upheld as the watershed cradle of Northern Luzon, being host to 13 sub-watersheds (See Map 15 CAR Sub-watersheds in Chapter 16). Irrigation development needs to accelerate through the development of other potential NIS. NIA should consider the region's unique topography and expand the technical definition of irrigable land to consider agricultural areas in higher degrees of slope in order for existing and potential agricultural lands to be included.

Moreover, the National Irrigation Administration should continue to supplement the LGU efforts in developing Communal Irrigation Systems since a large part of the irrigable areas in the region are marginalized and located at higher elevations.

### ***Invest in water infrastructure services provision.***

The Philippine Water Supply and Sanitation Master Plan (PWSSMP) mandates the LGUs to develop their WSS programs and projects. The LGUs in turn can utilize inter-LGU partnership and PPP. Hence, LGUs should consider the delivery of safe and potable water to the households utilizing level 3 water systems which should

be managed by the LGU or through local water districts. There are only 9 water districts in the region. There is a need for the establishment of water districts in 1st to 3rd class LGUs to ensure the delivery of safe potable water and properly maintain the water supply infrastructure in their localities.

### ***Strengthen implementation of integrated water resources management (IWRM).***

The region will contribute to this national initiative through the participation of LGUs, GOCCs and private water enterprises in conducting research and development in the water development sector. Agencies involved in the utilization of water resources (i.e., NIA, DOH, LGUs) will explore multiple utilization of water resources whenever possible. NIA can venture into deep well sources for irrigation but can also be utilized for domestic specifically in geographically isolated and disadvantaged areas. In the context of promoting coordinated development, inter-regional projects will be properly assessed to address equity in the utilization of water resources considering that the region's water resources is utilized more by our neighboring regions.

## Outcome 4: Affordable, accessible, reliable and clean energy provided

**Invest in energy innovation to respond to increasing demand and new markets for clean technology goods and services.** The government shall provide a conducive environment to encourage private sector investments in game-changing innovations that will facilitate entry of cleaner energy in the market and respond to increasing demand. The region will update the Cordillera Energy Master Plan to lay-out the strategies to fully utilize the energy potentials in the region. The large portion of the energy potential of the region remains to be untapped. Increasing renewable energy generation is a major thrust of the current administration as well. Developing the region's vast energy potentials needed to be carefully planned out to consider balancing development objectives with that of cultural sensitivities and social acceptability. The updated masterplan will provide for the inventory of the region's mini to small hydropower potentials in the region, and the region's energy potential as well. CAR's energy resources both existing and potential is equivalent to 3,996.14 MW, when fully developed will contribute significantly to the Luzon Grid.

***Facilitate the entry of more renewables, intermittency problems shall be addressed.***

The mandatory and preferential dispatch of RE is expected to facilitate the increase in RE investments. Capacity markets shall be developed to allow for more generation plants with flexibility to adjust generated output as

needed to compensate for the intermittency of renewable sources. Electricity generated from sources such as solar, wind, and wave are intermittent as they are not continuously available due to external factors that cannot be controlled.

***Enhance delivery of energy, increase generation capacity, upgrade transmission and distribution.***

The government will endeavor to enhance the market's ability to coordinate investment in generation, transmission, and distribution infrastructure and achieve total electrification across the region. It will rationalize bureaucratic processes and remove local-central government impasse when undertaking investments in generation. The LGU Energy Code also espouses a convergent framework to facilitate putting-up energy projects. Energy will be delivered to consumers in off-grid or missionary areas.

The Cordillera Regional Development Council shall coordinate measures to fast track the development of renewable energy for CAR to be among the major renewable energy producer in the country. Focus shall also be on the 74 renewable energy projects with a 3,996.14 MW potential capacity on board to full commissioning by the DOE.

***Enhance the demand side management.*** The government will lead energy efficiency and conservation efforts through the following policies: a) full implementation of the Energy

Efficiency and Conservation (EEC) Act so that energy efficiency will contribute to improving national productivity at the most reasonable cost, b) local government units will come up with their Local Energy Efficiency and Conservation Plan (LEECP) aligned with the National Energy Efficiency and Conservation Plan (NEECP), c) establishment of the Energy Efficiency and

Conservation Office in the LGUs as provided in RA 11285 will be enjoined to oversee and monitor energy efficiency and conservation, and d) Energy Conserving Design on Buildings for the construction of new buildings will also be implemented.

## Outcome 5: Enhance support to social development provided

***Invest in or provide financing for social infrastructure.*** The provision of social infrastructures like school, health facilities will be in accordance to standards. As such, classrooms shortages will be addressed, while adhering to ideal classroom size to maintain safety and health protocols and ensure optimal learning environment. The design and safe location of these infrastructures will also be a critical input in the identification of the projects.

***Adopt spaces for indigenous and modern learning.*** The need to modernize learning spaces and ensure adequate, safe, and resilient facilities for students. Adhere to ideal classroom size to maintain safety and health protocols and ensure optimal learning environment. In all schools, universal access to basic utilities such as electricity, internet will be provided with learning spaces to include basic facilities, classroom meeting space, library, recreation spaces, science laboratories. A well-designed learning environment promotes collaboration, communication and interpersonal learning in

students and encourage discussion and teamwork.

***Ensure equitable access to adequate health, education, SWM and Materials Recovery Facilities infrastructure.*** A comprehensive needs assessment of critical health facilities involved in service delivery networks will be regularly conducted. The assessment results will form part of the basis for determining which facilities will be constructed upgraded, or expanded under the Health Facilities Enhancement Program (HFEP). National government support for health infrastructure will be guided by the National Allocation Framework, which gives priority to low-capacity and high-gap areas. To ensure equitable access to quality and affordable health care goods and services, proposed interventions will prioritize GIDAs, marginalized populations, and indigenous people communities. Multisectoral partnerships will be pursued to deliver telemedicine, remote health care services, emergency medical service through



ambulance and patient transport services, and other innovations for health.

***Improve resiliency to ensure continued delivery of health services and minimize class disruption.*** The LGUs will identify locations within their jurisdiction for health facilities, school buildings and evacuation centers taking into consideration not only accessibility and demand, but also long-term resilience to natural and anthropogenic hazards and risks, including those associated with climate change. National and local government funding, coupled with multi-sectoral partnerships, will be pursued to adequately provide for the construction, retrofitting, and repair of health facilities and schools; to better withstand the impact of hazards and calamities; and to minimize disruption of services or classes. In every LGU there will be permanent disaster-resilient evacuation centers, equipped with adequate Gender Equality, Disability and Social Inclusion (GEDSI)-responsive basic facilities constructed for families displaced during emergencies.

***Encourage consolidation of LGU efforts to take advantage of economies of scale.*** The Department of Environment and Natural Resources will assist the LGUs in consolidating their efforts, services, and resources for the purpose of delivering common facilities for waste management to take advantage of economies of scale. This will alleviate their budget burden for capital-intensive projects and enhance the financial viability of these projects, thus making them attractive to private investors.

# Legislative Agenda

CAR seriously pursues the development of its energy potential and the expansion and upgrading of its physical and digital assets. Nonetheless, there are still important support mechanisms that needs to be addressed through legislation in order to attain the goals and objectives of our development plan. Hence, listed below are among the priority legislative agenda that will support the policies and programs in this medium term and beyond.

**Table 54 Legislative agenda to expand and upgrade infrastructure**

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>Creation of a Department of Energy Regional Office/Unit for CAR</b>	CAR has vast energy potential compared to its neighboring regions, that if maximized can provide significant power for the Luzon Grid. In order to facilitate the energy development aspirations of the region, a regional office of the Department of Energy is needed.	RDC
<b>Streamlining of LGU licensing and permit processes for cell sites</b>	There should be a uniform process and number of permits to be issued by the LGUs for TelCos who wish to establish their services in the LGUs.	LGU, DTI, DICT
<b>Creation of law requiring the 1st to 3rd class municipalities to establish their own local water districts and the creation of the Department of Water Resources</b>	Effective water supply and sanitation (WSS) institutions are needed to address the regulation of water consumption and address challenges and gaps in water sanitation. Less than 50percent of Filipino HHs are connected to proper water systems (Level III). The remaining HHs have to fetch water from a source. The creation of a law requiring water districts in more progressive LGUs will help address the gaps in water availability and sanitation.	LGUs, LWUA, Congress

# 14

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## **Ensure Peace and Security and Enhance Administration of Justice**

**14.1 Ensure Peace and Security**

**14.2 Enhance Administration of  
Justice**



## Chapter 14

# 14 Ensure Peace and Security, and Enhance Administration of Justice

The region's preferred future is characterized by a high-trust society where its people are protected from any threat and where justice is efficiently managed. The gains of the Cordillera region in advancing peace and security will be sustained and felt by the vulnerable sector and communities in geographically isolated, disadvantaged and conflict-affected areas. The administration of justice is efficient and the justice system recognizes indigenous practice of settling disputes as an alternative platform for conflict resolution.

## 14.1 Ensure Peace and Security

Efforts to ensure peace and security in the region will be strengthened. This will be pursued through a whole-of-society approach encouraging more active participation from the private sector and the community. Affirmative actions on law enforcement and disaster response will be strengthened for a livable and peaceful community and resilient from any threat or calamity.

## Assessment and Challenges

### Assessment of Performance

#### *Communities in conflict-affected and conflict-vulnerable areas developed.*

Convergence and complementation of programs among agencies facilitated efficient delivery of services in Communist Terrorist Group (CTG)-cleared barangays and geographically isolated and disadvantaged areas (GIDAs). A total of 48 CTG-cleared barangays in Abra, Ifugao, Kalinga and Mountain Province were recipients of the Support to Barangay Development Program of the National Task Force to End Local Communist Armed Conflict (NTF-ELCAC)

from 2021-2022. The funds were utilized for farm-to-market roads, school buildings, and water and sanitation systems aimed of improving the socio-economic conditions of the recipient barangays.

#### *Reintegration programs for former rebels and their families implemented.*

The whole of nation approach was effective in encouraging former rebels to come back to the folds of law. Aside from remuneration for surrendered firearms, livelihood assistance, skills training, financial assistance and

psycho-social services were also provided to enable the former rebels and their families to be integrated to the community.

***All forms of criminality and illegal drugs significantly reduced.*** Crime incidents in the region have been decreasing annually with the intensified law enforcement efforts. From a high 12,964 crime incidents in 2016, the region's crime volume decreased by 75 percent equivalent to 3,222 crime incidents reported as of October 2022. The sustained efforts against criminality coupled with better police to population ratio of 1:220, the lowest ratio nationwide, had reduced both index and non-index crime rates in the region.

A total of 770 barangays were validated as drug-cleared while 329 were confirmed as drug-free barangays as of October 2022. Of the 1,178 barangays in the region, there remains 46 drug-affected barangays, majority of which are in Abra. Aside from the joint efforts of the Philippine Drug Enforcement

Agency (PDEA) and the PNP Regional Office Cordillera (PROCOR), the anti-drug abuse councils (ADACs) at the local levels were also organized and made functional to sustain the region's commitment to anti-illegal drugs campaign.

***Public safety from fire incidence sustained.*** Continuous inspection of buildings and establishments regionwide is being conducted to ensure public safety of communities from fire. In 2021, the region reported 230 fire incidences with damaged value amounting to Php 45 million. This is lower than the 289 incidences of fire in 2017 with value of damages amounting to Php 61 million.

The Bureau of Fire and Protection (BFP) intensified efforts against destructive fires and was able to inspect 65,793 buildings and establishments regionwide in 2021, surpassing its 64,207 target.

## Challenges

***Persistence of gender-based violence.*** The region's crime index from 2017-2022 shows that rape is among top highest index crimes committed from 2017 to 2022.

***Re-emerging marijuana plantation sites continues.*** Despite the aggressive operations on illegal drug eradication, marijuana plantation continues to emerge particularly in Benguet and Kalinga as this hemp grows best in mountainous areas. Millions-worth of marijuana are confiscated and burnt yearly

but its cultivation persists. Moreover, violations related to illegal drugs including marijuana remain as the top non-index crime in the region from 2017-2021.

***Limited ICT capability of the police force to effectively respond to cyber-related crimes.*** While police to population ratio in the region is above national standard, ICT equipment and skills of security personnel need to be upgraded to boost cybercrime response. Cybercrime incidents such as online scam

emerged especially at the height of the COVID-19 pandemic when people shifted to online activities and transactions thus the need to strengthen crime prevention in the cyberspace.

**Agreement of the Government of the Philippines – Cordillera Bodong Administration – Cordillera People's Liberation Army (GPH-CBA-CPLA) not yet fully realized.** Peace process with the CBA-CPLA was sustained and is focused on strengthening implementation of the Normalization program particularly on

socioeconomic interventions and for former CBA-CPLA members as peace advocates. However, there is need for a database to profile former members of the CBA-CPLA to determine all qualified beneficiaries and identify appropriate social and economic services under the normalization program. Government assistance programs such as the PAMANA have been limited to few identified members of the CBA-CPLA and their immediate next of kin.

## Targets

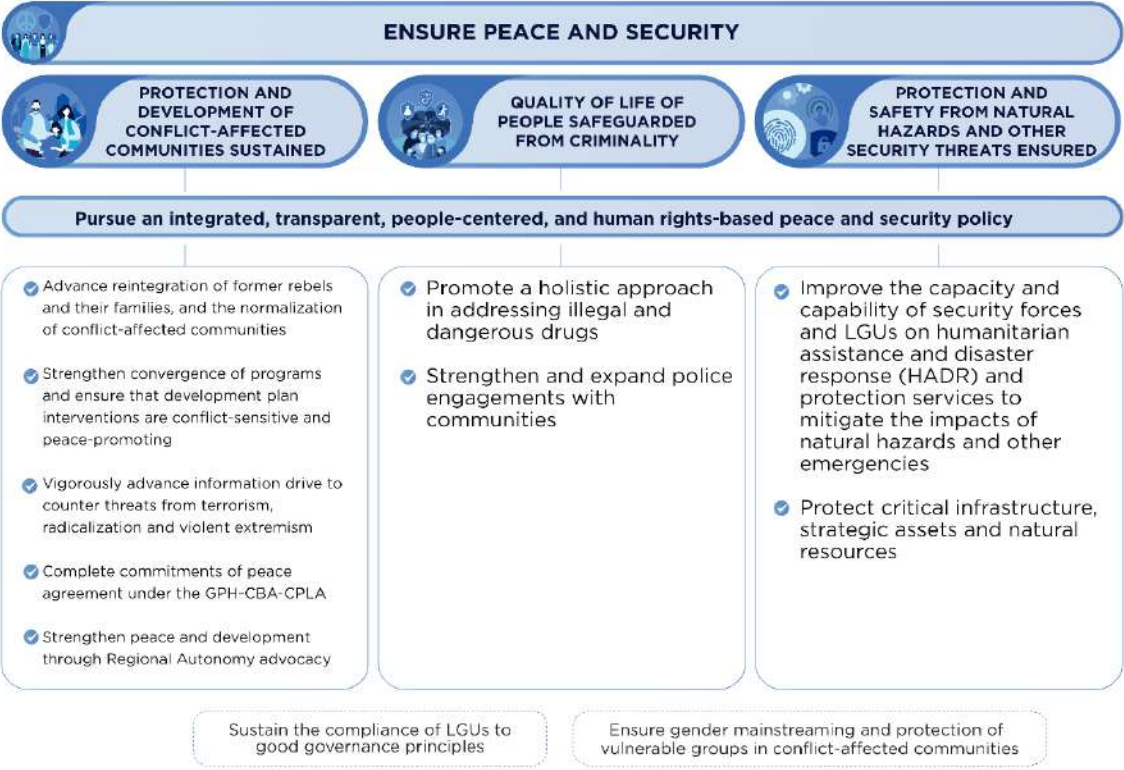
Table 55 Plan targets to ensure peace and security

Outcome Indicators	Baseline	Targets						Lead Agency
	Value (Year)	2023	2024	2025	2026	2027	EOP (2028)	
<b>Sub-Chapter Outcome 1:</b> Protection and development of conflict-affected communities sustained								
Number of CTGs neutralized	36 (2022)	36	36	36	36	36	36	PA, PROCOR
<b>Subchapter Outcome 2:</b> Quality of life of people safeguarded from criminality								
Average monthly index crime rate reduced	17.58 (2022)	54.1	53.5	52.89	52.28	51.67	51.07	PROCOR
Crime solution efficiency rate improved	82.06 (2022)	63.27	63.84	64.41	64.98	65.55	66.12	PROCOR
Police to population ratio	1:248 (2022)	1:250	1:500	1:500	1:500	1:500	1:500 (2020 population)	PROCOR
<b>Subchapter Outcome 3:</b> Protection and safety from hazards and other threats ensured								
Firefighter to population ratio	1:1542 (2021)	1:2000	1:2000	1:2000	1:2000	1:2000	1:2000	BFP

# Strategies

Ensuring peace and security is fundamental to economic transformation. The region will consistently pursue peace by mainstreaming peacebuilding and development interventions and utilizing a conflict-sensitive-and-peace-promoting paradigm in government programming. Towards this end, the gains of the peace processes in conflict-affected communities will be sustained; security and law enforcement operations, cybersecurity and disaster response will be strengthened; and the country’s territorial integrity, maritime rights, and entitlements will be protected. These outcomes will be realized through an integrated, transparent, people-centered, and human rights-based peace and security policy, supported by cross-cutting strategies.

Figure 39 Strategy Framework to ensure peace and security





## **Outcome 1: Protection and development of conflict-affected communities and conflict-vulnerable areas sustained**

***Advance reintegration of former rebels and their families, and the normalization of conflict-affected communities.*** The continuous disbandment of former rebels and demilitarization of firearms and munition will be strengthened and implemented. This shall be done thru the Enhanced Comprehensive Local Integration Program (E-CLIP) that provides package assistance to help address their economic, social and psychological rehabilitation needs. Efficient delivery of socioeconomic services to benefit not only the former rebels and their families but the conflict-vulnerable sectors in the community: children, elderly, women, and persons with disabilities, will be implemented to hasten normalization in conflict-affected communities.

***Strengthen convergence of programs and ensure that development plan interventions are conflict-sensitive and peace-promoting.*** A monitoring tool in the implementation of convergence programs will be developed to assess and ensure that plans and program implementation and interventions are responsive to the community's needs. More convergence projects from DA, OPAPRU, DTI, DPWH and other concerned agencies will be rolled out in geographically isolated, disadvantaged and conflict affected areas while closer coordination between Local Peace and Order Council and Local Development Council will be strengthened. Further, the RTF-ELCAC shall closely

monitor the implementation of barangay projects funded under the Support to BDP for the CTG-cleared barangays. The LGUs shall likewise formulate/ update their respective peace and order and security plans ensuring that these are conflict-sensitive and peace promoting with synchronized alignment and implementation with the existing comprehensive development plan and investment programs.

***Vigorously advance information drive to counter threats from terrorism, radicalization and violent extremism.*** The DILG will continue to conduct information, education and communication (IEC) campaign to strengthen resiliency of communities against terrorism, radicalization and violent extremism focusing on women, youth and even religious groups being the most vulnerable sector in the community. The AFP will also intensify its effort to engage with the higher education institutes in the region to educate and organize more Youth for Peace as partner and advocate to counter Communist Terrorist Group (CTG).

***Complete commitments of peace agreement under the GPH-CBA-CPLA.*** The implementation of the 5-Year Normalization Program Roadmap with three components: 1) security, 2) social and economic, and 3) healing and reconciliation will serve as guide in the implementations of programs and projects aimed for the members and

identified communities of the CBA-CPLA are transformed into active partners for a peaceful and developing Cordillera region free from CPP-NPA and other threat groups. This peace agreement will be realized following the complete profiling of the members and families of the CBA-CPLA so that appropriate programs and interventions are provided and all beneficiaries are re-integrated into the community as partner for development.

***Strengthen peace and development through regional autonomy advocacy.*** The region will further advance its advocacy on regional autonomy as the better mechanism for good governance towards economic transformation and progress for all Cordillerans. While the national police remain to be the peace-keeping force in the proposed Cordillera Autonomous Region, it will be supported by the indigenous knowledge and practices of settling conflict and peace negotiations especially among tribes and community.

## **Outcome 2: Quality of life of people safeguarded from criminality**

***Promote a holistic approach in addressing illegal and dangerous drugs.*** Concerned law enforcement and anti-narcotics agencies will continue their relentless anti-drug operations especially the arrest of high-value targets. Restorative interventions for drug users and their dependents will be supported and strengthened. The construction of more Balay Silangan to serve as reformation centers will be promoted while the establishment of private drug rehabilitation centers will be supported.

With the incessant marijuana cultivation in the region, the legalization of marijuana for medical purposes is being discussed in local and regional development fora. A stringent regulation for the legalization of this drug will be supported. Senate Bill 230 filed in the 19<sup>th</sup> Congress seeks to legalize the medical use of marijuana in capsule and oil form as

compassionate alternative means of medical treatment. Aside from its medical benefit, the legalization of marijuana will benefit the region from increased taxes paid by manufacturers who will get marijuana supplies from the Cordillera.

***Strengthen and expand police engagements with communities.*** Support and active participation of communities to law enforcement is an asset in crime prevention and crime solution. The involvement of local peace keeping forces, people's organization and civic volunteers in crime reporting will be strengthened to ensure peace and order in the community. Police visibility will be expanded thru the construction of municipal police stations in strategic areas with sufficient police complement. Further, PROCOR shall pursue upgrading and procurement of ICT-related

equipment such as computers, body camera, satellite internet, and the like to boost crime-resolution efficiency.

LGUs together with PROCOR shall expand training of force multipliers in all barangays to perform voluntary public safety services in support to existing government public safety

functions and programs. The Bontoc Women's Brigade, a volunteer organization in Mountain Province that helps in maintaining peace and order in the community, can be replicated in context across the region.

### **Outcome 3: Protection and safety from natural hazards and other security threats ensured**

***Improve the capacity and capability of security forces and LGUs on humanitarian assistance and disaster response (HADR) and protection services.*** The disaster specific Response Plans (e.g., Typhoon, Earthquake, Emerging and Re-emerging Diseases) of the Cordillera RDRRMC will serve as the overall framework in responding and protecting communities from disaster and security threats. The LGUs shall be the frontliners in disaster response and management complemented by the security responders from the agencies like BFP, AFP, PROCOR. Assessing the exposure and vulnerabilities of LGUs thru the Community Disaster Risk Assessment (CDRA) will be prioritized to identify specific interventions to mitigate the impact of disasters. The establishment and operationalization of LGU command centers and operation centers will be supported. Citizen volunteerism in disaster response will be strengthened either at the local level or through enlistment as AFP reservists. The expertise of DOH, BFP, and private organizations like Red Cross and 911 On Call will be tapped for capacity building on public safety and disaster response.

***Protect critical infrastructure, strategic assets and natural resources.*** Critical infrastructure must be designed for long term operation, strategically located, and sufficiently protected to be resilient and remain operational during disaster and emergencies. Rehabilitation and construction of operation centers and command centers will be prioritized by the LGUs with adequate inventory equipment for disaster mitigation, prevention and response. Capacity to respond and manage forest fires and water body-based disasters like flooding, mine tilling spills and hazardous spills will be improved by mobilizing the forest rangers, bantay kalikasan and volunteer organizations. The rehabilitation of roads, bridges, flood control, slope protections, drainage, sewerage systems, social infrastructure and other critical and strategic assets will be prioritized for funding using the quick response funds (QRF) of agencies such as DPWH, NIA, DEPED, the 70% disaster fund of local governments and other disaster-related funding support from government financial institutions. The result of the CDRA will be utilized by the local governments as

evidenced-based mechanism to identify priority interventions for risk reduction and disaster management.

## Cross-cutting Strategies

***Strengthen LGU compliance to good governance principles.*** With full devolution arising from the implementation of the implementation of the Mandanas-Garcia ruling, LGUs are expected to deliver better and quality service to its constituents. The implementation of their respective devolution transition plans shall, among others, aim at ensuring accountability and transparency to uphold good governance and the efficient management of public resources. The DILG and the Committee on Devolution shall continue to monitor, provide technical assistance as well as in rewarding LGUs for their compliance and efforts towards good governance.

The community-based dialogue approved by the RDC-CAR will be institutionalized in the LGUs as a mechanism to address human rights concern through community participation being an integral component of democratic governance.

***Ensure gender mainstreaming and protection of vulnerable groups in conflict affected communities.*** Mainstreaming gender-equality shall be guaranteed in conflict-affected areas thru the inclusion of gender-based policies and program interventions to respond to the needs of women, children, senior citizens, persons with disabilities and other vulnerable groups. Specifically, the monitoring of the functionality of Barangay Violence Against Women helpdesks will be sustained.

The formulation of a Regional Action Plan on Women, Peace and Security (RAPWPS) spearheaded by the OPAPRU shall be supported to complement the national plan as a framework to ensure the protection of women's human rights in armed conflict and post-conflict situations as well as to empower women's participation in peacekeeping and conflict resolution.

# Legislative Agenda

Table 56 Legislative Agenda to ensure peace and security

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<p><b>Creation of the Cordillera Autonomous Region</b></p>	<p>The establishment of a Cordillera Autonomous Region is the better option for a just and lasting peace and inclusive growth where indigenous knowledge, practice and culture-sensitive governance will be adopted.</p> <p>Being autonomous, the Cordillera region will be empowered to enact policies and implement programs responsive to the needs of its people while promoting indigenous knowledge, systems and practices for sustainable development.</p>	<p>NEDA</p>
<p><b>Legalization of Marijuana Production for Medical Purposes</b></p>	<p>This aims to legalize and stringently regulate marijuana production in the region solely for medical use.</p> <p>Considering the beneficial and therapeutic uses of marijuana, its legalization will address persistent illegal trade, continuous search and destroy operations, and high crime incidence for violation of the Comprehensive Dangerous Drugs Act or RA 9165.</p>	<p>PDEA, PROCOR, DOH</p>
<p><b>National Citizens Service Training (NCST) program Reserve Officers' Training Corps (ROTC) program</b></p>	<p>The proposed bill aims to motivate, train, organize, and mobilize students for national defense preparedness, including disaster preparedness and capacity building for risk-related situations.</p> <p>With CAR being a disaster prone area to flooding, landslide, and other calamities, more volunteer responders are needed to augment security forces in the region.</p>	<p>CHED, TESDA</p>

# 14.2 Enhance Administration of Justice

An efficient administration of justice is vital towards achieving sustained economic progress. A stable and accountable justice system, whether mainstream or alternative, must inspire trust and confidence among stakeholders characterized by integrity, fairness and accessibility. A strong and vibrant economy requires a sector-based approach anchored on strong coordination among justice sector institutions, agencies, and actors to drive public engagement and trust in the justice system.

## Assessment and Challenges

### Assessment of Performance

***Justice efficiency and accountability improved.*** The congestion rate of CAR's jails is among the lowest nationwide. As of September 2022, the Bureau of Jail Management and Penology reported that of the 20 jails in CAR, half are congested. The average congestion rate of the ten congested prisons in CAR is 153 percent compared to the national average congestion rate of 370 percent. This means that in the region, around two persons deprived of liberty (PDL) occupy a 4.7 square meters (m<sup>2</sup>) of space, compared to the ideal ratio of one PDL per 4.7 m<sup>2</sup>.

Compliance to the terms of probation and parole of previous PDLs improved at 99.94 percent compared to 98.75 percent in previous years. In relation, there have been no recommitted parolees and pardonees due to recidivism since 2019, and all recommendations in probation investigations submitted to the courts by the PPA for CAR have been sustained.

More rehabilitation and intervention services have been rendered to parolees and pardonees in CAR. This includes programs and interventions that facilitate self-help among clients with behavioral problems and addictions. With the assistance of volunteer probation aides, a total of 77,465 rehabilitation and intervention services were rendered region wide to clients in 2021 alone. Public attorney to court ratio in the Cordillera has improved reaching the national standard of 1:1 public attorney to court ratio from the municipal circuit trial court, municipal trial court and the regional trial court.

The Baguio City Justice Zone, which is a flagship program of the Justice Sector Coordinating Council (JSCC), is the latest to be established in the country in 2022. This will serve as a joint forum for dialogue on issues of common interest and mechanism for effective coordination and sharing of information in support of planning and implementation of joint initiatives among justice sector institutions namely the

Supreme Court (SC), the Department of Justice (DOJ), and the Department of the Interior and Local Government (DILG). It shall serve as venue where the Supreme Court

and the rest of the judiciary, law enforcers, public defenders and prosecutors collaborate to solve problems that hamper the quick delivery of justice.

## Challenges

***Inadequate family courts and other special courts to resolve cases.*** While a 1:1 public attorney to court ratio is met, there is need to increase family courts and other special courts relating to land disputes, road right of way, among others, to fast track the resolution of cases.

***Need for the establishment of a regional prosecutor's office in CAR.*** The CAR RDC-RPOC has passed Joint Resolution No. 8,

series of 2017, appealing to the Justice Secretary to facilitate the establishment of a CAR Regional Prosecutors' Office but has not yet acted on. The clamor for a CAR regional justice office aims to facilitate the establishment of a regional database, improve service delivery, and strengthen customary laws and practice of the indigenous peoples of the Cordillera in settling dispute. At present, provincial and city prosecutors in the region are assigned from Regions I and II.

## Targets

Table 57 Plan Targets to enhance administration of justice, 2023-2028

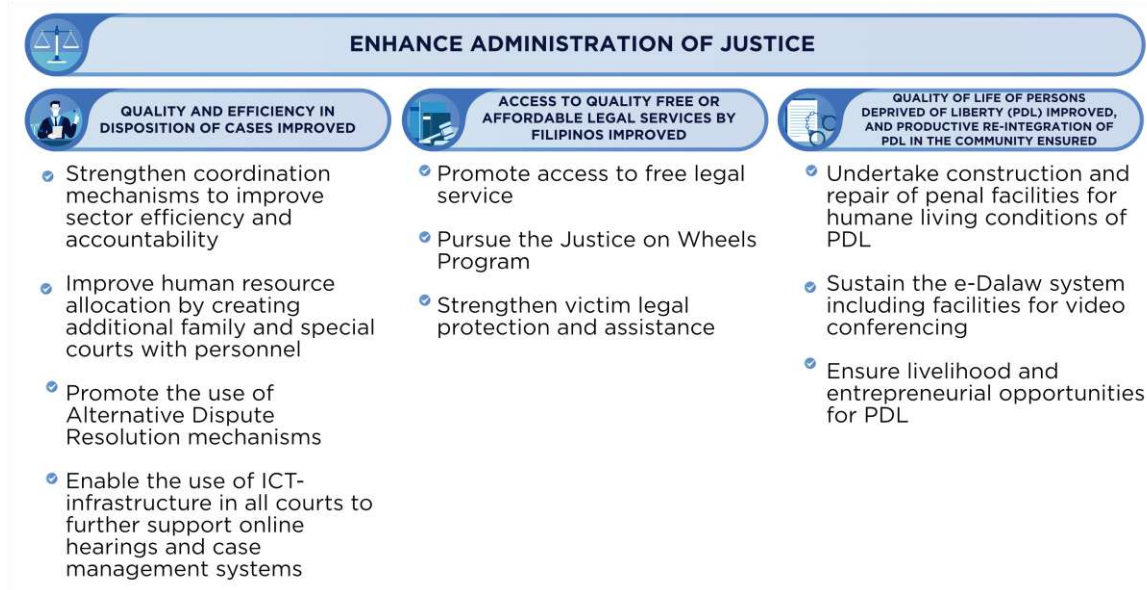
Outcome Indicators	Baseline	Targets						Lead Agency
	Value (Year)	2023	2024	2025	2026	2027	2028 EOP	
<b>Sub-Chapter Outcome 1:</b> Quality and efficiency in disposition of cases improved								
Percentage of successful prosecution improved (convictions vs acquittal)	73 (2022)	75	75	75	75	75	75	DOJ
Settlement rate of ADR cases thru the IP system and practice increased	1 (2022)						6	NCIP, Kalinga Bodong Council
<b>Subchapter Outcome 2:</b> Access to quality free or affordable legal services by Filipinos improved								
Prosecutor to court ratio improved	87 (2022)	88	89	90	91	93	95	DOJ
<b>Subchapter Outcome 3:</b> Quality of life of PDL improved, and productive re-integration of PDL in the community ensured								

Outcome Indicators	Baseline	Targets						Lead Agency
	Value (Year)	2023	2024	2025	2026	2027	2028 EOP	
Average congestion rate in jail facilities reduced	153 (2021)						100	BJMP
Percentage of parolees and pardonees not recommitted into prison due to reoffending or other infractions improved	100 (2021)	100	100	100	100	100	100	PPA

## Strategies

The strategy framework to enhance administration of justice supports economic transformation extending to persons deprived of liberty (PDL). The justice sector aims to achieve the following outcome: quality and efficiency in disposition of cases improved; access to quality free or affordable services by Filipinos improved; and quality of life of PDL improved and productive re-integration of PDL in the community ensured.

Figure 40 Strategy Framework to enhance administration of justice





## Outcome 1: Quality and efficiency in disposition of cases improved

### ***Strengthen coordination mechanisms to improve sector efficiency and accountability.***

The recently established Baguio City Justice Zone, both supported by the Justice Sector Coordinating Council (JSCC) and the Baguio City government, will expand its functions to include monitoring and assessment of their coordination mechanisms, implementation of reporting to the JSCC, and the sharing of best practices among other justice zones in the country. With Baguio City Justice Zone being prioritized as the judiciary's first electronic court (e-court), streamlined processes and seamless procedure will facilitate faster and easier case resolution and disposition. The Baguio City Justice Zone will not only serve the city but the entire region as all local justice sector actors such as police, prosecutors, public attorneys, judges and prison personnel in the region will work together to identify common problems and generate common solutions to address them.

The Public Attorney's Office (PAO) shall utilize client survey forms to assess the effectiveness and satisfaction of service provided and in identifying areas for improving legal service delivery to clientele.

***Improve human resource allocation by creating additional family and special courts with personnel.*** Creation of more courts and human resources in both the Judiciary and the Executive Department will enhance speedy disposition of cases especially those

relating to family laws, land disputes, road right of way, drug crimes, among others.

The establishment of a regional justice office in the Cordillera would better address the need for regional database, faster service delivery and enable it to pursue the aim of integrating the customary law of indigenous people into the legal system.

### ***Promote the use of Alternative Dispute Resolution (ADR) mechanisms.***

Conflict resolution thru the Katarungang Pambarangay and Lupong Tagapamayapa will not only strengthen the role of community elders in settling dispute but also serves as an avenue for indigenous peoples to document and preserve their customary practices. There are various barangays in the Cordillera that employ indigenous ways of resolving conflicts but are not documented nor duly recognized in courts. Encouraging barangay Lupons to be keen in documenting their proceedings and make their practices recognized may establish an effective method of resolving disagreements outside the halls of courts. The region will advocate for legislative action integrating indigenous practice such as the "bodong" and "pechen" as ADR in the rules of court.

***Enable the use of ICT-infrastructure in all courts to further support online hearings and case management systems.*** As courts gear towards automation, procurement and upgrading of ICT-related equipment will be provided sufficient budgetary allocation

including capacitating personnel of courts, prosecution and the public attorney's office on video conference hearings and online database management system.

## **Outcome 2: Access to quality free or affordable legal services by Filipinos improved**

**Promote access to free legal service.** The region will advocate to implement the Revised Law Student Practice Rule to address limited legal services. A Memorandum of Agreement thru PAO and the Regional Trial Court with the Integrated Bar of the Philippines, Schools of Law, and other legal aid clinics will be executed for the conduct of free legal services.

A database of free legal aid public directory and referral system will be available online to ensure that law enforcers and detainees have immediate access for legal services.

**Pursue the Justice on Wheels Program.** The conduct of hearings thru a mobile court shall be utilized not only for detainees in jail

facilities but will expand to include resolution of agrarian reform cases and environment-related cases. Extending free legal consultation and legal assistance to communities will also be conducted.

**Strengthen victim legal protection and assistance through victim-centered, child-friendly, and gender-sensitive assistance mechanism.** Closer coordination among the PROCOR, PAO and the DSWD will be strengthened to provide legal protection financial assistance to victims of violence or unjust imprisonment thru the victim compensation program.

## **Outcome 3: Quality of life of PDL improved, and productive re-integration of PDL in the community ensured**

**Undertake construction and repair of penal facilities for humane living conditions of PDL.** Rehabilitation and improvement of jail facilities will be carried out to improve the conditions of detainees and ensure adherence to international standards on humane living conditions of PDL. LGUs will also be encouraged to donate or identify available lot for the expansion of jail facilities and the

construction of a regional Bureau of Correction and prison facility.

**Sustain the e-Dalaw system including facilities for video conferencing.** The e-Dalaw system will provide mechanism for detainees and their families for communication especially when face-to-face visitation is not possible. Procurement and upgrading of ICT equipment for video conferencing will be

undertaken to benefit more PDLs take advantage of online communication.

**Ensure livelihood and entrepreneurial opportunities for PDL.** Livelihood assistance and trainings provided by DTI, DOLE and TESDA will continue and be strengthened to provide income to PDLs even inside jail facilities.

Local governments are encouraged to provide tax incentives or other non-monetary incentives and recognition to employers and business establishments that will provide capacity-building, livelihood or employment, and entrepreneurial opportunities to PDL

## Legislative Agenda

Table 58 Legislative Agenda to enhance administration of justice

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
<b>Creation of Cordillera Regional Prosecutor's Office</b>	The creation of the regional prosecutor's office in CAR will speed up investigation and prosecution of criminal cases and will also relieve Regional Prosecutors' Offices of Regions I and II of their backlogs.	DOJ
<b>Expand Katarungang Pambarangay</b>	The expansion shall cover the court's recognition of the Cordillera indigenous practice as alternative dispute resolution by issuing SC circular recognizing and integrating IP practices in the rules of court	SC, DOJ, DILG, NCIP



# 15

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**Practice Good Governance  
and Improve Bureaucratic  
Efficiency**





## Chapter 15

# 15 Practice Good Governance and Improve Bureaucratic Efficiency

Good governance and an efficient bureaucracy are bedrock strategies towards achieving a prosperous, inclusive and resilient Cordillera. The preferred future of governance is characterized by meaningful participation of the governed as well as transparency and accountability of the government. It is also characterized by an efficient bureaucracy that is rational, fast, and adaptive to risks supported by competent, motivated, agile, and resilient public servants.

## Assessment and Challenges

### Assessment of Performance

***Major reforms towards good governance and bureaucratic efficiency instituted.*** Major reforms to improve service delivery were instituted such as the Freedom of Information (FOI) Policy, Executive Order No. 2, s. 2016, for transparency and full public disclosure and the Ease of Doing Business and Efficient Government Service Delivery (EODB EGSD) Act of 2018 which created the Anti-Red Tape Authority (ARTA) to oversee the harmonization and mainstreaming of various government processes that govern business-to-government and citizen-to-government transactions. An ARTA Office for CAR was newly inaugurated in 2022 located in Baguio City.

Other legislative milestones include: EO No. 138, s. 2021 or the full devolution of certain functions of the Executive Branch to the LGUs as defined in the Local Government Code; the Community-Based Monitoring

System (CBMS) Act of 2019 necessary in targeting beneficiaries, conducting more comprehensive poverty analysis and needs prioritization, designing appropriate policies and interventions and monitoring impact over time; the Seal of Good Local Governance (SGLG) Act of 2019 institutionalizing incentives for all LGUs to continually progress and improve their performance in varied areas of governance; and the Philippine Identification System (PhilSys) Act of 2018.

***Participatory governance strengthened*** with the Department of the Interior and Local Government (DILG) rolling out DILG Memorandum Circulars<sup>47</sup> that provide guidelines on the accreditation of Civil Service Organizations (CSOs) to the Local Special Bodies to enhance their participation in local governance processes and implementation of programs.

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<sup>47</sup> DILG MC Nos. 2019-72 & 2022-005

**Table 59 CMCI National Rankings, CAR: 2020 and 2021**

<b>LGU/Income Classification</b>	<b>2020 Rank</b>	<b>2021 Rank</b>
<b>Highly Urbanized City (HUC)</b>	<b>Out of 33 HUCs</b>	<b>Out of 33 HUCs</b>
Baguio City	19th	17th
<b>Component City</b>	<b>Out of 102</b>	<b>Out of 102</b>
Tabuk City	79th	60th
<b>Provinces</b>	<b>Out of 81 Provinces</b>	<b>Out of 81 Provinces</b>
Ifugao	54th	12th
Benguet	10th	26th
Abra	66th	47th
Kalinga	61st	48th
Mountain Province	62th	51st
Apayao	76th	69th
<b>Municipalities - 1st to 2nd class (Top 100)</b>	<b>Out of 508</b>	<b>Out of 508</b>
La Trinidad	8th	11th
<b>Municipalities - 3rd to 4th class (Top 100)</b>	<b>Out of 649</b>	<b>Out of 649</b>
Lamut	89th	5th
Alfonso Lista	40th	21st
Buguias	51st	53rd
<b>Municipalities - 5th to 6th class (Top 100)</b>	<b>Out of 304</b>	<b>Out of 304</b>
Sablan	22nd	18th
Tublay	11th	22nd
Sagada	84th	37th
Pidigan	120th	40th
Bucay	82nd	42nd
Tayum	109th	64th
Asipulo	100th	70th
Dolores	128th	73rd
Pilar	154th	75th
La Paz	148th	83rd
Manabo	91st	98th

Source: CMCI



***The establishment and enhancement of online government services and Smart City solutions*** such as the Baguio in My Pocket App improved e-government systems and seamless interfaces with the government. These gains can potentially be maximized further through inter-local cooperation such as the Metropolitan Baguio-La Trinidad-Itogon-Sablan-Tuba-Tublay which serves as a platform for sharing of best practices and larger scale development programs.

## Challenges

***Structural limitations in government reached.*** Transformational changes in the public sector are needed to enable the government to rise above structural limitations and undertake innovative governance approaches. This is indicated by the results of the Seal of Good Local Governance (SGLG) assessment with only 12 of the 83 CAR LGUs passing and receiving the award as of December 2022<sup>48</sup>. This falls short of the target of at least 18 LGUs to be awarded for the year.

Transition to full devolution as mandated by EO 138 is also slowed by the limitations on existing LGU technical capacity, plantilla positions and Personnel Services cap for LGUs. The review conducted by the Committee on Devolution to check harmonization of NGA and LGU DTPs showed that LGUs have not included some devolved PPAs in their DTPs due to the lack of resources and capability to undertake such functions.

***Competitiveness of CAR LGUs improved*** with more LGUs ranking in the upper one-third in the 2021 CMCI, increasing from 11 LGUs in 2020 to 20 LGUs in 2021, indicating improvement of LGUs on governance efficiency, economic dynamism, infrastructure, and resiliency. LGU capacity towards resilience was strengthened as more CAR LGUs created plantilla positions for Local DRRM Officers to lead DRR CCA programs at 88 percent (73 of 83 provincial, city and municipal LGUs) as of 2021.

Aside from the devolved functions, LGUs are also faced with the challenge to innovate when the current staffing pattern of the government does not consider emerging needs such as MIS/Data Analysts, IT, Statisticians and others needed to undertake digital transformation.

***Regional Autonomy postponed.*** The Cordillera Regional Development Council (RDC-CAR) adopted regional autonomy as its overarching theme of development for the region. As understood in RDC advocacies, regional autonomy is the most strategic means to accelerate development in the Cordillera. It is also an end in itself, complying with Section 15, Article X of the 1987 Constitution and putting in place a regional government mechanism that assumes power and functions to be devolved by the national government.

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<sup>48</sup> DILG-CAR 2022 Year-End Accomplishment Presentation

Autonomy establishes the Cordillera region as a political entity with a permanent status. Executive Order 220 established the Cordillera Administrative Region in 1987 with the purpose of preparing the region for autonomous governance. This is a temporary status that is provided to a region that has had a history of marginalization in social, cultural and policy contexts.

Autonomous government set-up is intended to provide for a permanent identity for the 6 provinces and 1 Charter City as well as fast-track bureaucratic processes to address inappropriate national policies detrimental to the development of the Cordillera such as the Forestry Code (PD 705) and Roxas Law (RA 7880).

The CAR's constitutional right to be an autonomous government remains unfulfilled after the organic bill failed to pass congressional review. This incarnation of the proposed organic law has gone through several house committees since the 15<sup>th</sup> Congress. While support has been growing each year since then with manifestos of support from LGUs, CSOs, and the academe, national support for the advocacy has waxed and waned with the changing lawmakers and executives. However, the 16<sup>th</sup> and 17<sup>th</sup> Congress saw gradual but consistent rise in support among key members of both the House of Representatives and the Senate.

# Targets

**Table 60 Plan Targets to practice good governance and improve bureaucratic efficiency, 2023-2028**

Outcome Indicators	Baseline		Targets							Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	EOP	
LGUs compliant to CSO participation in local bodies increased			385							DILG
Number of LGUs (Provincial, City, Municipal) with functional Local Development Council				83	83	83	83	83	DILG	83
Number of Barangays with Functional Local Development Councils	2022	1157	1176	1176	1176	1176	1176	1176	1176	DILG
% of LGUs (Provincial, City, Municipal) conferred with Seal of Good Local Governance (SGLG)	2021	98								DILG
Number of LGUs fully complying with Full Disclosure Policy (FDP)		83	83	83	83	83	83	83		DILG
Number of LGUs with improved Governance Efficiency Score in the Cities, Municipalities Competitiveness Index (CMCI)	2020	39							77	DTI, RCC
Number of agencies compliant to maturity level 2 of PRIME-HRM	2021	3								CSC

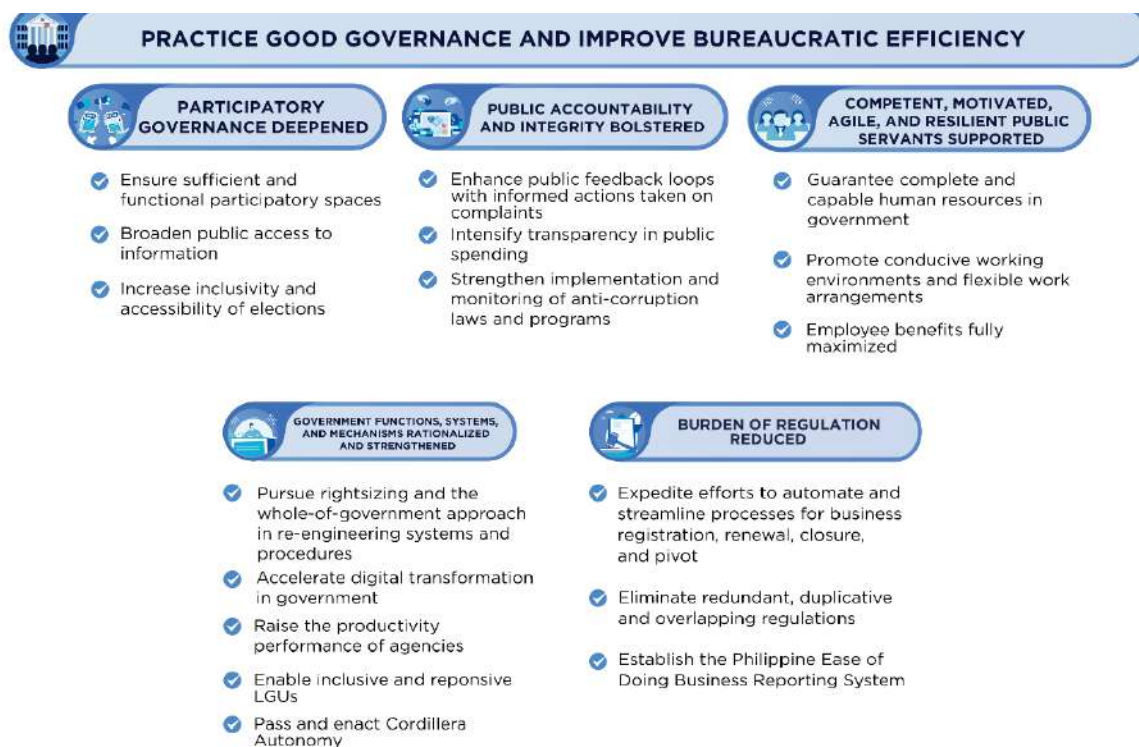
# Strategy Framework

Consistent with the PDP plan outcome of achieving a prosperous, inclusive and resilient Philippines, practicing good governance and improving bureaucratic efficiency is a bedrock strategy for the region. Good governance must be practiced through the active participation of the citizenry and bolstered public accountability and integrity of public servants and political appointees.

This is supported by an improved bureaucracy where the efficiency of government functions, systems and mechanisms are rationalized and strengthened. Key to achieving this is personnel rightsizing and accelerating digital transformation in government. Competent, motivated, agile and resilient public servants must also be supported through complete and capable human resources in government that is based on merit and upgraded career standards.

As a region formed out of the need for more appropriate development policies and a collective call for self-determination, good governance and improved bureaucratic efficiency in the region is best achieved through the establishment of the Cordillera Autonomous Region.

Figure 41 Strategy framework to practice good governance and improve bureaucratic efficiency



## Outcome 1: Participatory governance deepened

### ***Ensure sufficient and functional participatory spaces and improve quality of participation.***

With the DILG-CAR's initiatives to strengthen participation through the accreditation of CSOs to participatory spaces such as Local Special Bodies, participation can be maximized with the capacitation of these CSOs on government processes. The DILG shall continue implementing the CSO Capacity Development Program compliant with DILG Memorandum Circular 2022-005 which provides the guidelines on the accreditation of CSOs to co-implement DILG programs and projects.

Specific to the region, capability building for Indigenous Peoples Mandatory Representatives must also be a priority.

Appropriate participatory spaces in the Cordillera exist in the form of Indigenous Political Structures (IPS). Building awareness through briefings and IEC campaigns among national government agencies, non-government organizations (NGOs), and CSOs is the first step to institutionalizing these IPSs. This is to ensure that the programs, projects, and activities of these stakeholders are for legitimate indigenous cultural communities and indigenous peoples.

Further, there is a need to ensure adequate representation and employment of members of each marginalized sector in government bodies as mandated by governing laws rules

and regulations. Compliance to these mandates must be regularly monitored.

Public participation and accountability are further strengthened with the annual regional DILG Dagyaw town hall meetings which provides a space for inter-sectoral dialogue. This annual activity provides a needed push towards a more interactive and functional participation of citizens with their local government.

***Broaden public access to information.*** Major strides have been reached with reforms in public access to information. However, FOI mechanisms in government offices at the regional and local levels need to be enhanced through the population of government websites and regular updating of the same. To better serve the public, government employees, likewise, will have to enhance their capacity, through IECs, to implement these mechanisms and other knowledge portals and products. To meet this strategy, other related PPAs and strategies are included in the discussions of Outcome 3, Government functions, systems, and mechanisms rationalized and strengthened.

***Increase inclusivity and accessibility of elections.*** Even before the pandemic, challenges in the accessibility of elections faced Cordillerans in Geographically Isolated and Disadvantaged Areas (GIDA). This can be addressed by the Commission on Elections by expanding the use of satellite and special registrations, innovating voting modalities,

and intensifying voters' education and information campaigns outside of the election period. The COMELEC may also

need to assess election participation per age group, income class, location and other factors for more appropriate interventions.

## **Outcome 2: Public accountability and integrity bolstered**

***Enhance public feedback loops.*** To ensure timely and adequate response of the government to public demands, there is a need to closely monitor the implementation of the various mechanisms instituted such as Ease-Of-Doing-Business (EODB) and Efficient Government Service Delivery (EGSD) Acts, the Anti-Red Tape Authority's (ARTA) Harmonized Client Satisfaction Measurement, the Civil Service Commission's (CSC) Contact Center ng Bayan, and people's feedback mechanisms required in national agency websites. The DILG also sustain the monitoring of the functionality of CSO desks and Barangay Violence Against Women helpdesks. Digitalization of these mechanisms must be pursued to improve access, inclusion, context-sensitivity, and empowerment of marginalized sectors.

***Intensify transparency in public spending.*** DILG shall sustain the monitoring of LGU compliance to the Full Disclosure Policy, transparency practices in Local Special Boards (LSBs), extending these to the local Bids and Awards and Project Monitoring Committees. Relatedly, broadening public access to information is key for both LGUs and RLAs to intensify transparency.

Continued and enhanced implementation of the Section 93 of R.A. 10352 or the General Appropriations Act for Fiscal year 2013 institutionalizing the transparency seal, is needed to maintain public trust and provide the necessary foundation from which transparency can be intensified.

***Strengthen implementation and monitoring of anti-corruption laws and programs.*** Implementation of moral restoration programs and orientation programs for newly-election officials must be sustained. The Regional Development Council's Committee on Good Governance and Development Administration has programmed capacity building activities for Local Chief Executives (LCEs) and their officers on topics such as transformational leadership, technology and governance systems as well as development financing such as public private partnerships, joint ventures and Official Development Assistance (ODA). Further, the RDC through the Development Administration committee shall continue its FLAME or Forwarding Local Autonomy Medal of Excellence Awards which serves to incentivize LGUs that have exemplified good governance and readiness for Cordillera Autonomy.

## Outcome 3: Government functions, systems, and mechanisms rationalized and strengthened

***Pursue rightsizing and the whole of government approach in reengineering systems and procedure.*** Guided by the National Government Rightsizing Program, the whole of government needs to pursue rightsizing in the context of the Full Devolution of LGU functions and the challenge to innovate on government procedures and processes. The Committee on Devolution under the Regional Development Council will have to ensure complementation and clear delineation of functions, structure, and staffing of national agencies and LGUs concerning the Supreme Court’s Mandanas-Garcia ruling and Executive Order (EO) No. 138, s. 2021.

The government shall also reorganize to consider emerging needs such as MIS/Data Analysts, IT, Statisticians and others needed to undertake digital transformation. Prioritization of and funding for these positions is imperative to provide the regional and local government with the necessary competencies and capabilities for information technology which includes systems thinking, development, and management as well as data gathering, analysis, and management.

***Accelerate digital transformation in government.*** One of the many lessons government was forced to learn during the pandemic was to prioritize digitalization of key processes. While the private sector provided ways for the public to adjust to

digital life, government lagged behind. Public-Private Partnership arrangements are recommended to fund digital transformation projects. Government agencies must formulate development digital transformation roadmaps tailored to their respective processes. There is also potential in developing start-up tech providers that will develop and innovate government online service systems and mobile applications.

Government services such as application and permit processing, particularly for businesses, fees payment, registration and loan applications are ripe for digital transformation and would provide the most immediate and visible impact on the lives of Cordillerans and how they transact with the regional and local government. The National Government Portal (gov.ph) provides the necessary backbone of a common, easily understandable interface for both clients and developers to avail of and digitalize services. Given the Cordillera region’s challenges in digital literacy and digital infrastructure (see Chapter 10 on Challenges), a familiar, ready-to-use interface through *gov.ph*, can help overcome most hurdles for prospective clients who want to avail of government services and in-house and third-party developers who aim to transition their products, services, and processes online.

The importance of adequate information has increased. As such, the presence of interactive portals and websites for all agencies is crucial

in providing the public with the necessary information to avail of government services. Agencies can start these with the development of their own management information systems. These information systems can then be shared among related agencies to provide the public with a centralized information system tailored to their own needs rather than separate, disjointed government portals that provide similar services. For example, Overseas Filipinos, foreign nationals and their families will benefit from a comprehensive migration database. As of 2020, there is a recorded 44,046 overseas workers (OW) coming from CAR. While Cordillerans compose only 1.6 percent of the national population, Cordillerans OWs compose 2.2 percent of all OWs, as of 2020. Mapping out and listing available assistance for these stakeholders would ensure the proper provision of services. Information dissemination activities through caravans and online platforms will help raise awareness and encourage them to avail of these services.

However, the Cordillera region lags behind other regions in the basic infrastructure needed to adequately provide these services. Nonetheless, there have been major achievements in IT infrastructure with the DICT implementation of the GovNet in regional government offices in Baguio City and La Trinidad, public schools, and provincial capitol buildings around the Cordillera (See Chapter 13).

The private sector also has a role in this as the regional implementation of the National Broadband Plan (NBP) is supplemented by

private Internet Service Providers (ISPs). Particularly, ISPs have established lines in Bontoc, Mountain Province where the fiber optic lines of the GovNet program have yet to be laid out. Partnerships with the private sector provides a better chance of establishing and improving internet connectivity in harder to reach areas of the region.

***Enable Inclusive and Responsive LGUs.***

Existing mechanisms have been put in place in CAR LGUs. These mechanisms need only to be strengthened to allow for results-based and evidence-based program and beneficiary identification. Local Project Monitoring Committees need to develop harmonized monitoring tools that provide the necessary information such as project monitoring results to guide plan formulation and programming. Using project monitoring results to inform plans for future programs, projects and activities would enable LGUs to be more responsive to the needs of its stakeholders and target beneficiaries based on actual results, data, and evidence. Particularly for soft or non-infrastructure projects, outcomes monitoring must be institutionalized. Provision of sustained capacity-building on monitoring and evaluation techniques and technologies will better inform plan formulation and its subsequent PPAs moving forward.

***Pass and establish the Cordillera Autonomous Region.***

With the region's unique peoples, culture, political history, achieving Cordillera autonomy is the direct strategy to achieve the desired outcome of participatory governance and improved



bureaucratic efficiency in the region. The conduct of IECs and lobbying with Congress, the national government and the Office of the President need to be undertaken through a strategic approach that sends the message that the region is socially and fiscally prepared to assume the powers and functions of an autonomous government.

The Regional Development Council will continue to oversee projects that aim to measure the readiness of the Cordillera for autonomy such the Cordillera Autonomy Pulse Survey and continued mock plebiscites during IECs.

## **Outcome 4: Competent, motivated, agile, and resilient public servants supported**

***Guarantee complete and capable human resources in government.*** A government based on meritocracy over much-lamented *padrino* system has been a clamor of many a Filipino even in the Cordillera. There needs to include qualifications on education and experience qualifications of elected leaders both locally and nationally. This would raise the standards of governance and remove the dependence for currently implemented programs for newly-elected officials and programs on moral recovery.

To ensure the capacity of political appointees, it is recommended to upgrade their qualification standards through legislative action. There is a need to need to ensure capacity of political appointees to manage and deliver mandate of the agency or office they are assigned to. Likewise, upgrading of career standards for civil servants must follow. Crucially, capability building and creation of new plantilla positions for devolved functions is most urgent as an effect of the Mandanas-Garcia Supreme Court ruling. Continuing with the push for evidence-based decision making, the creation

of proper management information systems and corresponding knowledge management offices or divisions will guide and inform appointments and career development.

***Promote conducive working environments.*** Another lesson learned during the pandemic is the need to promote conducive working environments to cater to the diverse needs of civil servants just like any other Filipino laborer. Particularly, implementation of appropriate flexible work arrangements with considerations for gender equality, disability and social inclusion (GEDSI) have to be provided.

Existing benefits such as health insurance, hazard pay, among others, especially with the implementation of the Universal Health Care Act, are being patronized by civil servants but are not being fully utilized due to lack of proper information and the reality of red tape sometimes inherent to newly-implemented

programs. Information dissemination campaigns must extend to civil servants to both inform them and have them as advocates to promote these benefits.

## Outcome 5: Burden of Regulation Reduced

**Establish the Philippine Ease of Doing Business Reporting System.** The ARTA Northern Luzon Office, having been recently inaugurated in Baguio City, shall launch and localize the Philippine EODB reporting system. Guided by the World Bank Group Doing Business Report (DBR) and the PGRP, the EODB reporting system will provide a monitoring to for businesses and investors to refer to and encourage economic activity towards recovery at the local and national levels.

***Eliminate redundant, duplicative, and overlapping regulations and raise the productivity performance of agencies and LGUs.*** ARTA cites policy coherence as one of the guiding regulatory principles. Regulatory bodies in the CAR must ensure regulations are consistent and coherent, eliminating regulations that unnecessary or superfluous. Both national and regional strategies entail a move to face this problem with a whole-of-government approach. Redundancy, overlaps, and duplication usually come from different government offices requiring the same information as well as outdated policies and requirements. Recalling chapter outcome 3, digitalization of government process,

which includes privacy-compliant data sharing, is key to avoid administrative redundancy and duplication. Overlapping regulations can be assessed, reviewed, evaluated, and updated through inter-agency coordination led by ARTA via Program NEHEMIA (National Effort for the Harmonization of Efficient Measures of Inter-Related Agencies).

With the enactment of RA 11032 creating ARTA, bureaucratic efficiency now has its own regulator and enforcer. The public has been enabled to gauge government agencies on their efficiency and productivity through the ARTA Report Card Survey (ARTA-RCS). To incentivize regional and local offices that have a high score on the ARTA-RCS, an awards system can be put in place. This would also raise awareness among the public and encourage government agencies to improve their compliance to their respective citizen's charters.

***Expedite efforts to automate and streamline processes for business registration, renewal, closure, and pivot.*** Government offices in the Cordillera, particularly LGUs must accelerate this to encourage entrepreneurship and

investment. Automation and streamlining (PGRP) released by the Anti-Red Tape Authority (ARTA) in 2021. Philippine Good Regulatory Principles

## Legislative Agenda

Cordillera Autonomy has been the overarching theme of regional development since it was adopted as such in 2006 by the CAR Regional Development Council through RDC Resolution No. CAR-09, s. 2006. Citing historical factors such as the separate colonial history of the Cordillera, the splitting of the old Mountain Province in 1972 by virtue of P.D. No. 1 or the Integrated Reorganization Plan. A relatively young regional government compared to the rest of the Philippines, the Cordillera has yet to catch up in terms of bureaucratic maturity let alone socio-economic development. Particularly, autonomy would facilitate the institutionalization of various customary practices and indigenous knowledge systems and practices of governance, conflict resolution and consensus building. Cordillera autonomy would capitalize on the region’s unique characteristics and achieve good governance and bureaucratic efficiency through the spirit of self-determination.

**Table 61 Legislative agenda to practice good governance and improve bureaucratic efficiency**

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	LEAD AGENCY
Guidelines on providing incentives to CSOs in special local bodies	To at least cover costs incurred by CSOs and to incentivize more meaningful participation of CSOs (beyond attendance) at the municipal, provincial and regional levels of government.	DILG, LGUs
Enactment of Cordillera Autonomy Bill	This will enable the region to formulate and implement appropriate development policies, programs and equitable share from its resources as well as the institutionalization of IKSPs in various sectors beyond governance.	Congress



# 16

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**Accelerate Climate Action  
and Strengthen Disaster  
Resilience**





## Chapter 16

# 16 Accelerate Climate Action and Strengthen Disaster Resilience

The Cordillera Administrative Region will be more resilient to the impacts of natural hazards and climate change by 2028. In order to attain the goal on accelerating climate action and strengthening disaster resilience in the region, the government will strengthen its efforts in increasing the climate and disaster resilience of communities and institutions; enhancing the resilience of the ecosystem; and enabling the transition to low carbon economy through a whole-of-society approach. As the host to 13 major river basins and the “Watershed Cradle of North Philippines”, the region will continue to intensify the rehabilitation and protection of its natural resources to sustain the provision of environmental goods and services. It will continue to supply water for irrigation, hydroelectric power generation, fisheries, industrial and domestic use for the downstream regions. Green economy will be promoted to boost contributions to livelihood and employment generation while improving the environmental and social well-being of the Cordillera people. Sound implementation of Disaster Risk Reduction and Climate Change laws, policies, programs and projects will be pursued to ensure improved climate and disaster resilience in the region.

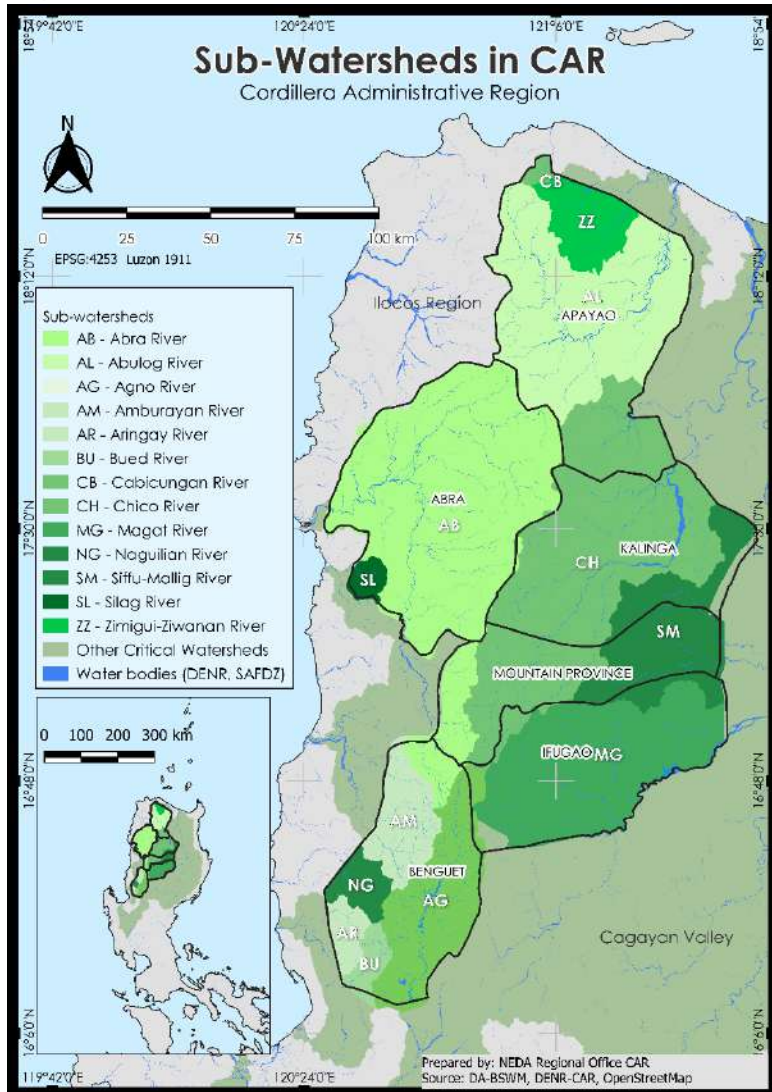
## Assessment and Challenges

### Assessment of Performance

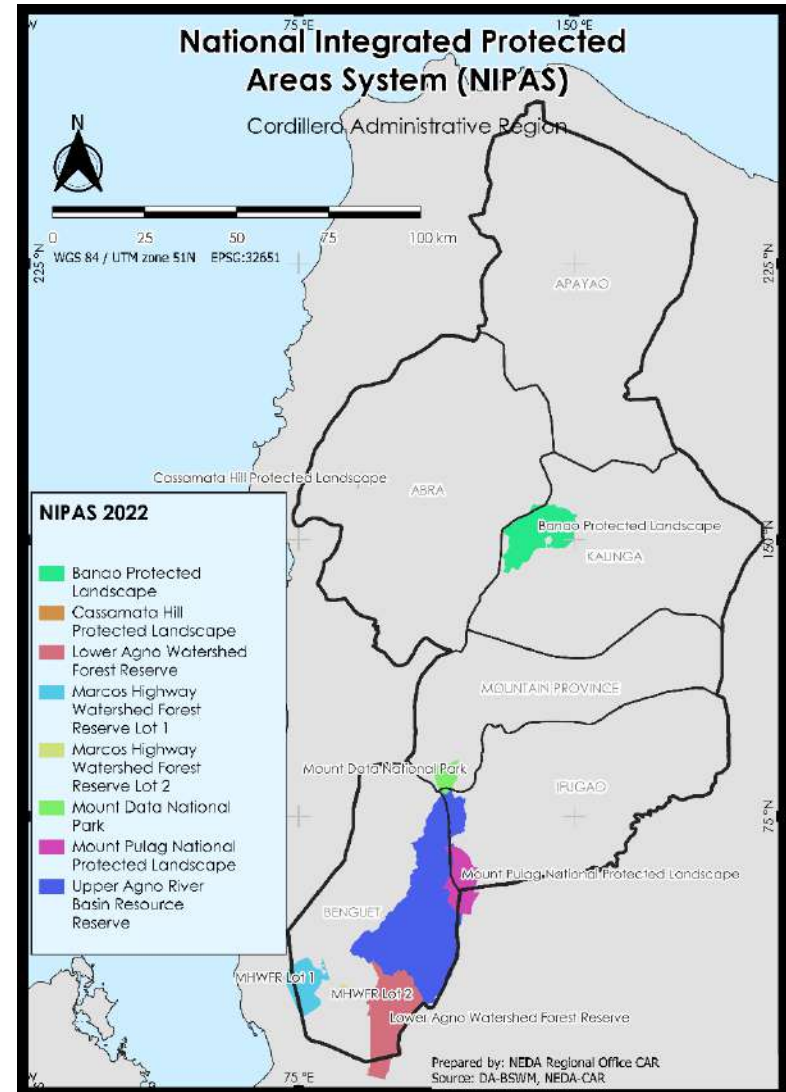
Chapter 20, “Ensuring Ecological Integrity, Clean and Healthy Environment”, of the RDP 2017-2022 aimed to ensure the ecological integrity and improvement of the socio-economic conditions of resource-based communities through sustainable, integrated area development. These could be achieved through protecting and rehabilitating the natural resources, improving environmental quality, and enhancing the disaster resilience of communities.

**Natural resources conserved, protected, and rehabilitated.** The 10.34 % increase in forest cover from 2017 to 2022 exceeded the 5% regional target with a total of 24,417 hectares area planted to 27,949,162 various tree species. In support to the National Greening Program, 87 small water impounding systems were constructed and six seed production areas were established and maintained. The program generated 255,431 jobs in the upland communities for the period. The critical habitats in the region continued to be protected with a) the legislation of 2 Protected Landscapes:

Map 14 CAR Sub-watersheds



Map 15 National Integrated Protected Areas System (NIPAS) in CAR





Mt. Pulag Protected Landscape (RA 11685) and Banao Protected Landscape (RA 1168); b) maintenance of the other five protected areas under the NIPAS initial component which are to be legislated in the near future; c) assessment and classification of 19 caves; and d) the formulation of management plans of six inland/wetland areas.

In terms of forest protection and law enforcement, 90,237.56 hectares were surveyed as fire-prone areas; 161,394.12 hectares are now with appropriate tenure; a total volume of 545,406.71 board feet of illegally-cut trees were apprehended; and 311 cases were filed in court for violation of various ENR laws and policies. On land disposition and improved land management, free patents were issued to 12,401 residential lots and 7,773 agricultural lots. On the other hand, 305 government lands and 62 school sites were issued special patents.

***Environmental quality improved.*** Air quality was sustained within standard level (fair-good) and continued to be monitored through the maintenance of five air quality monitoring stations which are located in Baguio City and La Trinidad, Benguet. In addition, 657 firms with Air Pollution Source Installations (APSIs) were monitored on their compliance to their permit to operate. Generators, furnaces, boilers, manufacturing industrial machineries are examples of APSIs. In support to the BLISTT Airshed, designated through DENR DAO 2003-004, the local government units of Baguio City and La Trinidad, Itogon, Sablan, Tuba and Tublay in Benguet, concerned agencies, and other

stakeholders actively participated in air quality management through the following initiatives: number coding of private and public vehicles during weekdays to limit traffic that aggravates air pollution, total ban of fireworks, declaration of carless day, and establishment of green buffer zones. On water quality, the region continued to monitor the three water quality management areas in the Province of Benguet (Balili River, Bued River, and Amburayan River). Dissolved Oxygen and Biological Oxygen Demand are within the quality standards except for the readings on fecal coliform which are above the water quality guideline. Three major water bodies (Abra River, Agno River in Benguet, and Apayao-Abulog River) are regularly being monitored with Apayao-Abulog River as the cleanest among the three in terms of water quality. On solid waste management, the region monitored and assessed seven operational sanitary landfills and 104 EMB-funded and LGU established materials recovery facilities. In compliance to the SWM Act, 73 Municipal LGUs completed their Ten-Year Solid Waste Management Plans which were approved by EMB.

On responsible mining, 57 mining permits/contracts were monitored while 568 mining applications were approved and endorsed to MGB-CO. In addition, 13 Minahang Bayan (MB) areas were declared. Two MB areas, the Loacan Itogon Pocket Miners Association in Itogon and Northern Sagada Small-Scale Miners Association Inc. (NSBSSMAI) in Sagada, Mountain Province have approved mining contracts.

***Disaster resilience of communities enhanced and continually assessed.*** All the 75 municipalities, two cities, and five provinces except for Apayao have their respective Local Disaster Risk Reduction Management Plans (LDRRMPs), 55 of which are updated as DRR-CCA enhanced. A total of 59 LGUs have also established their respective Local Disaster Risk Reduction Management Offices (LDRRMOs) with 56 LGUs having at least one plantilla position to institutionalize the operation of the LDRRMOs.

For the Geohazard Vulnerability and Risk Assessment (VRA), five LGUs were assessed in terms of risks and vulnerability and two LGUs on groundwater subsidence. Also prepared were 12 Geohazard maps and 52 VRA maps. The geohazard VRA aims to evaluate and quantify the risk exposure of people, built-up areas, and road networks that are exposed to landslide and flood in a particular area. In terms of Groundwater Resources and Vulnerability Assessment, three LGUs were assessed and four hydrogeologic reports with groundwater availability maps prepared. The assessment is implemented to determine the availability and quality of groundwater in various rock formation and assess the vulnerability of the aquifer in identified areas. Amidst the imposition of stringent health security measures, VRA IEC activities were conducted through face to face and virtual platform to assist the LGUs in the preparation of their disaster risk reduction and management plans and programs.

The Upper Agno River Basin and the Upper Amburayan Watershed were the subject of watershed characterization and vulnerability assessment in 2021. Due to limited funds and COVID-19 lockdown restrictions, the assessment was confined within the jurisdiction of Cordillera. The Upper Amburayan Watershed characterization and VA report were reviewed and finalized on October 22, 2021 and endorsed to the DENR-CO on November 8, 2021.

The Build Back Better Task Force for Cagayan River Basin in CAR was created on January 26, 2021. The different member agencies and partners presented their implementation plans to help in the rehabilitation and recovery of the Cagayan River Basin within the Cordillera. The implementation plans were packaged under Key Result Area No. 6 of the Build Back Better Plan which focuses on Intensified Watershed Management. This includes programs on enforcement of environmental laws, river bank stabilization, river easement recovery, reforestation, and forest protection measures.

For 2022, the cities and municipalities were assessed based on their performance in each of the Cities and Municipalities Competitive Index (CMCI) pillars namely: Economic Dynamism, Government Efficiency, Infrastructure, and Resiliency. The pillar on resiliency measures the capacity of a locality to facilitate businesses and industries to create jobs, raise productivity, and increase the incomes of citizens over time despite the shocks and stresses it encounters. The pillar on resiliency shows that Sablan, Benguet ranked 8<sup>th</sup> and Baay-Licuan, Abra ranked 20<sup>th</sup>

under the 5th – 6th class category. Banaue, Ifugao ranked 9<sup>th</sup> and Lamut, Ifugao ranked 10<sup>th</sup> under the 3rd – 4th class category. Meanwhile, La Trinidad, Benguet slid down to rank 163 nationwide from rank 27 in 2021. On the highly urbanized city category, Baguio

City also slid down to rank 19 nationwide from rank 15 in 2021. The decline on the resiliency pillar ranking among the cities and municipalities in 2022 is one of the negative effects of COVID-19 pandemic across the region.

## Challenges

***Competing land uses and conflicts in resource use.*** Notwithstanding the improved efforts to sustain the region’s role as the Watershed Cradle of the North Luzon through the successful implementation of NGP and other forest protection programs, competing land uses and conflicts in resource use remains a challenge. The expansion of production and settlement areas into forestlands continues with the needs of the region’s growing population. Added to this is the fast conversion of farm lands into settlement areas (Also discussed in Chapter 2).

Regular surveillance activities are done, but encroachment into forestland and timber poaching persist as indicated by the confiscation of illegally collected forest products and the filing of appropriate cases in court. Forest degradation due to farm expansion, timber poaching, and forest fires also result to loss of biodiversity with the destruction of wildlife habitats.

***Constraints in improving land tenure remain.*** The provision in PD 705 that prohibits the alienation of lands with 18 percent slope and above limits alienable and disposable (A&D) lands to only 15 percent of

the region’s total land area. This provision is disadvantageous to the Cordillera considering the region’s mountainous topography. Based on the Forestland Boundary Assessment and Delineation of the DENR-CAR, the A&D lands may be increased to 22-25 percent of total land area to reflect actual land use and consider land area expansion and development for the needs of the growing population. Even with an increase in A&D lands, the forest cover can still be maintained at the desired level of 60-40 forest to non-forest land use ratio.

***DRR-CCA implementation needs to be upscaled.*** The region is faced with challenges in implementing climate adaptation and risk reduction strategies, strengthening community and ecosystem resilience, and supporting green technologies. In the context of the disaster risk management cycle, LGUs still prioritize response measures over disaster prevention and mitigation. This is evident in the low utilization of their 70 percent annual LDRRM budgets including accumulated trust fund devoted to mitigate the effects of disasters.

***Environmental governance needs to be improved.*** Sound environmental laws and

policies are in place, and CAR has its Declaration of Principles on Environmental Governance (DPEG), but implementation falls short because of the lack of resources, expertise and political will. This is evident with the land, air, and water pollution due to poor solid and liquid waste management, poor compliance to safety and environmental standards, and unsustainable farming practices such as the use of excessive chemical fertilizers and pesticides. Watersheds and forests are also encroached on by farms and settlements.

The low compliance of LGUs to the requirements of RA 9003<sup>49</sup> is due to lack of resources and suitable areas for the establishment of sanitary landfills, materials recovery facilities, and composting facilities.

Another concern is the need for the government to resolve constraints and facilitate the issuance of mining contracts in declared Minahang Bayan (MB) areas. In 2022, only two out of the 13 MBs have mining contracts while the others are still working on their FPIC clearances

## Targets

Table 62 Plan targets accelerate climate action and strengthen disaster resilience

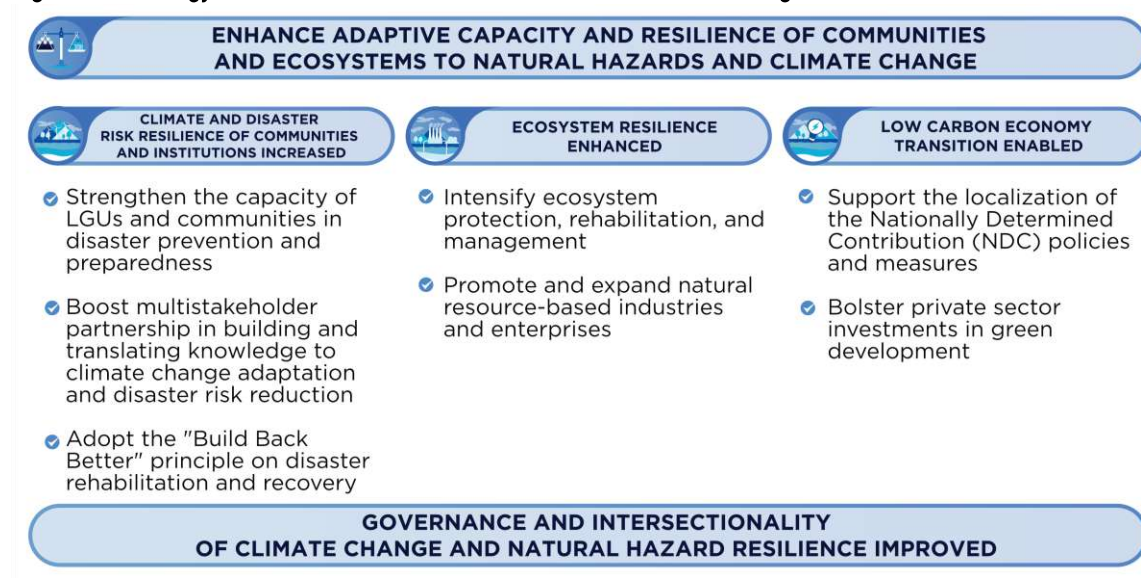
Outcome Indicators	Baseline		Targets							Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	EOP	
Forest cover increased (%)	2022	5.28	1.27	1.8	1.83	2.25	2.71	5.04	5.04%	DENR
Area reforested (hectares)	2022	24,417	231	3,465	3,863	18,989	19,271	4,427	4,427	DENR
Protected landscapes and critical habitats protected increased	2022	2	1	1	1	1	1	1		DENR
Proportion of monitored water bodies conforming with water quality guideline values increased			100%	100%	100%	100%	100%	100%	100%	EMB
Percentage of highly urbanized and other major			100%	100%	100%	100%	100%	100%	100%	EMB

<sup>49</sup> Ecological Solid Waste Management Act

Outcome Indicators	Baseline		Targets							Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028	EOP	
urban centers with ambient air quality guideline values of PM 10 and 2.5										
LGUs with LDRRMOs established			83	83	83	83	83	83	83	OCD
CC/DRRM enhanced plans increased			83	83	83	83	83	83	83	OCD
Number of Casualties from Natural Disasters and the Impacts of Climate Change Reduced			Decrease	Decrease	Decrease	Decrease	Decrease	Decrease	Decrease	OCD

# Strategy Framework

Figure 42 Strategy Framework to Accelerate Climate Action and Strengthen Disaster Resilience



The attainment of the above framework requires a whole-of-society approach requiring closer collaboration between and among the national, regional, and local governments with the academe and private sector to: 1) increase the climate and disaster resilience of communities and institutions; 2) enhance the ecosystem resilience; and, 3) facilitate transition to low carbon economy. The subsector outcomes can be achieved through the strategies on capacitating the LGUs and communities on disaster prevention and preparedness, strengthening stakeholders' partnerships including private sector investments in green development such as renewable energy, and sustainable ecosystem management with funding and implementation of environmental projects to complement LGU resources. These strategies will consider the integration of proven traditional and adaptive approaches currently implemented by the Indigenous Peoples on forest conservation, protection, and management.

## Outcome 1: Increase climate and disaster risk resilience of communities and institutions

***Strengthen the capacity of LGUs and communities in disaster prevention, mitigation, and preparedness.*** In order to improve DRR-CCA in the region, IEC activities and capacity building for the LGUs and communities must focus on disaster preparedness, prevention, and mitigation

aside from disaster response, rehabilitation, and recovery. Capacitation of LGUs and communities on disaster prevention and preparedness will be pursued to enable them to efficiently manage all types of emergencies and achieve orderly transitions from response to recovery.

There is a need for continuing provision of technical assistance as LGUs prepare and continually enhance their Local Climate Change Action Plan (LCCAP) and Local Disaster Risk Reduction Management Plan (LDRRMP) to achieve the goal of enhancing the adaptive capacities and resilience of the communities and ecosystems to natural hazards and climate change. The local plans shall include resilient infrastructures such as roads, schools, evacuation centers, health facilities, water supply and sanitation facilities and the safeguards for the communities affected by disasters especially the women, children, elderly and other groups at risk. In support, the MGB will regularly update the regional hazard and vulnerability maps as inputs to risk reduction and climate change planning and investment programming.

Apart from the formulation and updating of DRR-CCA regional and local plans, the efficient utilization of disaster risk reduction and management fund shall be strengthened to heighten focus in addressing all the four thematic areas of disaster: preparedness, prevention and mitigation, response, and rehabilitation and recovery.

The capability building of the OCD, other government agencies, academe and the private sector on disaster resiliency and climate change adaptation for LGUs and communities need to be sustained. The DOST Early Warning System IEC and the Radio Network Establishment for All-Weather Communications in the Highlands (REACH) Project that aims to enhance the communications network for early warning and monitoring of hazards and incidents in

the Cordillera will strengthen the capacities of the communities and LGUs on climate change and disaster resiliency.

***Boost multi-stakeholder partnership in building and translating knowledge to climate change adaptation and disaster risk reduction.*** The Cordillera Regional Disaster Risk Reduction and Management Council (CRDRRMC) will collaborate with all stakeholders in the conduct of DRR-CCA related activities at the local level including IECs, fora, seminars, capacity building, financing assistance for PPAs, and monitoring of program and project implementation to ensure the attainment of safer, adaptive and resilient communities.

***Adopt the “Build Back Better” principle on disaster rehabilitation and recovery.***

The principle of “build back better” entails not only restoring communities to their pre-disaster conditions, but also developing more resilient physical and social infrastructure including capacity building among agencies and LGUs in taking steps towards disaster resiliency.

MGB will continually update the regional geo-hazard and vulnerability maps to be shared with the LGUs as inputs to planning and programming of PPAs to ensure safety and well-being of the communities and institutions in the region. The Geo-Hazard Assessment Program will generate information on susceptibility of areas to geologic hazards. The assessment is focused on rain-induced landslides, floods, flashfloods, ground subsidence or sinking,

and other forms of slope instabilities that are not directly induced by earthquakes or volcanic activities.

## Outcome 2: Enhance ecosystem resilience

**Intensify ecosystem protection, rehabilitation, and management.** The region will promote integrated river basin planning, development and management to protect, conserve, and rehabilitate its ecosystems (e.g., forest, water, rivers, wetlands, land). Since CAR is an IP dominated region, the river basin integrated planning approach shall be aligned with the Ancestral Domain Sustainable Development and Protection Plans (ADSDPP) of IP communities.

The region will continue to lobby for the legislation of the five protected areas, namely the Casamata Hill in Abra, Lower Agno Watershed Forest Reserve, Upper Agno River Basin Resource Reserve, Marcos Highway Watershed Forest Reserve, Mt. Data National Park, under the Expanded NIPAS Act.

Monitoring the compliance on environmental laws, policies, and regulations will be strengthened to cover extractive activities on mining, quarrying, road construction, water use and other activities including mitigating the negative impacts of tourism, commercial agriculture, and major infrastructure projects. The resolution of the persistent issue on encroachment of settlements and agriculture activity on forest lands needs an inter-agency approach to promote sustainable agriculture, equity and

security of land tenure, a sustainable ecosystem and disaster risk reduction.

**Promote and expand natural resource-based industries, enterprises, and income-generating opportunities for local governments and stakeholders.** The expanded National Greening Program (NGP) implemented in partnership with peoples' organizations (POs) will be sustained. The NGP provides livelihood and economic opportunities for the poor and vulnerable upland communities while also rehabilitating and protecting the watersheds. The NGP will likewise increase the region's forest cover that in 2020 was estimated to be 47% of total land area to sustain the region's watersheds and river basins.

In partnership with the private sector, ecotourism and farm tourism will be promoted but with safeguards to minimize adverse effect on the environment.

Aside from the enforcement of penalties on polluters, the National Government can also provide assistance to low-income class LGUs in cost recovery for waste management operations. In addition, entrepreneurship may be promoted to include trainings on waste recycling at the household and community levels.



The inclusion of the small-scale miners in the formal economy through their participation in the Bangko Sentral ng Pilipinas (BSP) Gold Buying Program will also provide them access

to programs on mine waste and pollution management, safety and health protection measures that will benefit them and their families, as well as the local communities.

### Outcome 3: Enable low carbon economy transition

***Support the Localization of the Nationally Determined Contributions (NDC), and Policies and Measures (PAMs).*** In 2021, the RDC-CAR issued Resolution No. 78 supporting the implementation of the NDC PAMs at the regional and local levels. The region will pursue the regional NDC targets as determined by the localized guidelines of the Climate Change Commission to determine the potential contribution of regions in attaining the NDC targets on mitigation actions.

The NDC will be used as an expanded platform for enhanced global cooperation and amplified access to key resources (i.e. finance & technology transfer), not just for climate change mitigation, but also for adaptation and resiliency measures especially for the most vulnerable. The NDC shall support national development objectives and priorities such as sustainable industrial development, poverty eradication and provision of basic needs, securing social and climate justice, and energy security.

***Boost private sector investments in green development.*** The region in coordination with the national government will foster an enabling policy environment to leverage private sector investments in green technologies and the promotion of circular

business models that generate green jobs. The government shall grant incentives to businesses that involves one or more of the following elements: recycling of products and materials, sharing economy and substitution of unwanted or toxic substances. Recycling prevents the emission of many greenhouse gases and water pollutants, and saves energy. Using recovered material generates less solid waste. Recycling helps to reduce the pollution caused by the extraction and processing of raw materials.

Job-rich projects include planting forests, engaging in soil conservation, and retrofitting buildings to make them more energy efficient. Building climate-resilient infrastructure and expanding green public transportation, renewable energy, and smart electricity grids are also essential components of a green, circular economy.

The National Government and LGUs in partnership with the private sector shall initiate the shift to circular business models to reduce waste while protecting the environment. Circular business models modify the pattern of product and material flows through the economy. In doing so, they can reduce the adverse environmental side-effects resulting from the extraction, use, and

eventual disposal of processed resources and materials.

On renewable energy, DOE in partnership with LGUs and the private sector to push for the commissioning of the awarded hydropower projects under the development category to boost the energy production of the region.

***Strengthen implementation of programs aimed at reducing waste production.*** LGUs should monitor the strict implementation of waste segregation at the household level, where plastics and other recyclables may be reused or can be manufactured into other products. Organic wastes could be composted into fertilizers for urban gardens. The establishment of materials recovery facilities in the communities can serve as additional source of livelihood for the residents while at the same time reducing the volume of municipal wastes being hauled by the garbage trucks to waste disposal facilities.

***Pursue programs towards maintaining the region's air, water and soil quality within standards.*** The region will continue to monitor the ambient air quality in the BLISTT area particularly on the five air quality monitoring stations strategically located in Baguio City and La Trinidad, Benguet. In the long-term, air quality monitoring will also be conducted in the capital towns and the urbanizing centers of the provinces.

In support of the Clean Air Program and the BLISTT Airshed, the implementation of the DOTr/LTFRB Jeepney Modernization Program shall provide assistance to the drivers and operators to facilitate transition from the use of old vehicles emitting high CO<sub>2</sub> to the use of environment and passenger-friendly modern-day transportation system.

In addition, LGUs will be encouraged to impose a buy-back policy on chemical fertilizer and pesticide containers by the suppliers and manufacturers to mitigate soil and water pollution caused by improper disposal of such containers.

## Cross Cutting Strategy: Improve governance and intersectionality of climate change and natural hazard resilience

***Align regional development strategies with the DPEG.*** The RDC-CAR approved the Declaration of Principles on Environmental Governance (DPEG) for the Cordillera Administrative Region on October 8, 2014. The DPEG consists of policy directions on environmental governance that will serve as a guide for the RDC-CAR, RLAs, the private sector and all civil society to address environmental issues pertaining to, among others, upland agriculture, mining, water resources management, urban growth, and tourism.

Guided by the DPEG, the region will promote innovation and the use of green technologies such as: wind and solar power energy, green architecture, recycled plastic road surfacing, waste-water electricity generator, waste to energy, electric vehicles, smart meters, and the like, while tapping the region's wealth of indigenous knowledge systems and practices as far as applicable.

The Early Warning System IEC of DOST will be intensified and the capabilities of the early warning and flood monitoring facilities installed in the upper river systems and tributaries will be expanded and upgraded for disaster prevention.

***Continue pursuit for payment for ecosystem services.*** The region shall also push for the establishment of mechanisms for the

payment for ecosystem services (PES) as CAR supplies the water needs of downstream regions for irrigation, hydroelectric power generation, fisheries, industrial, and domestic use (also discussed in Chapter 2). The DENR, DOE, and NIA shall jointly initiate the establishment of mechanisms for PES using the PSA environment and natural resources accounting studies on timber, land, minerals, and water as inputs. The PES shall serve as incentive or source of income for communities and LGUs in the rehabilitation and protection of watersheds.

The PSA will continue to compile, and regularly update natural capital and ecosystem accounts as basis for the mechanisms for payment for environmental services (PES) as CAR is the host to 13 major river systems supplying the water needs of regions 1, 2, and 3. PSA has already compiled the region's physical and monetary asset accounts for land, timber, mineral resources, and the physical asset and flow account for water resources.

***Scale up the mobilization of sustainable finance and other forms of support from public and private sources.*** The Cordillera Regional Disaster Risk Reduction Management Council (CRDRRMC) will spearhead collaboration with the private sector to support and finance DRR-CCA

programs and projects through public-private partnerships (PPP).

As an IP region, eco-tourism and agricultural tourism which are primarily private sector managed shall adhere to the DOT, DENR, LGU, and community policies and guidelines on sustainable and responsible tourism. Sustainable tourism is the concept of traveling and exploring a destination as a tourist while respecting the culture, environment and people of that destination. Responsible tourism is about creating better places for people to live in and better places for people to visit. Tourism fees should include allocation for proper solid waste management in every tourism site. In addition, the government must also pursue studies on the carrying capacities of tourism sites in the region.

***Ensure implementation of responsible mining practices through intensified monitoring.*** On responsible mining, MGB ensures the implementation of responsible mining practices in the minerals industry. It involves the monitoring of mining permits and contracts to determine their compliance with the Safety and Health, Environment and Social (SHES) provisions of the Mining Act of 1995, as well as the approved work permits on exploration, development, construction, and operating work programs of large-scale mining operations. The audit of the SHES and work program monitoring system is also a component of this strategy.

MGB will monitor through the Multipartite Monitoring Teams the compliance to mining

permits and contracts as well as illegal mining activities. Issuance of cease and desist orders and the consequent filing of charges will be done as needed.

MGB will continue to facilitate registration and regulation of the Minahang Bayan (MB) areas in the region. The declaration of MB areas is part of the government's thrust to protect the environment and ensure comprehensive monitoring of small-scale mining operations.

In line with the government's assistance to the small-scale mining sector, the MGB will continue to monitor and provide assistance to the two MBs with mining contracts, provide technical assistance to facilitate the issuance of mining contracts to the other 11 declared MBs, and facilitate the declaration of about 40 MB applications across the region.

***Undertake researches that will guide formulation of local environmental plans and policies and improvement of existing programs.*** On DRR-CCA researches, the Watershed and Water Resources Research, and Development Center (WWRRDEC) will conduct researches and studies on the following: Water Resources Assessment and Hazards Analysis; Management and Protection of Water Bodies; Landscape Enhancement of Riparian Areas within Degraded River Systems in North and Central Luzon; Technology Transfer and Livelihood Development within Watersheds; Climate Mitigation and Adaptation Strategies of Upland Dwellers to Climate Change; Documentation of Indigenous Knowledge

Practices in Weather and Climate Forecasting of Selected Tribes in Cordillera. The results of the studies will be shared with partner agencies, LGUs, institutions, the private sector, and the communities as inputs in their DRR-CCA planning and programming.

***Harness the region’s potentials for renewable energy production.*** The region will continue to advocate for the implementation of the region’s renewable energy development program including the commissioning 79 DOE-awarded hydropower projects, three geothermal projects, one biomass project, one wind project, and one solar project to boost the energy production in the region.

## Legislative Agenda

**Table 63 Legislative Agenda to Accelerate Climate Action and Strengthen Disaster Resilience**

LEGISLATIVE AGENDA	RATIONALE/DESCRIPTION	LEAD AGENCY
Legislation of House Bill 3267	The HB seeks to fulfill the mandate of the 1987 Constitution providing autonomy to Muslim Mindanao and the Cordilleras. The granting of CAR autonomy shall serve as the foundation that will empower the Cordillera people to pursue sustainable and inclusive growth through the management, protection, and development of their natural and human resources, and the promotion of the rights and culture of the Cordillera people. Moreover, the region can formulate better policies on natural resources management integrating and adapting indigenous knowledge systems and practices in preserving the environment. The establishment of regional autonomy will complement the provisions of Republic Act No. 8371 or the Indigenous Peoples’ Right Act of 1997 (IPRA) for the protection of indigenous peoples and their lands.	CAR Congressmen
Legislation of the five protected areas under expanded NIPAS Act	Legislation of the following protected areas into Protected Landscapes under the Expanded NIPAS Act: <ul style="list-style-type: none"> <li>• Lower Agno Forest Reserve,</li> <li>• Upper Agno Forest Reserve,</li> <li>• Casamata Hill National Park in Abra,</li> <li>• Mt. Data National Park, and</li> <li>• Marcos Highway Forest Reserve.</li> </ul>	DENR, LGUs, PAMBs
Amendment of Local Government Code of 1991 (RA 7160) to redefine the term “Host	The institutionalism of mechanisms and adoption of policies for payment of environmental services (PES) shall ensure the sustainable management of	DENR, DOE, DILG

LEGISLATIVE AGENDA	RATIONALE/DESCRIPTION	LEAD AGENCY
<p>Community”, the DOE Act of 1992 (RA 7638) and the EPIRA of 2001 (RA 9136) to include the upland or upstream communities and LGUs that are protecting and maintaining the watersheds of hydroelectric power generating facilities and multi-purpose dams</p>	<p>the region’s forests and water resources. PES shall serve as incentive or source of income for communities and LGUs in the rehabilitation and protection of watersheds</p>	
<p>Amend the provision of PD 705 that restricts the classification of lands with more than 18% slope as alienable and disposable.</p>	<p>The provision is disadvantageous to the region with its mountainous topography. Lands that are developed for agriculture and settlements should be released for titling as long as they are not in environmentally critical or hazardous areas. Improving land tenure security is a poverty alleviation and productivity enhancement measure for farmers.</p>	<p>DENR, CAR Representatives</p>

# 17

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**Promote Culture Sensitive  
Governance and  
Development**







## Chapter 17

# 17 Advocate Culture-Sensitive Governance and Development

The people of the Cordillera Region’s collective aspiration for deep social and economic transformation through culture-sensitive governance and development is embodied in the regional vision, to wit:

“We, the people of the Cordillera, proud of our culture and heritage rooted in spirituality will have a truly autonomous region of a united, enlightened and empowered citizenry who will pursue sustainable development where responsibilities and benefits are shared by all.”

This entails that Cordillera culture and values are upheld and Indigenous Peoples are empowered and protected through rights-based and gender-sensitive implementation of development plans, policies and programs under an autonomous regional government. Towards these, the region will focus on advocating for: the recognition of the region’s diverse culture; advancing indigenous innovation and creativity; inculcating values for the common good; and strengthening culture-sensitive governance mechanisms and development initiatives.

## Assessment and Challenges

The region recorded an increase in the number of local government units (LGUs) with Local Cultural Inventory, regional arts academies or schools, schools of living tradition (SLTs) implementing special programs in the arts, SLT learners and graduates, and compliance rate of LGUs to the establishment of Local Culture and Arts Councils (LCACs) and LGUs with IP Mandatory Representation (IPMR). These accomplishments have significantly contributed to cultural preservation and protection as well as in the institutionalization and promotion of Cordillera’s local culture and values.

*Ancestral Domain Sustainable Development and Protection Plans (ADSDPPs) formulated.* The number of ADSDPPs formulated or updated was sustained in 2021 with 71 of 144 ancestral domains with ADSDPPs formulated. This leaves 73 ancestral domains still without an ADSDPP. However, despite the number of ADSDPPs formulated and updated, the lack of clear implementation mechanisms and funding allocation either from the LGU or the National Commission on Indigenous Peoples (NCIP) challenges plan implementation.

**Table 64 Number of Ancestral Domain Sustainable Development and Protection Plans, CAR: 2021, NCIP-CAR**

Province/City	Actual Number of Ancestral Domain	Number of ADSDPP	
		2020	2021
<b>CAR</b>	<b>144</b>	<b>67</b>	<b>71</b>
Abra	26	13	14
Apayao	13	5	7
Baguio City	1	1	1
Benguet	15	18	15
Ifugao	12	9	9
Kalinga	46	9	13
Mountain Province	31	12	12

Source: NCIP-CAR

***Identifying and profiling of IP communities, delineating their territories and documenting their customary laws and decision-making process.***

The implementation of the Free and Prior Informed Consent (FPIC) depends on the existence of legitimate and functioning IP organizations that truly represent their community, their customary laws and known decision-making, and clearly defined ancestral domain boundaries. Whenever the conditions are not present, the screening of projects for the FPIC process will be long, its outcome will be difficult to predict, and its legitimacy is prone to be questioned.

The NCIP-CAR reported that in 2021, 26 Certificate of Ancestral Domain Titles (CADTs) and 187 Certificate of Ancestral Land Titles (CALTs) were registered in the region (see Table 65). Out of the 144 ADs, only 26 CADTs were issued due to unresolved

boundary conflicts among ancestral domains and lack of funding for the delineation of AD.

The issuance of a CADT to the ICCs/IPs will give the ICCs/IPs the responsibility and ownership of their ancestral domain. The ICCs/IPs will develop, control, manage and utilize collectively the ancestral domain issued with a CADT with all the rights, privileges, and responsibilities subject to the condition that the said ancestral domains or portions thereof, shall not be sold, disposed or destroyed.

The NCIP also continued to render legal services to their clients. In 2022, 910 IP clients were assisted. Paralegal trainings were also conducted for IP mandatory representatives, IP women, elders and leaders. In addition, four customary laws/practices were documented.

**Table 65 Number of Approved Certificate of Ancestral Domain Titles (CADTs) and Certificate of Ancestral Land Titles (CALTs), CAR: 2021**

Province/City	CADT		CALT		
	No/Location		Area (in sq. km)	No.	Area (in sq. km)
Abra	1	- Peñarrubia	3,595.78	-	
Apayao	3	- Eva Garden, Nabuangan, Ingajan	497.48	-	
Benguet	1	- Atok, Bakun, Bokod, Buguias, Domolpos, Itogon, Kabayan, Kapangan, Kibungan, La Trinidad, Mankayan, Sablan, Tublay	2,611.81	12	1.35
Baguio City	13	- Happy Hallow	1.46	163	14.68
Ifugao	3	- Tinoc, Asipulo, Eastern Lagawe	670.04	1	0.0031
Kalinga	3	- Lubo, Guilayan, Bangad	108.30	7	11.73
Mountain Province	2	- Kabatangan, Kadaclan	185.04	4	0.12
<b>Total</b>	<b>26</b>		<b>4,113.32</b>	<b>187</b>	<b>28.8831</b>

Source: NCIP-CAR

***Strengthened documentation, promotion, recognition and utilization of Indigenous Knowledge, Systems and Practices (IKSPs).***

Indigenous knowledge is used by local communities as the basis for decisions pertaining to food security, health, education, natural resources, and other vital activities, that are culturally acceptable to the life of Cordillerans. An additional 12 Indigenous Knowledge Systems and Practices (IKSPs) were documented in 2021 of which, seven were with Free, Prior and Informed Consent (FPIC) facilitated by the NCIP.

The National Commission on Culture and the Arts (NCCA) also certified additional three LGUs that established their local cultural inventory in 2021. The inventory is a documentation of cultural properties within an LGUs jurisdiction that serves as aid in its development, promotion and dissemination.

Despite the pandemic, there was a 51.14 percent increase in learning resource materials (LRMs) developed. The increase in number from 1,914 LRMs to 3,727 LRMs was attributed to the teachers who were trained in Alternative Delivery Mode (ADM) development and on Information and Communications Technology (ICT) training.

***Spirit of volunteerism instilled.*** Recognizing the significant contributions of volunteers and volunteer groups in the region, the Philippine National Volunteer Service Coordinating Agency (PNVSCA), an attached agency of the National Economic and Development Authority (NEDA), conducted the Search for Outstanding COVID-19 Volunteers (SOV) in 2020 and 2021. This search aimed to highlight exceptional individuals and volunteer organizations that went above and beyond to serve their fellow Filipinos during the ongoing health and economic crisis. Ms.

Clemencia B. Lapas was recognized at the national level in 2020. Ms. Lapas, together with two individuals, were given recognition at the regional level for their volunteer services during the height of the pandemic. For 2021, three individuals and one organization were recognized as top Cordilleran volunteers. These volunteers rendered mutual aid and developmental interventions for the attainment of the public good, where monetary and other incentives or rewards were not the primary motivating factors. They freely gave their time and effort to help the Cordillerans in need.

***Indigenous innovation and creativity advanced.*** Various cultural endeavors such as the IBAGIW Festival, Mandeko Kito: Artisan’s Fair, and the Montañosa Film Festival were conducted to advance indigenous innovation and creativity in the region. These were undertaken to preserve tangible and intangible cultural heritage and to encourage policymakers, implementers, local artists, and artisans to enhance the region’s creative industry potentials.

Baguio City, a popular holiday destination, is not only recognized for its chilly mountain climate and abundant pine trees, but also for valuing creativity and culture as part of its development. Noteworthy that it is the first city in the country to be named by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as one of 64 cities worldwide in its Creative Cities Network. Baguio was also recognized for its artistry, with the likes of the National Artist for Visual Arts Benedicto “BenCab” Cabrera and Erik

“Kidlat Tahimik” de Guia living and showing their wares in the City and its neighboring towns.

Like woodcraft, silver craft, and tattooing, weaving is known as one of the most creative expressions of local culture in the Cordillera. Weaving communities from the six provinces participated in the different exhibits and bazaars conceptualized and organized by the different government offices such as the Cordillera Weaves Exhibit and Weavers’ Bazaar to showcase their creativity and craftsmanship.

The Cordillera Regional Research, Development and Innovation Committee (RRDIC) through the leadership of DOST-CAR Director Nancy A. Bantog, spearheaded the initiative of bringing together the various stakeholders from government and the private sector for the preparation of the Cordillera Weaving Industry Development Plan (CWIDP) 2020-2028. The plan, which was approved on 29 January 2021, is expected to bring about “a Cordillera-inspired, creative and vibrant weaving industry that is sustainable, resilient and globally competitive advanced by community of artisans and entrepreneurs for the benefit of the Cordillera people” by 2040.

***Compliance of LGUs to the establishment of Local Culture and Arts Council (LCAC).*** The creation of Local Culture and Arts Councils (LCACs) in CAR was first proposed by the NCCA during the Cordillera Regional Culture and Arts Conference held in Banaue, Ifugao on October 13, 2017 as a strategy to

protect and promote local cultural heritage and the arts, this being mandated also by various laws and policies. A total of 78 out of 83 LGUs established their LCACs. This includes all the six provinces in CAR, two cities (Baguio City and Tabuk City) and 70 municipal LGUs based on DILG-CAR Summary of Initial Results of the 2022 Seal of Good Local Governance.

**Indigenous Peoples participation and representation in local governance increased.** NCIP-CAR recorded that 75.70 percent of all LGUs targeted to have an Indigenous Peoples Mandatory Representative (IPMR) or 763 of the 1,008 LGUs (provinces, cities, municipalities, and barangays) have IPMRs.

**Table 66 Number of Indigenous Peoples Mandatory Representatives CAR: 2021**

Province/ City	Provincial Level		Municipal Level			Barangay Level			Total	
	No. of Provinces	No. of IPMRs	No. of City/Municipalities	No. of Target	No. of IPMRs	No. of Barangays	No. of Target	No. of IPMRs	Target	Actual
<b>Abra</b>	1	1	27	20	20	303	159	105	180	144
<b>Apayao</b>	1	1	7	7	7	133	105	97	113	105
<b>Benguet</b>	1	1	13	13	9	140	140	126	154	125
<b>Baguio City</b>	1	1	1	0	0	128	53	6	54	7
<b>Ifugao</b>	1	-	11	11	4	175	177	73	189	77
<b>Kalinga</b>	1	1	8	7	6	153	153	142	163	150
<b>Mountain Province</b>	1	1	10	10	10	144	144	143	155	155
<b>Total</b>	7	6	77	48	36	1,176	933	701	1,008	763

Source: NCIP-CAR

**Ethnicity component in the Philippine Census of Population and Housing.** Lack of quantitative data is a problem affecting minority and indigenous communities, not only in the Cordillera, but in the entire Philippines. After it has been studied thoroughly and defined by the Philippine Statistics Authority (PSA), the ethnicity component was included in the 2020 Census of Population and Housing. The generation of Indigenous People (IP) statistics is critically important in formulating proper and effective policies, plans, and programs/projects for the indigenous communities.

**Advocacy for the passage of an Organic act establishing the Cordillera Autonomous Region continued.**

In 2020, the global pandemic proved to be a major challenge in the implementation of government programs and activities. This prompted the national government to impose travel and health restrictions to mitigate its unprecedented effects to the community. The Cordillera Regional Development Council (RDC-CAR), through the Social Preparation of CAR into an Autonomous Region (SPCAR) program, shifted its autonomy advocacy from face-to-face fora and assemblies to online platforms in delivering its mandate for preparing the region for autonomy.

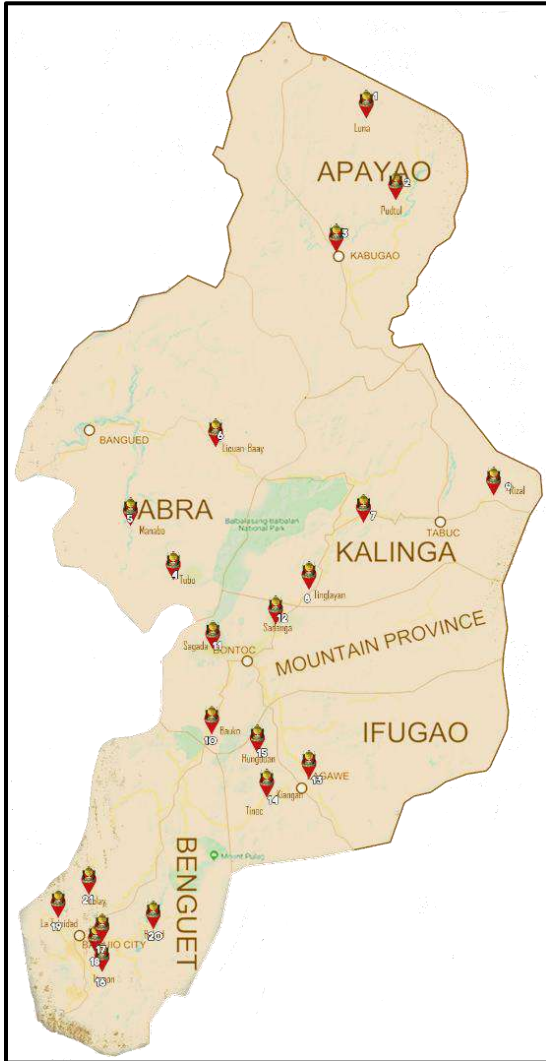
In 2020, the SPCAR realigned its resources and efforts toward various media platforms that are frequently referred as major sources of information like newspaper, radio, and social media in delivering its information dissemination. This enabled the advocacy to extend its reach to far flung areas and not only in the town centers despite travel restrictions. Toward the end of the year, the SPCAR social media saw a 31% increase in reach and an unprecedented 982% increase in engagement compared to the previous year. This means that the number of likes, comments, and shares on SPCAR's social media posts increased significantly compared to the previous year. Moreover, a total of 96 LGU Resolutions signifying support for the RDC-CAR's autonomy advocacy were also received.

In the same year, a previous joint project headed by the Mountain Province State Polytechnic College (MPSPC) and the RDC-CAR saw its completion with the production of two Information, Education, and Communication (IEC) campaign materials. The project, entitled "Mapping and Marking of

CAR Historical Sites", was designed to promote cultural identity and increase awareness of the events of the Cordillera struggle. One of the said outputs, entitled "A People's Journey: Continuing Struggle for the Self-determination in the Cordillera", documents the history of the sites and why they were crucial to the region's call for regional autonomy. The said outputs were distributed along with other materials during the resumption of face-to-face IECs. The completion of the joint project is a significant milestone in preserving the Cordillera's rich cultural heritage and promoting the region's struggle for self-determination.

In 2021, the SPCAR conducted multiple meetings in coordination with autonomy advocates and CAR Congressional Representatives with the goal of consolidating the two house bills that were filed in Congress. This collaboration aided the filing of HB 10729 or the substitute bill. However, due to lack of material time in the 18<sup>th</sup> Congress, the bill was not enacted into law.

Map 16 Cordillera Struggle Historical Sites



In 2022, the RDC-CAR updated the SPCAR Communication Plan incorporating strategies gained from the adjustments undertaken due to the pandemic and in preparation for the national and local elections and its subsequent

activities on the transition of officials. The updated Communication Plan will guide the program in effectively delivering its mandate for 2022 to 2025.

A pulse survey was also commissioned by the RDC-CAR to gauge the level of awareness and support among Cordillerans on regional autonomy. The survey results indicate that 71 percent of the respondents would vote yes to autonomy should there be a plebiscite tomorrow excluding undecided and no votes. This is a manifestation of an increasing support and clamor for regional autonomy.

With the new administration, the SPCAR program will continue to operate under two approaches, the downstream and upstream. The program will not hamper its efforts in preparing local stakeholders or autonomy through various information, education, and communication (IEC) activities to further increase the overall awareness of the region on Cordillera autonomy.

Likewise, capacitating regional partners in effectively delivering the advocacy and building stronger alliances with the national government and partners from the private sector outside the region remain as a priority alongside the grassroots and multi-sectoral IECs.

# Targets

Identified region-specific core indicators that will be monitored to ensure progress toward respecting, recognizing and valuing the region’s diverse culture, indigenous innovation, advancing creativity, inculcating values for the common good, and strengthening culture-sensitive governance and development are presented in Table 17.4.

**Table 67 argets to advocate Culture-sensitive governance and development**

Outcome Indicators	Baseline		Targets						Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028 (EOP)	
<b>Outcome 1: Diverse cultures respected, recognized, and valued</b>									
Number of SLT learner graduates increased	2022	228	75	150	150	225	225	225	NCCA
Number of regional arts academies/schools, SLTs implementing special programs in the arts sustained	2022	15	5	6	7	8	9	10	NCCA
Number of Ancestral Domain Sustainable Development and Protection Plan formulated/ updated increased	2022	72	6	6	6	6	6	6	NCIP
Number of documentations conducted on indigenous knowledge systems and practices (IKSP)	2021	8	4	2	5	5	5	5	NCIP
<b>Outcome 2: Indigenous Innovation and Creativity Advanced</b>									
Number of Trainings Conducted (Dyeing, Handloom Weaving, Product Development)	2022	48						80	
Number of Weaving Associations Organized/Developed/Assisted	2022	63						95	
Number of Shared Service Facilities Established/Maintained (Weaving)	2022	14						14	
Number of Intellectual Property related registration (weaving patents, weaving trademarks)	2022	41						49	
Number of Product Development Activities (Weaving)	2022	12						13	
<b>Outcome 4: Culture-sensitive governance and development strengthened</b>									

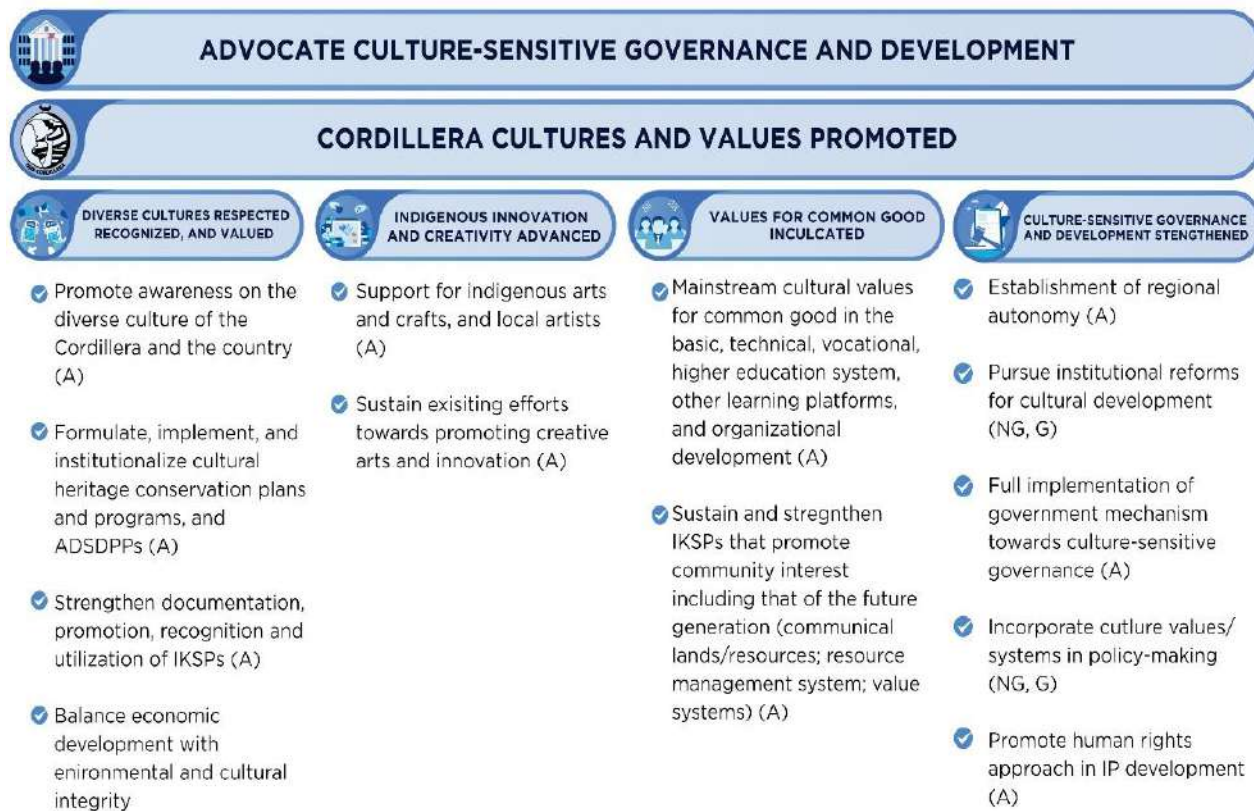


Outcome Indicators	Baseline		Targets						Lead Agency
	Year	Value	2023	2024	2025	2026	2027	2028 [EOP]	
Number of LGUs (Provincial, Municipal, City, Barangay) with installed IPMRs with Certificate of Affirmation)	2022	763	793	823	858	903	953	1008	NCIP
Number of Certification Precondition issued FPIC applications with CP issued increased – cumulative	2022	840	886	936	986	1036	1086	1136	NCIP
Number of Indigenous Political Structures (IPS) documented increased	2022	22	2	2	2	2	2	2	NCIP

## Strategy Framework

The region acknowledges the distinct socio-cultural life of its indigenous populations. Based on the knowledge of indigenous peoples’ cultural specificities and vulnerabilities, the region seeks to increase the level of cultural awareness, cultivate innovation and creativity, inculcate values for the common good, and intensify culture-sensitive governance and to improve development outcomes. These objectives will be reflected in development plans across all levels of government in the region, supported by adequate resources.

Figure 43 Strategic Framework to advocate culture-sensitive governance and development



## Outcome 1: Diverse cultures respected, recognized, and valued

*Promote awareness on the diverse culture of the Cordillera and the country.* The NCIP will prioritize the identification and profiling of IP communities considering that the implementation of the FPIC depends on the existence of legitimate and functioning IP organizations that truly represent their communities. The different groupings in the Cordillera region should be revisited and reformulated, if possible, based on self-ascription. Side by side with appreciating the diversity of the Cordillera peoples, it is important to popularize broader Igorot identity so as to promote unity and solidarity among the diverse groups and at the same

time clarify misconceptions about this broader identity.

Localized and contextualized education materials through the IP Education Program (IPed) of the Department of Education (DepEd) will be made publicly available for schools to utilize in their formulation of culture-base curriculum. The teaching of IKSPs including cultural performances will be institutionalized in schools that cater to IP learners especially in the context of deteriorating traditional institutions that used to play this role.

Technical-vocational schools and Higher Education Institutions (HEIs) in the region should take the lead in incorporating the Indigenous Peoples Rights Act (IPRA) in social sciences subjects. Education outside of the classroom setting such as conventions, symposia, festivals, and other similar activities should also be promoted with the consciousness that the integrity of the practices we present should not be sacrificed. Choreographed presentations, while this showcase creativity, should be presented with explanatory narratives.

Tourism, while it has an important role to cultural sharing and preservation should not be used as reasons for cultural misrepresentation. Guidebooks for “DOs and DON’Ts” and orientations for tourists in the Cordillera will be promoted.

***Formulate, implement, and institutionalize cultural heritage conservation.*** The NCIP will continue facilitating the formulation and updating of the ADSDPPs and should ensure that the ADSDPPs are incorporated in the local development plans and annual investment plans. The ADSDPPs should be included in the Medium Term or Five-Year Master Plan for ICCs/IPs which serve as the guide for programs/projects listed in the annual and medium-term budgetary proposals of the NCIP as well as other agencies concerned with the welfare of ICCs/IPs.

The NCIP will conduct a region-wide orientation on the Guidelines for ADSDPP Formulation for the key ICC/IP

elders/leaders, assisting NGOs, and the NCIP staff at all levels. Also, NCIP will have to conduct capacity building activities to ICCs/IPs on how to formulate and implement their ADSDPP.

Critical government agencies and non-government agencies will be involved to further guide the identification of programs in the ADSDPP.

The legislative agenda of the Indigenous Peoples’ Mandatory Representatives (IPMRs) will have to prioritize ordinances geared towards the protection of the environment and the implementation of the development plans and programs identified in the ADSDPP.

The NCCA will sustain its assistance to local governments on establishing and maintaining their own cultural inventory through NCCA’s Cultural Mapping Program. NCCA will also have to conduct dissemination forums, on its Cultural Mapping Program and other culture related programs to fully inform the LGUs about the importance of cultural mapping and its role in developing the LGUs cultural and creative industries.

***Strengthen documentation, promotion, recognition, and utilization of IKSPs.*** The Cordillera region has always been known for having a rich and vast coverage of Indigenous Knowledge Systems and Practices (IKSPs). The NCIP, NCCA, CHED and other concerned agencies to establish a convergence research/documentation

program to harmonize efforts on IKSPs, including verified documentation on Cordillera indigenous knowledge systems, oral traditions, and practices, to produce a single repository for all information and make it available publicly online through a web portal for wider coverage and easier access. Local audio-visual heritage should also be preserved and restored to connect younger generations with arts and culture in the past.

More IKSPs will have to be used by teachers in the teaching of their subject of expertise. A support system, such as the establishment of Council of Elders (CoEls) in schools, should be established as a form of support for our educators as they integrate IKSPs in their subject matters. ICC-initiated or participatory IKSP documentation in the form of stories, ethnovideography, among others will be done with the facilitation, as needed, by concerned government offices or private sectors.

To ensure the recognition, promotion, and protection of the ICCs/IPs' interest, rights, and well-being, government agencies will also observe the Free and Prior Informed Consent (FPIC) and IKSP guidelines as they introduce and implement plans, programs, projects, activities, and other undertakings involving ICCs/IPs and as they conduct research activities that affect the ICCs/IPs.

NCIP and other concerned government offices and private sectors should also promote the acceptance of IKSPs among the general public through the aid of all media forms.

## **Outcome 2: Indigenous innovation and creativity advanced**

***Support for indigenous arts and crafts, and local artists.*** Protection of artistic works will be advocated through the facilitation of applications of intellectual property on individual creative works.

The creation of Local Culture and Arts Councils (LCACs) has been mandated by the Department of the Interior and Local

Government (DILG) and the Philippine Creative Industries Development Act. Local Government Units are required to form Councils that will formulate development plans and programs to help cultural industries. LGUs should redefine spaces, especially unused structures and aged buildings, to creative and cultural hubs. These hubs will be the places where creative and

cultural champions, advocates, and locals will be brought together, provide facilities for networking and other cultural creative activities, and for non-professionals and non-creative to explore the arts and culture. Man-made and natural spaces should be accessible to the grassroots to ideate and create, and these community hubs should be by and for the grassroots communities. Rural art spaces should also be cultivated and co-managed with barangays and local governments.

LGUs can also partner with the Commission on Higher Education (CHED), Technical Education and Skills Development (TESDA), Department of Trade and Industry (DTI) and Department of Science and Technology (DOST) to design art programs that will cater to those outside the formal schooling. Arts, culture, and creative economy should also be integrated in other development programs and frameworks such as Gender and Development, Smart Cities, Data Driven Development, Food Security, Climate Change and the Environment, Tourism Development Plans, and others. The NCCA should continue to implement and monitor the agency's Cultural Response and Resilience Plan 2023-2028 and monitor the Philippine registry of cultural property that will strengthen indigenous arts and crafts, and local artists.

***Sustain existing efforts toward promoting creative arts and innovation.***

The number of regional arts academies and schools implementing special programs for the arts will be increased. Culture is a major asset for tourism development as well as one

of the major beneficiaries of this development. Culture is a major factor in the attractiveness of most destinations, not only in terms of tourism but also in attracting residents and inward investment. Entrepreneurs will be encouraged to have a paradigm shift towards a culture-based industry and creative economy by featuring/selling products with Cordillera cultural influences in their business to local buyers, tourists, marketed during exhibits, trade fairs, established outlets within and outside the region, festivals, performances, local shows and exports. This includes local arts and crafts for local and international tourism activities.

The Cordillera textile products continue to maintain high demand from both foreign and local tourists because of their distinct colors and unique designs. With the approval of the Cordillera Weaving Industry Development Plan 2020-2028, the DOST, DTI, creative industries and other concerned agencies will continue their efforts in promoting and advancing the Cordillera weaving industry, not only as a cultural asset, but as an economic industry in the region. The indigenous hand-weaving tradition will be kept alive by training both young men and women in formal education (IPEd, K12, HEIs) in creating handwoven products.

Development of local weaving and textile producers will be given the needed support (e.g. capacity building programs including development and promotion of innovative designs through digitization of weaving patterns, technical consultancies, access to finance and marketing support) and resources to continuously create and tell

stories of patterns and empower weavers as artists and entrepreneurs in the commercialization of textile technologies. Woven products will be protected from the exploitation and misappropriation of fashion

designers, merchandisers, and other businesses through patents. Competitions and summits for weavers and textile makers will be conducted to continue the co-creation of knowledge and skills-sharing.

### **Outcome 3: Values for the common good inculcated**

***Mainstream cultural values for common good in the basic, technical, vocational, higher education system, and other learning platforms.*** The region aims that the youth are equipped not only with functional literacy and skills but also with the necessary values to become productive citizens. Values and culture education will be mainstreamed accordingly in basic education, particularly in the K to 12 Curriculum and the IP Education Program of DepEd. Cultural values will be mainstreamed also in the tertiary-level courses such as Bachelor of Culture and Arts Education program (per CHED MC No. 8, series of 2017) and vocational courses offered by TESDA, particularly in decorative crafts, language and culture, and the visual arts. SUCs and HEIs will also be encouraged to undertake research on culture, heritage, and the arts.

***Sustain and strengthen IKSPs that promote community interest through communal lands /resources and resource management, and value systems.*** Undoubtedly, IP communities have made courageous efforts to protect their IKSPs but with the rapid development around them and subsequent massive degradation of natural resources, these efforts are not enough. Their local initiatives need to be recognized and

supported by the government. The survival and cultural identity of the ICCs revolve largely in their IKSPs. Their IKSPs in turn are rooted on the ancestral domain and natural resources with which the IPs lived for centuries. It is most appropriate then to look at IKSP and ancestral domain under one whole context. Although their IKSPs are now disintegrating rapidly mainly due to external factors and also internal developments, the ICCs relationship with their lands remains relatively strong. Pilot projects on management of ancestral land domain by the ICCs and application of IKSP in the sustainable management and utilization of resources should be spearheaded by the Department of Environment and Natural Resources (DENR) in partnership with other concerned government offices and private sectors as needed.

LGUs together with the DOT and other concerned offices will also intensify piloting and promoting ICC-managed farm tourism and ecotourism. This will help promote enjoyment and appreciation of nature and the farm while respecting environmental integrity and the unique culture of the community. LGUs and other concerned agencies should focus greater attention and action on appropriate programs and projects

that empower IPs, alleviate poverty and that will respond to gender issues and concerns on the significant land and resources held by IPs where their IKSP can be applied and promoted for maximum participation in community and nation-building.

This just need to be secured and guaranteed occupancy by the deserving ICCs. The livelihood and associated IKSP of the ICCs can only be stable if their resource base is also sustained. This requires both individual and group efforts in rehabilitating and conserving the remaining resource base.

## Outcome 4: Culture-sensitive governance and development strengthened

***Establishment of Regional Autonomy.*** The region will continue to pursue its advocacy for the passage of an Organic Act establishing the Cordillera Autonomous Region under the new administration to accelerate the attainment of regional development goals and priorities. House Bill 3267, a bill filed in the 19th Congress that aims to establish an autonomous region in the Cordillera considers the uniqueness of the region in terms of culture, topography, and vulnerability to disasters. The bill also aims to establish peace-keeping programs and initiatives in close coordination with the Philippine National Police (PNP) and the Armed Forces of the Philippines (AFP), as well as to uphold traditional conflict resolutions that are acceptable and effective in the promotion of social, political, economic, and peace and order in the region. The pursuit of regional autonomy will continue through Information, Education, and Communication (IEC) activities, Alliance, and Capacity Building in accordance with RDC-CAR's adoption of autonomy as its overarching theme for regional development.

***Pursue institutional reforms for cultural development.*** Philippines is one of the

countries that established a comprehensive system for the protection of the rights of its IPs/ICCs. The NCIP however, has experienced several organizational challenges because of its inadequate human, logistics and financial resources to effectively carry out its diverse functions. The NCIP needs to improve its organization's cultural competence and the cultural sensitivity of its staff to be able to integrate and transform knowledge about diverse groups of people into specific standards, policies, practices, and attributes used in appropriate cultural settings to increase the quality of services producing better outcomes. Given its enormous mandate, there is a need to increase NCIP's regular budget for additional plantilla positions. Aside from the creation of anthropologist positions, the NCIP also needs personnel who are skilled in public administration who can help reconcile the IPRA and its rules and regulations with government procedures for seamless integration. Most importantly, NCIP requires resources to carry out its fundamental task towards the IPRA's effective and efficient implementation, such as the delineation of ancestral domain areas, identification of

profiling of IPs, and documentation of their customary laws and decision-making processes.

The NCIP also faces dilemma in streamlining the processing of FPIC and improving its political acceptability. To improve the efficiency of the FPIC process and strengthen its credibility, provincial offices of the NCIP and its service centers should be given a greater role in the implementation of the FPIC process. The NCIP should also be assisted in terms of developing practical methodologies in conducting the FPIC process. Specific methodologies and approaches should be developed for IP communities that no longer practice customary laws. These methodologies and approaches should be distinct from those designed for IP communities that still utilize such laws.

***Full implementation of government mechanism towards culture-sensitive governance.*** Over two decades ago, IPRA was passed which officially recognized the need to make special provisions for its indigenous peoples. But despite the strengths of the IPRA, there are still many legal issues that need to be confronted. More specifically, the IPRA has conflicts with several Philippine laws. The NCIP should initiate coordination with other agencies and pursue inter-agency discussions to harmonize the IPRA with other existing laws.

NCIP should also strengthen its existing agreements with institutions involved in the delineation of IP territories such as the

DENR, Department of Agrarian Reform (DAR), National Mapping and Resource Information Authority (NAMRIA), the Land Registration Agency (LRA) and the National Museum, among others.

With traditional leadership and political systems already disappearing or, in some cases, replaced by the barangay system, project proponents are sometimes faced with no legitimate organizations to negotiate with. While it is important to organize IP communities so that they can effectively respond to pressures from external forces, the NCIP needs to respect and recognize the customary socio-political structures that exist, or have previously existed, among particular communities.

A systematic, careful, and long-term impact assessment of how the IPRA has actually worked on the ground in terms of achieving its overall objectives is necessary to know whether it really made a positive difference for the IPs. This impact assessment will require a systematic monitoring of how the IPRA has transformed or failed to transform the lives of its intended beneficiaries.

***Incorporate cultural values/systems in policy-making.*** Indigenous socio-political systems are widely practiced in the region, such as decision-making by consensus where the opinion of elders is given premium. This should be integral in the establishment of Indigenous Political Structures (IPS). Culture and values need to be at the heart when crafting public policies. Policies are more likely to be successful if policymakers take these aspects into account.



***Promote human rights approach in IP development.*** Include promotion and protection of human rights not only in the outcome of projects and programs, but in the methods through which projects and programs are implemented. The right to participation, the right to self-determination and the right to development are implicit in this approach.

The IPRA is a Human Rights-Based Approach to Development in ancestral domains. Its passage has raised huge expectations which can be fully satisfied if the agency that is mandated to implement it will be strengthened. Although NCIP's role in the FPIC process is facilitative, it needs to enhance its organizational and technical capacity to recognize and analyze social and cultural issues associated with human rights approach in development in IP areas and present these for the consideration of the IPs.

The NCIP should attract achievers in the field of anthropology, sociology, research, development communication, among others. The NCIP personnel should at least be given training in anthropological techniques/methods. With only seven plantilla positions for a Community Service Center (CSC), two of which are health workers and three are positions that do not require a college degree, the task becomes gargantuan if you see that the CSC covers four to five municipalities and most outputs require lots of documentation and analysis. Promotion and respect of the ICCs/IPs rights to FPIC is a must if we are to desire peoples' participation in any development interventions within ancestral domains. FPIC upholds the common interests of ICCs/IPs in their ancestral domains.

Capacity-building activities and trainings for planners and other stakeholders in the region to design, formulate and execute culturally appropriate and indigenous peoples-sensitive PPAs will also be conducted.

# Legislative Agenda

Table 68 Legislative Agenda to Advocate Culture-Sensitive Governance and Development

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	RESPONSIBLE AGENCY
<b>Cordillera Regional Autonomy</b>	The aspirations of the Indigenous Peoples of the Cordillera for genuine autonomy are rooted in their quest for the right to self-determination fueled by the long history of struggle for the recognition of their rights and the preservation and development of their cultural heritage. Regional Autonomy will serve as a development framework where the people can pursue their economic, social and cultural development, and empower the people to pursue sustainable and inclusive growth, through the management, protection, and development of their natural and human resources, and the promotion of the rights and culture of the Cordilleran people.	RDC-CAR
<b>Establishment of the Department of Culture</b>	Reorganize the National Commission on Culture and the Arts, National Commission on Indigenous Peoples and similar or relevant agencies such as the National Cultural Agencies – Komisyon sa Wikang Filipino (KWF), Cultural Center of the Philippines (CCP), National Historical Commission of the Philippines (NHCP), National Archives of the Philippines (NAP), National Maritime Poly-Technic (NMP), and National Library of the Philippines (NLP).	NCCA, NCIP
<b>Establishment of an Institute for Cultural Heritage Conservation of the Philippines</b>	In line with the implementation of the Cultural Heritage Law (RA 10066), there is a need to come up with an institute that would offer trainings and workshops on cultural heritage education both for formal, alternative and information education. This is doing to be done with emphasis on the protection, conservation, preservation and safeguarding of cultural heritage and properties.	NCCA
<b>Integration and mainstreaming of Cultural Education Programs and Activities in the country's National Education Program</b>	A Cultural Education Program (CEP) will be created to develop and implement an enhanced Special Program for the Arts (SPA); mainstream indigenous knowledge systems, skills, and practices through the institutionalization of appropriate Schools of Living Traditions (SLT) model in the formal education system; support the K-12 program of DepEd, both in the formal and informal systems; and introduce culture-based technical and vocational courses.	NCCA, DepEd, CHED, TESDA

LEGISLATIVE AGENDA	DESCRIPTION/RATIONALE	RESPONSIBLE AGENCY
<b>Support to ILO 169 or The Indigenous and Tribal Peoples Convention</b>	ILO 169 recognizes the need to respect the special importance of peoples' relationship with their lands and territories, in particular the collective aspects of this relationship, for their cultural and spiritual values.	RDC-CAR



PART V

**Plan  
Implementation,  
Monitoring,  
and Evaluation**



# 18

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## **Plan Implementation and Monitoring and Evaluation**







## Chapter 18

# 18 Plan Implementation, Monitoring, and Evaluation

The Cordillera Regional Development Council (CAR-RDC) is the highest planning body in the region and serves as the counterpart of the NEDA Board at the sub-national level. As the primary institution that coordinates and sets the direction of all economic and social development efforts in the region, the CAR-RDC will ensure the implementation of strategies leading to the attainment of outcomes in the CAR RDP 2023 – 2028. The CAR RDC Sectoral and Sub-sectoral Committees will likewise shepherd the implementation of measures of the sectoral chapters as seen in Table 69 CAR RDP 2023-2028 Coordination Mechanism. These committees include members from the regional line agencies, local government units, academe, private sector representatives, and civil society organizations.

**Table 69 CAR RDP 2023-2028 Coordination Mechanism**

Chapter	Responsible Inter-Agency Committee
Chapter 1: Overview of the Regional Economy, Development Context and Trends	Regional Development Council
Chapter 2: Regional Spatial Development Framework	Regional Land Use Committee
Chapter 3: Overview of the RDP 2023-2028 Strategy Framework	Regional Statistics Committee
Chapter 4: Promote Human Capital and Social Development	Regional Social Development Committee
Chapter 5: Increase Income Earning Ability	Regional Social Development Committee
Chapter 6: Protect Purchasing Power	Agriculture Sub-Committee Regional Social Development Committee
Chapter 7: Modernize Agriculture and Agri-Business	Agriculture Sub-Committee
Chapter 8: Revitalize Industry	Economic Development Committee
Chapter 9: Reinvigorate Services	Economic Development Committee
Chapter 10: Advance Research & Development, Technology, and Innovation	Regional Research, Development, and Innovation Committee
Chapter 11: Promote Trade and Investments	Economic Development Committee
Chapter 12: Promote Financial Inclusion and Improve Public Finance Management	Development Administration and Governance Committee Economic Development Committee
Chapter 13: Enhance and Upgrade Infrastructure	Infrastructure Development Committee

Chapter	Responsible Inter-Agency Committee
Chapter 14: Ensure Peace and Security and Enhance the Administration of Justice	Development Administration and Governance Committee
Chapter 15: Practice Good Governance and Improve Bureaucratic Efficiency	Development Administration and Governance Committee
Chapter 16: Accelerate Climate Action and Strengthen Disaster Resilience	Watershed and Environmental Management Committee
Chapter 17: Promote Culture Sensitive Governance and Development	Committee on Indigenous Peoples Concern

To ensure the implementation of strategies and measures contained in the CAR RDP 2023 – 2028, the Regional Development Investment Plan (RDIP) 2023 – 2028 will be formulated and will contain the region’s priority programs and projects.

The implementation of measures that achieve the targets in *Chapter 2: Regional Spatial Development Framework* will be led by the Regional Land Use Committee (RLUC). The Regional Statistics Committee (RSC) will also ensure that strategies set in *Chapter 3: RDP 2023-2028 Strategy Framework* are implemented.

The Regional Social Development Committee (RSDC) will steer to ensure that social programs and policies are supportive to the promotion of human and social development (*see Chapter 4*) in the region. The RSDC will also coordinate the implementation of strategies that will achieve targets to increase the income earning ability (*see Chapter 5*) of the Cordillerans.

The Agriculture Sub-Committee and RSDC will work together to implement measures that will contribute in the attainment of targets that would protect the purchasing power of Cordillerans through ensuring food

security (*see Chapter 6.1*) and strengthening social protection (*see Chapter 6.2*).

The Economic Development Committee (EDC) will spearhead the implementation of strategies that will revitalize the industry (*see Chapter 8*), reinvigorate services (*see Chapter 9*), and promote trade and investments (*see Chapter 11*) in the region. The EDC together with the *Bangko Sentral ng Pilipinas* will also oversee implementation of financial inclusion strategies, programs and initiatives (*see Chapter 12*).

The implementation of policies, programs, and projects that will improve public finance management (*see Chapter 12*), ensure peace and security and enhance the administration of justice (*see Chapter 14*), and practice good governance and improve bureaucratic efficiency will be pursued by the Development Administration and Governance Committee (*DevAd Com*).

With the RDC thrust gearing toward renewable energy, the enhancement and upgrading of infrastructure (*see Chapter 13*) in the Cordilleras will be pushed by the Infrastructure Development Committee (*InfraCom*).

The Watershed and Environmental Management Committee will continue to direct measures that will accelerate climate action and strengthen disaster resilience (*see Chapter 16*).

Lastly, the Committee on Indigenous Peoples Concern will lead the implementation of strategies that would promote culture sensitive governance and development (*see Chapter 17*).

## Monitoring and Evaluation

The CAR RDP 2023 – 2028 shall have the Results Matrix (RM) as accompanying document. This is a monitoring instrument that underscores a results orientation of the RDP. It is anchored on results-based management (RbM) that highlights outcomes and impacts<sup>50</sup>.

The RM contains statements of the results to be achieved at various levels such as goals, outcomes, and outputs with corresponding indicators, baseline information, annual and end-of-plan targets, and responsible agencies that shall report on the progress of target indicators. Through the RM, regular performance assessment of the plan is undertaken. Similarly, annual recalibration of planned targets will be done to ensure the attainment of the plan.

The RM will be aligned to the eight-point socioeconomic agenda of the Marcos Administration and its indicators shall serve as the backbone that links the planning, programming, budgeting, monitoring and evaluation. These indicators shall be

translated into priority programs and projects under the Philippine Investment Program its corresponding RDIP for 2023 – 2028. The CAR RDC, through its sectoral development committees will prepare the Annual Regional Development Report (ARDR), a document that assesses the performance of the plan vis-à-vis its desired outcomes.

Moreover, the Regional Project Monitoring Committee (RPMC), the official monitoring arm of the RDC, will conduct regular project monitoring on the implementation of programs and projects supportive of the strategies in the plan and prepare quarterly Regional Project Monitoring and Evaluations System (RPMES) reports. It will also continue to capacitate the Local Project Monitoring Committee (LPMC) in the provinces to ensure that the timely implementation of programs, projects and activities at the sub-regional levels.

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<sup>50</sup> Guidelines in the Preparation of the Results Matrix (RM) of the Philippine Development Plan (PDP) 2023 – 2028



# ANNEX

## List of Abbreviations

<b>Abbreviation</b>	<b>Definition</b>
4Ps	Pantawid Pamilyang Pilipino Program
ADSDPP	Ancestral Domain Sustainable Development and Protection Plans
AFF	Agriculture, Forestry and Fisheries
AFP	Armed Forces of the Philippines
AI	Artificial Intelligence
AICS	Assistance to Individuals in Crisis Situation
ALS	Alternative Learning System
ARTA	Anti-Red Tape Authority
ASF	African Swine Fever
ATM	Automated Teller Machine
ATTRACT	Agriculture and Fisheries Technology Transfer and Commercialization Program
BFP	Bureau of Fire Protection
BIR	Bureau of Internal Revenue
BLGF	Bureau of Local Government Finance
BLISTT	Baguio-La Trinidad-Itogon-Sablan-Tuba-Tublay
BNS	Barangay Nutrition Scholar
BPM	Business Process Management
BPO	Business Process Outsourcing
BSP	Bangko Sentral ng Pilipinas
CADT	Certificate of Ancestral Domain Title
CAR	Cordillera Administrative Region
CCA	City Cooperative Assembly
CDA	Cooperative Development Authority
CDRA	City Disaster Risk Assessment
CHAPTER	Consortium of Higher Education Institutions for Program Development in Region II
CHED	Commission on Higher Education
CLUP	Comprehensive Land Use Plan
CMCI	Community Mobilization and Capability Enhancement
COD	Center for Development
COE	Certificate of Excellence
CRADLE	Collaborative R&D to leverage Philippine Economy
CREATE	Corporate Recovery and Tax Incentives for Enterprises Act

CRHRDC	Cordillera Regional Health Research and Development Consortium
CRIP	Cordillera Regional Improvement Project
CSC	Civil Service Commission
CSITE	Cordillera State Institute of Technical Education
CSO	Civil Society Organization
CY	Calendar Year
DA	Department of Agriculture
DAR	Department of Agrarian Reform
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resources
DEPED	Department of Education
DFS	Digital Financial Services
DHSUD	Department of Human Settlements and Urban Development
DICT	Department of Information and Communications Technology
DILG	Department of the Interior and Local Government
DOE	Department of Energy
DOH	Department of Health
DOJ	Department of Justice
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DOT	Department of Tourism
DPEG	Department of Budget and Management - Program and Evaluation Group
DPWH	Department of Public Works and Highways
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
DTP	Department of Trade and Industry - Trade Policy
EKGC	Eastern Kalinga Growth Center
EMB	Environmental Management Bureau
EO	Executive Order
EODB	Ease of Doing Business
EOP	End of Plan
FCA	Farmers, Cooperatives, Associations
FIT	Foreign Investment Negative List
FLBD	Forest Land Boundary Delineation
FMR	Farm-to-Market Road
FPIC	Free Prior and Informed Consent
FSAP	Food Safety Action Plan
GAP	Good Agricultural Practices
GDP	Gross Domestic Product
GIDA	Geographically Isolated and Disadvantaged Areas
GIR	Gold International Reserves

GRDP	Gross Regional Domestic Product
GVA	Gross Value Added
GVC	Global Value Chain
HB	House Bill
HEI	Higher Education Institution
HIV	Human Immunodeficiency Virus
HOA	Homeowners Association
HUC	Highly Urbanized City
ICC	Investment Coordination Committee
ICT	Information and Communications Technology
ID	Identification
IEC	Information, Education, and Communication
IHOMIS	Integrated Hospital Operations and Management Information System
IKSP	Indigenous Knowledge Systems and Practices
IP	Indigenous People
IPMR	Indigenous Peoples' Mandatory Representative
IPP	Investment Priorities Plan
IPRA	Indigenous Peoples' Rights Act
IPS	Indigenous Political Structures
ISF	Informal Settler Families
IT	Information Technology
KIST	Knowledge, Innovation, Science and Technology
LAG	Livelihood Assistance Grants
LCAC	Local Culture and Arts Council
LEE	Local Economic Enterprises
LET	Licensure Examination for Teachers
LFS	Labor Force Survey
LGU	Local Government Unit
LIIC	Local Investment and Incentives Code
LMIR	Labor Market Intelligence Report
LPCC	Local Price Coordinating Council
LPTRP	Local Public Transport Route Plan
LSP	Local Shelter Plan
MB	Minahang Bayan
MBLISTTDA	Metro Baguio La Trinidad Itogon Sablan Tuba Tublay Development Authority
MGB	Mines and Geosciences Bureau
MSME	Micro, Small, and Medium Enterprise
MT	Metric Ton
MW	Megawatt
NCCA	National Commission for Culture and the Arts
NCIP	National Commission on Indigenous Peoples

NCR	National Capital Region
NDC	Nationally Determined Contributions
NEDA	National Economic and Development Authority
NGA	National Government Agency
NGO	Non-Governmental Organization
NGP	National Greening Program
NHA	National Housing Authority
NIA	National Irrigation Administration
NIPAS	National Integrated Protected Areas System
NNC	National Nutrition Council
NSFI	National Strategy for Financial Inclusion
NTA	National Tax Allotment, National Tobacco Administration
OCD	Office of Civil Defense
OFW	Overseas Filipino Worker
OTOP	One Town, One Product
PCCI	Philippine Chamber of Commerce and Industry
PCIC	Philippine Crop Insurance Corporation
PD	Presidential Declaration
PDL	Persons Deprived of Liberty
PDP	Philippine Development Plan
PE	Procuring Entities
PES	Payment of Ecosystem Services
PESO	Public Employment Service Office
PEZA	Philippine Economic Zone Authority
PFMAT	Public Financial Management Assessment Tool
PH	Public Health, Philippines
PHP	Philippine Peso
PPA	Parole and Probation Administration
PPP	Public-Private Partnership
PRC	Professional Regulation Commission
PRIME	Philippines' Response to Indigenous Peoples' and Muslim Education
PROCOR	Police Regional Office - Cordillera
PSA	Philippine Statistics Authority
PUV	Public Utility Vehicle
PUVMP	Public Utility Vehicle Modernization Program
PWD	Person with Disability
RA	Republic Act
RDC	Regional Development Council
RDI	Research and Development Institute
RDP	Regional Development Plan
RDRRMC	Regional Disaster Risk Reduction and Management Council



RE	Renewable Energy
REACH	Radio Network Establishment for All-Weather Communications in the Highlands
RIIC	Regional Inclusive Innovation Center
RLA	Regional Line Agency
RLUC	Regional Land Use Committee
RM	Regional Matrix of RDP Indicators
RRDIC	Regional Research, Development and Innovation Committee
RSDC	Regional Statistics Development Committee
RSDF	Regional Spatial Data Framework
SEC	Securities and Exchange Commission
SGLG	Seal of Good Local Governance
SLT	School of Living Tradition
SMART	Standardized and Meaningful Assessments Result-based Teaching
SME	Subject Matter Expert
SP	Sangguniang Panlalawigan
SPCAR	Social Preparation of the CAR into an Autonomous Region
SPES	Special Program for Employment of Students
SSM	Small Scale Mining
SUC	State Universities and Colleges
TARAKI	Technological Consortium for Awareness, Readiness, and Advancement of Knowledge in Innovation
TBD	To Be Determined
TBI	Technology Business Incubator
TESDA	Technical Education and Skills Development Authority
TRIP	Tourism Road Infrastructure Program
TVET	Technical and Vocational Education and Training
UHC	Universal Health Care
UNESCO	United Nations Educational, Scientific and Cultural Organization
UP	University of the Philippines
VRA	Vulnerability and Risk Assessment
WHO	World Health Organization



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AFP	DILG	NORLU-CEDEC	PLGU Kalinga
ARTA	DOJ	OCD	PLGU Mountain
BALC	FFW	OPAPP	Province
BB-PICAG	IFGEMPC	PDEA	POST
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BLGF	LGU Baguio	PICE	PRC
CHR	NAPOLCOM	PLGU Abra	PROCOR
CRFV	NBI	PLGU Apayao	PSA
CSC	NEDA	PLGU Benguet	RTC

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Co-Chairperson : Mr. Rafael Gayaso, NORLU-CEDEC

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CDA	DOST	NEDA	PSA
CHR	DOT	NIA	PSR Mountain
DA	DSWD	NORLU-CEDEC	Province
DAR	DTI	OCD	TESDA

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CHR	DOLE	NEDA	PSA
CYC	DSWD	NNC	PWDAB
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DEPED	IGEMPC	PhilHealth	
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DILG	JVOFI	POPCOM	

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 Co-Chairperson : Arch. Ma Jorquesa A. Hakcholna, PIEP  
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BENECO	DTI	LGU Apayao	PIEP
BSU	IGEMPC	LGU Baguio	Shountog
BWD	IGO	LGU Bangué	UAP
CAAP	League of Municipal	LGU Benguet	
DAR	Mayors Abra	LGU Bontoc	
DBM	League of Municipal	LGU Ifugao	
DBP	Mayors Apayao	LGU Kabugao	
DENR	League of Municipal	LGU Kalinga	
DepEd	Mayors Benguet	LGU Lagawe	
DHSUD	League of Municipal	LGU Mountain	
DICT	Mayors Ifugao	Province	
DILG	League of Municipal	LGU Tabuk City	
DOE	Mayors Kalinga	NIA	
DOH	League of Municipal	NTC	
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Co-Chairperson : Dr. Julie Cabato, Shountog Foundation  
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BWD	DOT	MGB	POST
DA	DSWD	NCIP	PSA
DAR	EMB	NEDA	PSR Benguet
DENR	HEDCOR	NIA	UPB
DILG	JVOFI	OCD	WWRRDEC

## Indigenous Peoples' Concerns

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Co-Chairperson : Ms. Edna Tabanda, IGO  
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CBB	DTI	KSU	POST
CDA	IFSU	Lang-ay	PSA
CHED	IGEMPC	LGU Mountain	Sine Abreño
CHR	IGO	Province	SLU
DA	Igorota Foundation	MPSPC	TEBTEBBA
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REPUBLIC OF THE PHILIPPINES  
**REGIONAL DEVELOPMENT COUNCIL**  
Cordillera Administrative Region

Botanical Garden, Leonard Wood Road, 2600 Baguio City  
Tel./Fax No. (074) 442-3232 Email: car@neda.gov.ph

*Excerpts from the minutes of the 2023 1<sup>st</sup> Quarter RDC-CAR meeting held on 09 March 2023*

**RDC-CAR RESOLUTION No. 03**  
Series of 2023

**APPROVING THE CORDILLERA REGIONAL DEVELOPMENT PLAN (RDP) 2023-2028**

**WHEREAS**, Executive Order 325 series of 1996 mandates the Regional Development Councils (RDCs) to coordinate the preparation, implementation, monitoring and evaluation of short and long-term regional development plans and investment programs, regional physical framework plan and special development plans, including the formulation of policy recommendations;

**WHEREAS**, the RDC-CAR confirmed the RDC Executive Committee Resolution No. 1, series of 2022 on the Guidelines for the Formulation of the Cordillera Regional Development Plan (RDP) 2023-2028 and approved the overall Cordillera RDP Framework through RDC CAR Resolution No. 97, Series of 2022 on December 9, 2022;

**WHEREAS**, the strategies of the Cordillera RDP 2023-2028 were aligned to the strategies of the Philippine Development Plan towards economic and social transformation for a prosperous, inclusive, and resilient society by 2028;

**WHEREAS**, the Cordillera RDP strategy framework 2023-2028 includes the promotion of culture-sensitive governance and development as a bedrock strategy aligned with the Plan's inclusion of a special chapter on culture to underscore culture-sensitive governance in the context of regional autonomy;

**WHEREAS**, pursuant to national and regional guidelines and to ensure a whole-of-government and whole-of-society approach, the Cordillera RDP 2023-2028 was formulated through the conduct of the following regional activities: 1) Assessment Workshop on October 25 to 26, 2022; 2) Scenario Planning Workshop on November 23 to 24, 2022; and 3) Cordillera RDP Consultation on December 6, 2022;

**WHEREAS**, the Cordillera RDP was subjected to technical and peer review by the National Economic and Development Authority (NEDA) to ensure alignment to the Philippine Development Plan 2023-2028 and inter-regional development considerations;

**WHEREAS**, the Cordillera RDP Chapters were reviewed and endorsed by the RDC Sectoral and Support Committees during their meetings conducted from February 10 to March 6, 2023;

**WHEREAS**, the Cordillera RDP 2023-2028 ensured strong LGU content, particularly on the six provinces, one highly urbanized city and the indigenous cultural communities through the inclusion of provincial and highly urbanized city-level data and proposed LGU-level strategies, flagship programs and interventions with an emphasis on inter-LGU initiatives.

**NOW THEREFORE, ON MOTION DULY SECONDED, BE IT RESOLVED, AS IT IS HEREBY RESOLVED**, that the Regional Development Council – Cordillera Administrative Region (RDC-CAR), duly assembled, approves and adopts the Cordillera RDP 2023-2028 as the overall guide for regional development efforts and actions for 2023 to 2028;



The round metal gong of the Cordillera known locally as "gangsá" is a symbol of the upland people's culture that has been passed on from generations to another.  
The profile of a person blowing a "tangguyob" represents a community being called for an important matter or action.  
The lines that shape the mountains, the rice terraces, clouds and rivers symbolize the connectivity and flow of human interaction in a geographic area such as the Cordillera.  
All the symbols combined represent unity and harmony of the people with culture and environment in beating the gong for self-determination.





RDC-CAR RESOLUTION No. 03  
Series of 2022

APPROVING THE CORDILLERA REGIONAL DEVELOPMENT PLAN (RDP) 2023-2028

**RESOLVED FINALLY**, that the Plan will be disseminated to all regional development stakeholders for alignment, implementation, and support.

**APPROVED**, this 9th day of March 2023, in Baguio City, Philippines.

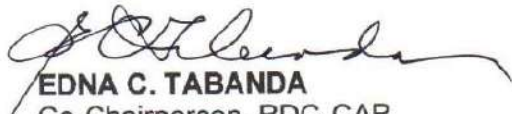
Certified true and correct:



**STEPHANIE F. CHRISTIANSEN**  
Secretary, RDC-CAR


(Assistant Regional Director, NEDA-CAR)

Attested by:



**EDNA C. TABANDA**  
Co-Chairperson, RDC-CAR  
(PSR, Indigenous People's Concern)

Approved:



**ELIAS C. BULUT, JR.**  
Chairperson, RDC-CAR  
(Governor, Province of Apayao)



## **Regional Development Plan 2023-2028**

Published by:

**National Economic and Development Authority Regional Office  
Cordillera Administrative Region**

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## Watershed and Environmental Management

Chairperson : Hon. Melchor D. Diclas, Benguet  
Co-Chairperson : Dr. Julie Cabato, Shountog Foundation  
Members :

BSU	DOST	LGU Baguio	PIA
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DILG	JVOFI	OCD	WWRRDEC

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CBB	DTI	KSU	POST
CDA	IFSU	Lang-ay	PSA
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DILG	IPMR-Benguet	NEDA	UPB
DOH	IPMR-Kalinga	NHA	UPB CSC
DOLE		NIA	