



CAGAYAN VALLEY
REGIONAL DEVELOPMENT PLAN
2017-2022



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Cagayan Valley Regional Development Plan 2017-2022

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RDC 02 Resolution



REPUBLIC OF THE PHILIPPINES

REGIONAL DEVELOPMENT COUNCIL II

RDC 2 Resolution No. 02-01-2017
Series of 2017

“ADOPTING THE CAGAYAN VALLEY REGIONAL DEVELOPMENT PLAN 2017-2022”

WHEREAS, the Cagayan Valley Regional Development Plan (CVRDP) 2017-2022, as the development blueprint for the next six years, spells out the thrusts and priorities of the region consistent with the Philippine Development Plan (PDP) and the long-term vision spelled out in the AmBisyon Natin 2040;

WHEREAS, the CVRDP anchors its development thrusts on the 0+10-Point Socioeconomic Agenda of the Duterte Administration which lays down the foundation for a more inclusive growth, a high trust society, and a globally competitive knowledge economy with emphasis on “*Malasakit, Pagbabago para sa Patuloy na Pag-unlad*”;

WHEREAS, the CVRDP embraces three development pillars specially on enhancing the social fabric, reducing inequality, and increasing potential growth, further translated into regional strategies, policies, programs, and activities that would ensure a more effective and efficient complementation of efforts by all partners and stakeholders;

WHEREAS, in the alignment of the development thrusts of the region and the three pillars of national development, the CVRDP adopts the development direction set by the members of the Regional Development Council (RDC) 2 during its Visioning Workshop conducted on September 20-21, 2016;

WHEREAS, through a series of multi-sectoral consultations with government and private sector stakeholders conducted from the third week of November 2016 up to the second week of January 2017, necessary inputs and concerns were generated and integrated into the plan components of the CVRDP;

WHEREAS, the RDC 2 Sectoral and Support Committees have reviewed and endorsed the core components of the plan for appropriate adoption by the RDC 2;

WHEREAS, the CVRDP will serve as reference in crafting its companion document, the Regional Development Investment Program (RDIP), that translates the RDP goals, objectives and strategies into specific programs and projects;

NOW THEREFORE, the Regional Development Council 2, in session assembled, **RESOLVED AS IT IS HEREBY RESOLVED** to adopt the Cagayan Valley Regional Development Plan 2017-2022.

APPROVED this 26th day of January 2017 in Tuguegarao City.

Certified Correct:

FERDINAND P. TUMALIUAN
RDC 2 Interim Secretary

Approved:

MARYANNE E.R. DABAUAY, CESO III
RDC 2 Acting Chairperson



Message of the President



Earlier this year, we launched the Philippine Development Plan (PDP) 2017-2022 through the initiative of the National Economic and Development Authority (NEDA). The PDP serves as our medium-term blueprint towards attaining a better and more secure life for our people in the next 25 years.

To complement the PDP, we are now launching the Regional Development Plans (RDPs) 2017-2022. This will provide direction in policy formulation for the next six years as we steer public and private investments to the regions.

We intend to place regional development at the center of our socioeconomic development strategy. By creating more jobs, improving social services, encouraging innovation and connecting the countryside to growth centers, we will reduce poverty and accelerate development in rural areas.

The RDPs will also prioritize accelerating infrastructure development, protecting our natural resources, addressing criminality and illegal drugs, and ensuring peace and security in the regions.

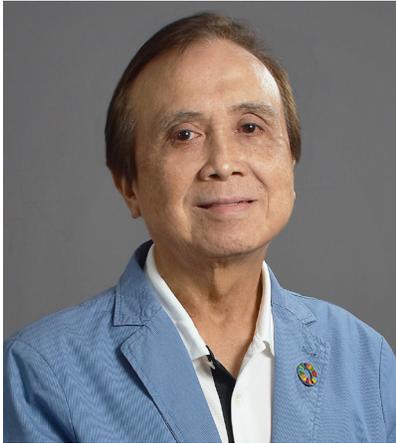
I commend the Regional Development Councils for aligning their respective regional plans to our PDP through fruitful collaboration with local government units and the private sector. I am confident that through the RDPs, we can realize our goal of laying a solid foundation for a stronger and more resilient nation for future generations.

A handwritten signature in black ink, appearing to read 'Rodrigo Duterte'.

RODRIGO ROA DUTERTE
President
Republic of the Philippines

MANILA
May 2017

Message of the Socioeconomic Planning Secretary



With regional and local development being one of the main thrusts of President Rodrigo R. Duterte's socioeconomic development agenda, the Philippine Development Plan (PDP) 2017-2022, the first medium-term plan anchored on a long-term vision (AmBisyon Natin 2040), was specifically designed to cultivate growth and reduce inequality between the regions. This can be achieved by directing development to key areas throughout the country and connecting these growth centers to rural areas.

As such, the Regional Development Plans (RDPs), as accompanying documents to the PDP, will be an important tool in guiding both public and private investments that will catalyze growth in the regions. It will also serve as our blueprint in laying down the three main pillars of *Malasakit*,

Pagbabago, at *Patuloy na Pag-unlad* that will help us build a secure, comfortable, and strongly rooted life for all Filipinos by 2040.

I would like to express my gratitude to the Regional Development Councils (RDCs) for their leadership in the crafting of the RDPs, and in coordinating various development efforts in the regions. Finally, we seek the support of our local government units, regional institutions, and private institutions to support the realization of our plans as we venture towards the creation of prosperous, peaceful and resilient communities.

A handwritten signature in black ink, appearing to read 'Ernesto M. Pernia'.

ERNESTO M. PERNIA

Secretary of Socioeconomic Planning

Message of the RDC 02 Chair



As the country begins laying down the foundation towards realizing the national long-term vision spelled out in the AmBisyon Natin 2040, we at the Regional Development Council (RDC) 2 are one in expressing our strong support by identifying and implementing development strategies that will redound to the fulfillment of the vision.

The Cagayan Valley Regional Development Plan (CVRDP) 2017-2022 enumerates these strategies and priorities and serves as our blueprint for development for the next six years. It is our bible, providing direction in the crafting of all development plans prepared by government entities and local government units in the region. The successful implementation of this Plan, therefore, lies on the collaborative effort and unrelenting commitment of the region's stakeholders, both from the public and the private sectors.

Our journey towards the formulation of this CVRDP was indeed rigorous. Nonetheless, the synergy between and among us and our development partners resulted in the successful series of multi-sectoral consultations and workshops which facilitated our preparation and adoption of the Plan. Our efforts for this have effectively translated the development agenda of the Philippine Development Plan into strategic interventions that will benefit our region.

I would, therefore, like to acknowledge the vital contribution of the RDC 2's active partners in the government and private sectors in accelerating local economic development and, on the whole, the general welfare of the community. Our strong collaborative partnership over the years has paved the way for numerous development accomplishments in our region, which we hope to sustain through this new CVRDP. We, therefore, call upon all our partners to continuously work harmoniously together to address the development gaps through aggressive and purposeful initiatives that will stimulate innovativeness and value-adding with the aid of science and technology. We need to further develop our prime sectors like manufacturing, construction and agriculture while exploring potential growth drivers along tourism, agri-business, among others. These can be achieved by improving the region's support infrastructure and facilities, transport connectivity and efficiency, preservation of environmental integrity and good governance.

May we continue exploring ways on how our region could achieve more across all areas of development. More importantly, may we at the RDC 2 work hand-in-hand in driving our region towards the realization of our vision for the region not only to be a bountiful Cagayan Valley Region but to be the "Prime Water Resource, Agro-Industrial Hub, and Emerging Tourism Destination" of the country.



JUNIE E. CUA
Chairperson, RDC 02
Provincial Governor, Quirino

Foreword



The Cagayan Valley Regional Development Plan (CRVDP) 2017-2022 follows the development agenda of the Philippine Development Plan (PDP) and it highlights the role of the region in achieving the national development goals and objectives. Likewise, it defines the region's development direction in the next six years and its contribution is critical to the attainment of the socioeconomic agenda of President Rodrigo Duterte's administration and to the national long-term vision of the Filipinos in the AmBisyon Natin 2040.

As this medium-term development plan also serves as the first concrete step towards realizing an inclusive growth, a high-trust society, and a globally-competitive economy in the next 25 years, the CVRDP 2017-2022 includes 21 chapters from previously eight (8) chapters in CVRDP 2011-2016. The reason being is that the plan with seven (7) parts comprehensively discusses the strategies grouped under three pillars Malasakit or enhancing the social fabric, Pagbabago or reducing inequality, and Patuloy na Pag-unlad or increasing growth potential.

The Regional Development Council of Region 2 has therefore worked hard in the formulation of the CVRDP to chart accurately the region's priorities and thrusts with the corresponding strategies that will likely contribute to the desired state of the people. The RDC also passionately endeavored for the identification of the key development strategies, for the region to embody its role of becoming a "Prime Water Resource, Agro-Industrial Hub, and Emerging Tourism Destination" in the country by 2022.

The plan was also subjected to several workshops and consultations with stakeholders before its eventual completion. It is high time, therefore that all agencies, LGUs and other partners have to put their acts together for the realization of the medium- and long-term vision. It is opportune that we think of development as everyone's role that no one should be left behind and that growth will only be achieved with greater participation.

May this Plan will truly inspire everyone to aggressively pursue regional development as we move forward in achieving our targets for the next six years while contributing the realization of the long-term vision. My earnest gratitude to all our regional development partners.

A handwritten signature in black ink, appearing to read 'Maryanne E.R. Darauay', written over a large, stylized circular flourish.

MARYANNE E.R. DARAUAY, CESO III
Vice-Chairperson, RDC 02
Regional Director, NEDA Regional Office 02

PART I

INTRODUCTION



01 The Long View

The Long View

This document, the Cagayan Valley Regional Development Plan 2017-2022, is the blueprint of the region under the current administration. It is a translation of the first of the four installments for the realization of the Long-Term Vision (LTV) for the Philippines as embodied in the Ambisyon Natin 2040 which was adopted by President Duterte through Executive Order No.5 (s., 2016). The LTV contextualizes inclusive growth with the power of presence for government in the implementation process and participation of the people in the planning process.

In ensuring inclusiveness of growth, the President issued Memorandum Circular No. 12 (s., 2016) for the formulation of the country's national and regional development plans and the accompanying investment programs. These documents lay down the foundations for the attainment of the Long-Term Vision for the country stated as follows:

"By 2040, the Philippines shall be a prosperous, predominantly middle-class society where no one is poor; our peoples shall live long and healthy lives, be smart and innovative, and shall live in a high-trust society."

This Vision underscores the long term goal to triple real per capita income (relative to 2015 levels) and eradicate hunger and poverty in twenty-five years or by 2040, if not sooner. The medium-term national and regional development plans which also highlight the President's 0 to 10-point Socioeconomic Agenda as well as the

country's commitment in the attainment of the 2030 Sustainable Development Agenda (SDA) shall provide a strong and solid foundation towards the attainment of the country's Vision by 2040.

Specifically, the regional development plan supports the national agenda for a more inclusive growth, a high trust society and a globally competitive knowledge economy, through its emphasis on "Matatag, Maginhawa, at Panatag na Buhay para sa Lahat". The overall strategies fall into three pillars: (1) to enhance the social fabric (*Malasakit*); (2) to reduce inequality (*Pagbabago*); and (3) to increase potential growth of the economy (*Patuloy na Pag-unlad*); supported by a strong foundation in national security, infrastructure development, disaster resiliency and ecological integrity.

In the alignment of the development thrusts of the region and the three pillars of national development, the region adopts the development direction set by the members of the Regional Development Council during its Regional Visioning Workshop conducted in September 2016. Various sectoral consultations were likewise conducted to define and arrive at a consensus for the strategic development framework for each of the plan components and operationalize the same through the identification of location-specific strategies, interventions and sector outcomes. The sectoral and public consultations were conducted from 3rd week of November 2016 to 3rd week of January 2017. The PDP regional consultation in November 2016 also provided the avenue for greater

understanding of the national development direction and appreciation of the challenges that lie ahead in the pursuit of the ultimate goal where no Filipino will be left behind. The entire consultation process is an affirmation of the region's support to the long-term vision.

This Plan charts the region's journey outside the confines of its comfort zone. It levels up the regional development agenda through

policies, strategies and interventions that will lead towards harnessing the region's resources, making the agriculture sector more competitive and promoting agri-based industries including tourism. The Cagayan Valley RDP 2017-2022, therefore, is the regional translation of the national agenda which provides appropriate and responsive strategies geared towards the attainment of every Filipino's ambition by 2040.

02

Global and
Regional Trends
and Prospects

Global and Regional Trends and Prospects

According to the Philippine Development Plan (PDP), global economic growth slowed down in the past decades due to various downturns in the economy. Uncertainties are likewise expected for the next years given the effects of new political administrations and reformations of big economies, presence of emerging markets and development in Asia (i.e., ASEAN economic integration and Northeast Asian Economies), and the recent challenges faced by the world oil-producers in the world market. These emerging developments pose as either opportunities or threats to growth depending on how countries or regions in particular respond to such trends. In this chapter, trends in various areas such as economics, politics, demographics, technology and environment were identified to be assimilated further in local development planning.

Economic Trends

ASEAN 2025

The economic integration of the ASEAN member-countries is deemed relevant both at the national and local levels, providing a wide array of opportunities to maximize capital and human resources, and enhance technological capacity to increase competitiveness.

The external trade of Region 02 over the years is very minimal with a national share of 0.02 percent in 2014. Despite serving as prime producer of agricultural commodities i.e., palay and corn in the country, along with the presence of port facilities and international airport, the limited marketable products, lack of processing industries and inadequate external market connectivity hindered the region's potential for external trade (see Chapter 8, 9 and 15).

At the local level, the region's contribution to the national output remained low at 1.1 percent in 2015 from 2.1 percent in 2014. The region ranked 14th across regions in 2015, from its twelfth position in 2014. Cagayan Valley also contributed a mere 0.1 percentage point to the 5.9 percent GDP growth in 2015. In terms of per capita GRDP, the region continuously registered positive growth from PhP35,571 in 2013 to PhP38,269 in 2015. However, this remains one of the lowest in the country and only almost half of the national per capita GDP at PhP74,770.

The structural change in the regional economy relative to industry shares in the GRDP showed a more diversified economy. The growth has been primarily driven by the services sector with a share of 50.2 percent in 2015. Its strong performance cushioned

Table 2.1 Regional Shares to Total GDP (at Constant 2000 Prices, in Percent), 2014-2015

REGION/ YEAR	2014	2015	2014 RANK	2015 RANK
NCR	34.8	40.4	1	1
CAR	1.0	1.1	15	13
Ilocos	3.2	2.7	8	9
Cagayan Valley	2.1	1.1	12	14
Central Luzon	13.5	8.3	3	3
CALABARZON	14.3	17.3	2	2
MIMAROPA	2.2	0.5	10	16
BICOL	1.4	2.8	14	8
Western Visayas	3.3	5.5	7	4
Central Visayas	8.0	5.3	4	5
Eastern Visayas	(0.9)	1.4	17	12
Zamboanga Peninsula	2.2	2.5	11	10
Northern Mindanao	4.3	3.5	6	7
Davao Region	5.7	5.3	5	6
SOCCSKSARGEN	2.7	1.5	9	11
CARAGA	1.9	0.9	13	15
ARMM	0.3	-0.1	16	17
PHILIPPINES	100.0	100.00		

Source: PSA 02

the erratic growth of the agriculture sector due to the latter’s vulnerability to climate change (see Chapter 3).

On the other hand, the region could boast of its educated labor force, accelerating investments in SMEs and emerging tourism industry. In terms of labor and employment, employment rate continue to rise and improvement in the quality of jobs is very evident. These were far better compared to other regions as well as at the national level. Actual tourist arrivals are also booming both in foreign and domestic counts (see Chapter 4 and 9).

Nonetheless, these economic trends suggest opportunities for opening of the region’s external trade given what ASEAN integration offers in terms of a highly integrated Regional economy through seamless movement of goods, investment, capital, and skilled labor. The increased connectivity across Regions (ASEAN Member-countries) can lead to new and

bigger markets by enhancing participation in global supply networks, increased complementation of enterprises, building competitiveness of goods and services, labor mobility and provides platform for greater linkages and networking.

Growth of Overseas Filipinos Remittances

Remittances of Overseas Filipinos (OFs) are said to have a positive impact in the financial system of the country through the improvement of the current accounts and provides for external funding. Buoying up inflows of remittances has been one of the strategies over the period aside from the significant contribution of working abroad to the employment of Filipinos. Remittance through formal channels should be properly promoted and regulated by the government in order to reap the positive effects of remittances. The region can take advantage of these money inflows by encouraging

OFs to invest in their localities, participate in mutual funds and other investment modalities offered by financial institutions

or deposit their savings in banks for relending to spur investments.

Social and Demographic Trends

Rapid Urbanization

The trend on the population of the region is also a vital area in economic progress, this affecting the economic activity, human resource capacity and extent of public services in the regional economy.

From the period 2010 to 2015, the population of the region has been increasing by 1.27 percent annually with more productive population at 64 percent of the total population (see Chapter 13). Growth and expansion in the urban areas of the Cagayan Valley especially in its four cities (Tuguegarao City, Ilagan City, Cauayan City and Santiago City) were registered over the years (see Table 2.2).

The growing urban population, if appropriate development measures are in place, will support the economic progress through more formal financial transactions, increased demand for goods and services (consumption), increased labor force, hasten industry developments (i.e., tourism, housing, and commercial trades). On the other hand, implementation of policies (i.e., human capital development, utilization of resources, environment protection and conservation), provision of infrastructure facilities, and efficiency of social services should be prioritized to maximize opportunities brought by population growth.

Table 2.2 Top Ten Most Populous Cities/ Municipalities in Region 02, 2015

RANK	CITY/ MUNICIPALITY	PROVINCE	POPULATION
1	Tuguegarao City	Cagayan	155,502
2	Ilagan City	Isabela	145,568
3	City of Santiago	Isabela	134,830
4	City of Cauayan	Isabela	129,523
5	Baggao	Cagayan	82,782
6	Solana	Cagayan	82,502
7	Echague	Isabela	79,094
8	Alicia	Isabela	71,504
9	Tumauni	Isabela	67,650
10	Aparri	Cagayan	65,649

Source: PSA 02

Emerging Technologies

In today's economy, almost all functions and operations of sectors require technology resources to better facilitate operations and transactions in the market and the public sector. Over the years, the region has been

exposed to technological advancements and needs to respond accordingly to reap the benefits these new technologies can offer. Among the technologies considered as very relevant to regional development and should be tapped by the region in order to expand opportunities and potentially reach

a growing and sustainable development as outlined in the PDP are as follows:

- Geographic Information System (GIS) and Management – this tool is being used particularly in the public sector especially along planning, budgeting and monitoring which facilitates better analysis and sound-decision making. It is integrated in economic, social and disaster risk and climate change planning.
- Fiber optic facility – this facility has been a developing progress particularly in the Cagayan Special Economic Zone and Free Port (CSEZFP) which aims to enhance efficient communication/connectivity, and could open up opportunities for livelihood and employment (IT-BPO industry). On the other hand, efforts to enhance human capacity along this line should be prioritized given the region’s labor-intensive capital.
- “Internet of Things” - to lay the foundations of a globally competitive knowledge economy, one consideration that should be tapped and optimized is the “internet of things” which envisions a “hyper-connected, digitally-responsive society.” It will be beneficial to the industry sector and the efficiency of the local governments. Along with its development is also the need to ensure data integrity, protection and security by enabling policies in knowledge systems.

- Big data analytics – a set of techniques and tools used to process and interpret large volumes of data that are generated by the increasing digitization of content, the greater monitoring of human activities, and the spread of the Internet of Things. Its application to public sector data can improve government policies and public services.
- Energy storage technology – a system that absorbs energy and stores it for a period of time before releasing it to supply energy or power services. Advances in this technology are important to optimize energy systems and allow the integration of renewable energy systems.

Trends on Research and Development

Research and development is a significant mechanism to further advance the region and make a way for innovations and technological readiness. However, the R&D budget and expenditure of the region is very low as well as the presence of capable human resources to improve the S&T services and initiatives (see Chapter 14). The development in R&D and technology especially in priority research areas in agriculture would be able to identify mechanisms to put additional value to the region’s produce and improve the competitiveness and productivity of the industries.

Political Trends

Maritime Disputes

Illegal poaching and fishing are one of the continuing problems of the region (see Chapter 17). Due to poaching activities,

millions of pesos worth of fish are lost while the security and protection of northern waters are affected.

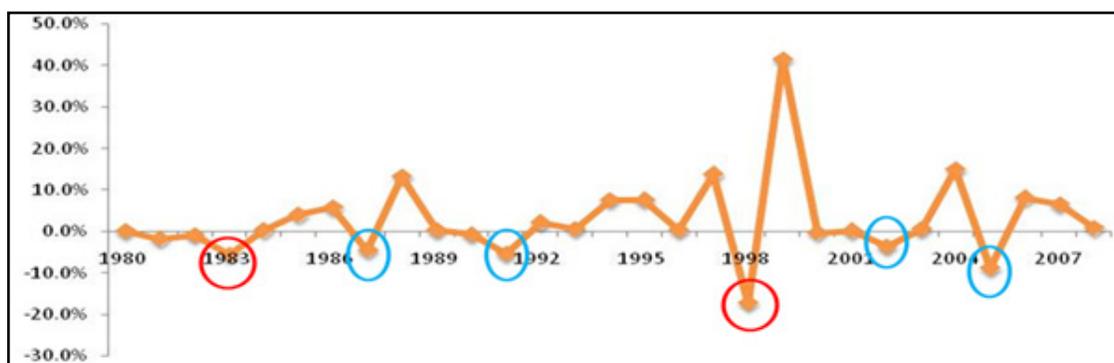
Environmental Trends

Climate Change

The Cagayan Valley Region has been consistently one of the most affected areas in the occurrences of gradual rising of temperatures and climate variability. Its impact to the regional economy is very destructive due to the damages on major agricultural produce as well as on the livelihood and settlements of the regional populace. For example, the economy of the region was slower during the El Niño

years wherein the production in agriculture experienced significant reductions (see Figure 2.1). The Agriculture, Forestry and Fishing (AFF) still covers more than one-third of the economy and employs more than half (54.4 percent or 823,000 persons) of the employed persons in the region. For this, there is a pressing need to build socioeconomic resiliency of individuals and communities particularly to those whose income largely depends on agriculture for livelihood.

Figure 2.1 Gross Value Added in Agriculture, Hunting, Forestry and Fishing, Region 02 (in 1985 Prices), 1980-2008



Source: PSA 02

Note: The highlighted years show the occurrence of El Niño in the region. The red circles indicate that the El Niño phenomenon were one of the devastating effects experienced in the country.

For the next six years, the Region will face many challenges that could be transformed into opportunities for growth and maximize its potential especially as the “Prime Water Resource, Agro-industrial Hub, and Emerging Tourism Destination” of the country (see Chapter 4). To plan appropriately for the future, the expected developments and uncertainties must be

properly addressed at the global and local levels. The regional stakeholders, therefore, needs to closely work with each other, and complement government programs, projects and activities. The succeeding chapters shall illustrate the current situation of the country and identify strategic interventions to overcome these challenging times.

03

Overlay of Economic Growth, Demographic Trends, and Physical Characteristics

Overlay of Economic Growth, Demographic Trends, and Physical Characteristics

The long-term spatial strategy for the region is anchored on the Luzon Spatial Development Framework (LSDF) which is a translation of the National Spatial Strategy (NSS). The NSS shows the direction of growth in the country based on economic and population trends. It recognizes the increasing role of urban centers as engines of economic growth and poverty reduction with infrastructure providing efficient and connected networks of sustainable communities, consistent with the long-term vision espoused in the Ambisyon Natin 2040. On the other hand, the LSDF translates the broad national spatial strategy into a more detailed spatial development perspective and interconnectivity of the various regions in Luzon.

Same with the NSS and the LSDF, the regional spatial strategy adopted three (3) core strategies, namely: Concentration, Connectivity, and Vulnerability Reduction (CCVR). The application of these strategies took into consideration the unique socioeconomic and bio-physical features of the various provinces, cities and municipalities in the region.

Economic and Demographic Trends

Economic Growth

For 2010-2015, the region's economy has sustained a positive though erratic growth pattern. While it reflects a positive growth of 4.95 percent over the 5-year period, this is not enough to change the position of the region as the fourth from the bottom in terms of contribution to the total GDP. Location and physical attributes of the region are contributory factors to the current economic performance of the region. The negative effects of climate change also pulls down modest gains that have been achieved as production sectors especially those in agriculture are very vulnerable to frequent weather disturbances such as typhoons, monsoon rains and drought.

Over the period, the structure of the regional economy is becoming more diversified as it slowly shifts from the Agriculture Sector (more than half of the region's GRDP in 2010 to 36.6% in 2015) to Services Sector. While there is already a significant shift in the share of the Services Sector to the total economy, agriculture still remains as the major source of income and livelihood to more than 50 percent of the population.

Another emerging trend is the significant growth of Services Sector which increased by 12 percentage points in terms of its share in the GRDP; the share of Agriculture and Industry sectors showed a downtrend in the past 15 years, most prominent was the shift in the past five years. The shift

was a welcome development as the rest of the world is gearing towards knowledge economy which has significantly benefitted the services sector.

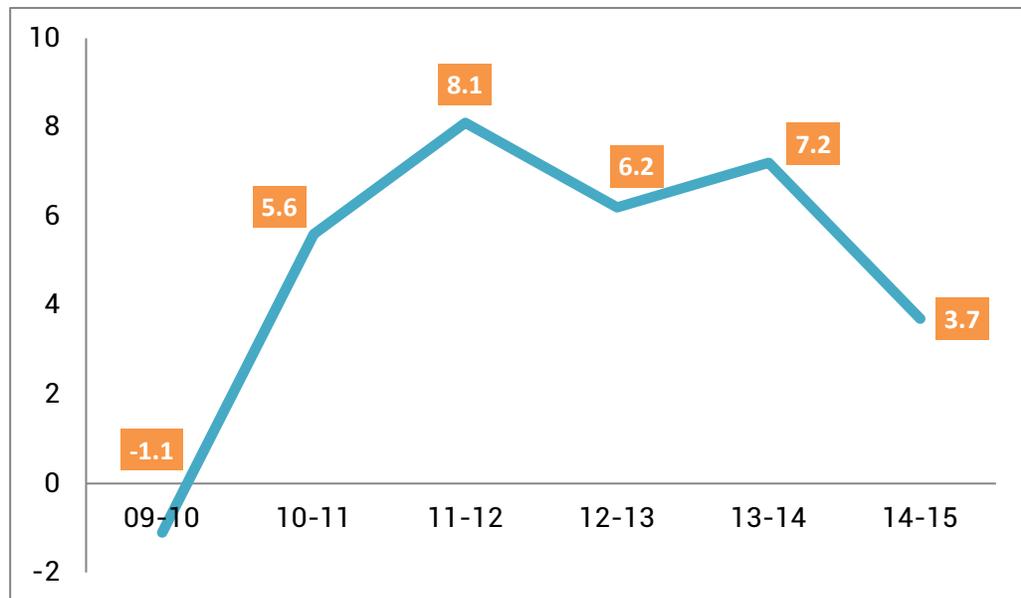
While the growth of the Services Sector had been phenomenal - this is now the main contributor to the domestic economy in the past six years, there was a slowdown in industry development at the regional level, particularly in manufacturing. Its growth also cushioned the poor performance of the Agriculture Sector primarily due to its vulnerability to climate change.

This emphasizes the need for the region to embrace and migrate to this new paradigm on knowledge economy. However, the region still lacks the support infrastructure, facilities and quality services to migrate and actively adapt to this trend. The region is still highly dependent on its Agriculture Sector and the limited capability of farmers to understand and take advantage of the benefits of new technologies in increasing

productivity are among the concerns that have to be dealt with. There is also the need for the processing sector to explore the use of modern technology to improve product quality and production efficiency including the utilization of the internet for product advertising and marketing.

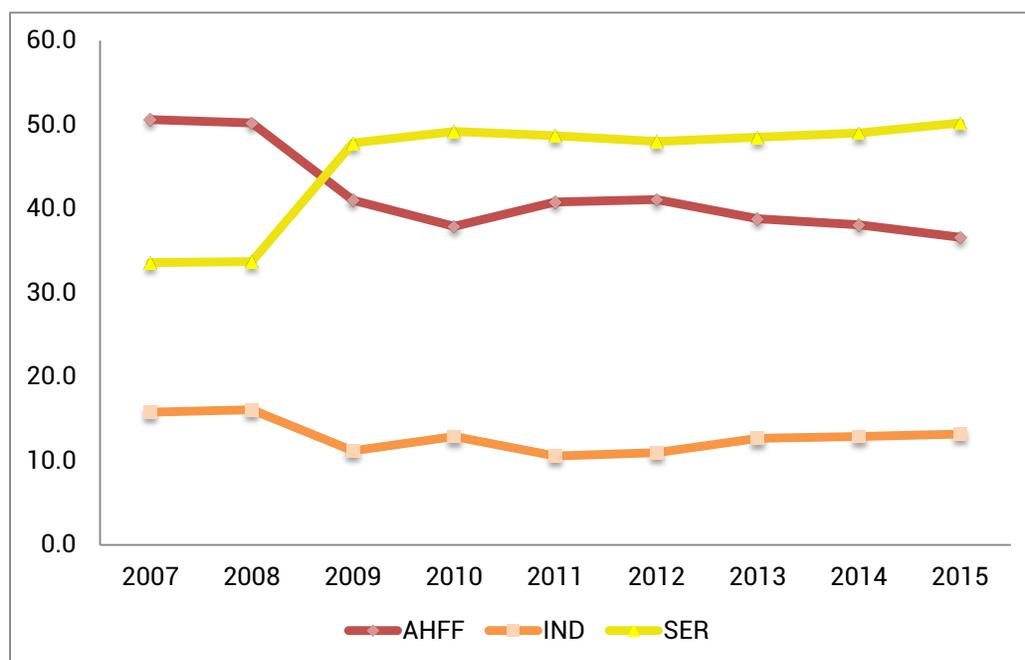
Growth in the Services Sector was manifested through the increase in the number of malls, banks, gasoline stations, fast food chains, and other similar establishments in fast growing urban areas in the region. It is also a manifestation of increasing demand for service-related activities and attract in-migration. It is for the same reason that the region remains steadfast in pursuing processing industries under manufacturing sub-sector because of the potential domestic and external trade. This will bring in opportunities for the region to attract investments, spur the growth of small and medium scale industries and create a substantial number of quality jobs.

Figure 3.1 Real GRDP Growth Rate, Region 02, 2010-2015



Source: PSA 02

Figure 3.2 Trend on Real GRDP Sectoral Distribution, Region 02, 2007-2015



Source: PSA 02

Population Growth Trends

The region's population has grown by 1.27 percent in the past 5 years for a total of 3.45 million in 2015. The region contributes 3.4 percent of the country's total population which is significantly lower compared to other regions with higher population and correspondingly greater GRDP contributions. The data show a direct relationship of population to GRDP contributions, where greater expenditure participation translates to more vibrant economy.

Urban population is on an increasing trend with the four cities of the region reflecting 16.09 percent share of the total regional population. The four cities are highlighted due to their role as regional and sub-regional centers. There are other population concentration areas to include capital towns and fast-rising urban municipalities which have significantly increased its

population base. Most prominent in terms of growth and expansion are urban areas located in the provinces of Isabela and Nueva Vizcaya. Population concentration in the urban centers has positive economic and social impacts with the increase in the expenditure base – more financial transactions, increasing demand for goods and services and confined location of social services. The only challenge is the strong possibility of urban sprawl or unregulated development as demand for housing and commercial development is increasing. The trend towards migration to urban centers is also growing associated with economic opportunities that the urban centers provide in terms of livelihood and employment.

The region's population concentration is located mostly along the Cagayan River which has historical bearing due to the utilization of the river as the earliest mode of transport and the use of alluvial plains for agriculture. While the original town centers

(usually near churches) were strategically located (flood-free), the corresponding growth of settlements spread-out (radial dispersion) from the city center. The location of the early settlements defined the succeeding infrastructure interventions in the region which is more reactive. Current practices on settlement growth can be observed along road networks especially along national roads.

Another factor was the structure of land ownership of prime agricultural land where the lack of opportunities for land to own and till drove people to the uplands starting in the 1960's. This was also the time when commercial logging activities started to gain traction contributing to the proliferation of upland communities. Some of the upland communities relocated back to the lowland at the height of insurgency in the 70's and 80's. Albeit the problem on peace and order, settlements still thrived in rural upland areas.

Coastal communities were established even prior to the Spanish period. These are located mostly in the north of Cagayan, the eastern seaboard of Isabela and the whole province of Batanes. From the original fishing communities, these were transformed into political subdivisions. In general, the trend in population concentration influenced horizontal or sprawl development as people tend to converge in areas with established economic and historical significance. However, competing land

uses and urban expansion may lead to increased vulnerability of the population to various types of hazards as people tend to settle down in the urban fringes. Safety is often disregarded with greater priority on accessibility. On the other hand, rural areas such as upland and coastal communities have problems on physical access and efficiency on the delivery of social services including support facilities like power and water.

Poverty

The region was successful in reducing its poverty by half from the 1991 levels with poverty incidence among population significantly reduced to 15.8 percent in 2015 (553,616 poor population). Among provinces, quite notable was the zero poverty incidence recorded in Batanes in 2015 from a high of 33.3 percent incidence in 2012. However, this estimate should be taken with caution considering the very small sample size that was enumerated in 2015. Corollary, among the five provinces, only in Batanes wherein there are no identified beneficiaries of the DSWD's Pantawid Pamilyang Pilipino Program (4Ps). All other provinces experienced improvement in terms of reducing poverty except for the province of Quirino (see Table below).

The improvement in the poverty situation is sending the signal that the government efforts on reducing the poverty have been

Table 3.1 Poverty Incidence Among Population (in Percent), Region 02, 2009, 2012, 2015

Area/ Year	2009	2012	2015
Batanes	14.4	33.3	0.0
Cagayan	27.8	19.7	15.9
Isabela	28.9	24.4	15.2
Nueva Vizcaya	13.3	20.7	13.6
Quirino	15.6	21.2	26.5
REGION 02	25.5	22.1	15.8

Source: PSA 02

effectively carried out over the years. For example, the implementation of the 4Ps has benefitted 103,327 poor households in the duration of its implementation.

Further, the region initiated the most recent wage order setting the minimum wage of PhP340 for non-agri workers and PhP300 for agri workers across provinces to provide relief to the purchasing power of the poor segment of the population. The increase was intended for the improvement of standard of living in all provinces with the noted decrease in the Purchasing Power of Pesos (PPP) and to narrow the gap of minimum wages with poverty threshold.

Relatedly, there is an improvement noted along employment as the percentage of unpaid family workers or persons who worked without pay on own family-operated farm or business declined to 13.2 percent in 2015 as compared to last year's 14 percent and the 2012 baseline figure of 16.8 percent. The mention of the minimum wage under this chapter is in cognizance to the details of the people's long-term vision increasing the average household income at least six- fold for the region to meet an estimated average monthly income of PhP 80,000 vis-à-vis the national average of PhP 120,000 after 24 years.

Employment

It is interesting to note that majority of the employed were engaged in the primary sector, Agriculture (54.4%) while the rest were in Services (37.3%) and Industry sectors (8.3%). This implies the big role played by the Agriculture Sector in terms of employment in the region and thus, calling for a need to develop more and improve investments in the agriculture, fishery and forestry sector; while developing capacities of the farmers, fisher folks and other stakeholders on value-adding, agribusiness development and value-chain

management that would help them become entrepreneurs. It is only through more value-adding activities that the region can increase the household income in the next 24 years, especially for the production sector. In addition, there is a need for an increased provision of social protection programs especially to the vulnerably employed, for instance, cash for work during off-cropping seasons.

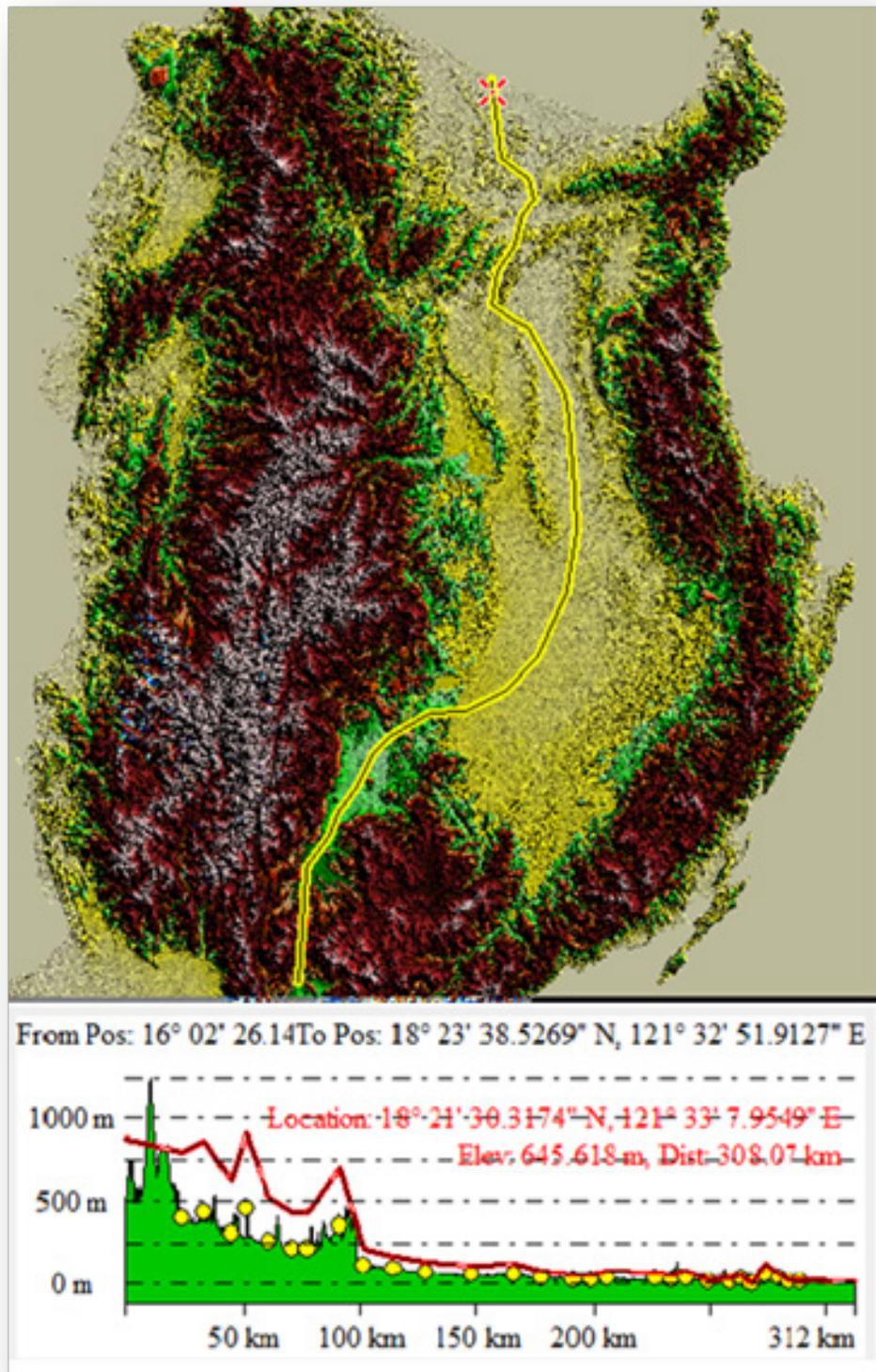
Employment in Region 02 is generally biased towards men as more than half or 63.6 percent of the total employed persons across sectors in 2015 were males. This is more evident in the industry and agriculture sectors where proportions of males were at 89 percent and 71 percent, respectively. It was only in the service sector where percentage of males (47%) was relatively lower than the females (53%). This reveals that women need to be integrated at work especially in the sectors of agriculture and industry.

Physical Characteristics

The economic performance and poverty situation of the region is further related to natural configuration and location. It is the fundamental factor that provides explanations for inequality. While development has historical bearings, the choice of where to and what to develop are based on the potential of an area and the natural environment. It is for the same reason that other regions were far more developed than the rest. While each of the regions are coming up with strategies to attract external investments, physical characteristics, location, infrastructure and utilities support are critical decision factors for potential investors to locate.

Within the region itself, it is the same factor that guides decision-making on where to locate a business, residence or other production ventures. The region is a natural

Figure 3.3 Slope Configuration of the Cagayan River



catch basin by virtue of its hosting one of the largest watershed in the country. It is crisscrossed by the longest river network and provides for the water requirement for domestic use, irrigation, recreation, and to a limited extent for transportation and industrial use.

The physical configuration of the region which is hemmed by mountains on all sides: the Sierra Madre in the east, the Caraballo in the south, and the Cordillera in the west, except in the northern part, is beneficial for agricultural production. The mountains to the east serves as a natural barrier from devastating winds during typhoon season. The valley floor experiences cold winds from November to February funneled through the opening in the north but it is also the same configuration that traps surface temperature usually from March to June. With most of the production and settlement areas in the valley floor, frequent exposure to extreme temperatures was already normal. However, extensive climate conditions (El Niño or La Niña) have significant impact on the watershed function of forest areas, production function of agricultural areas and health of the people.

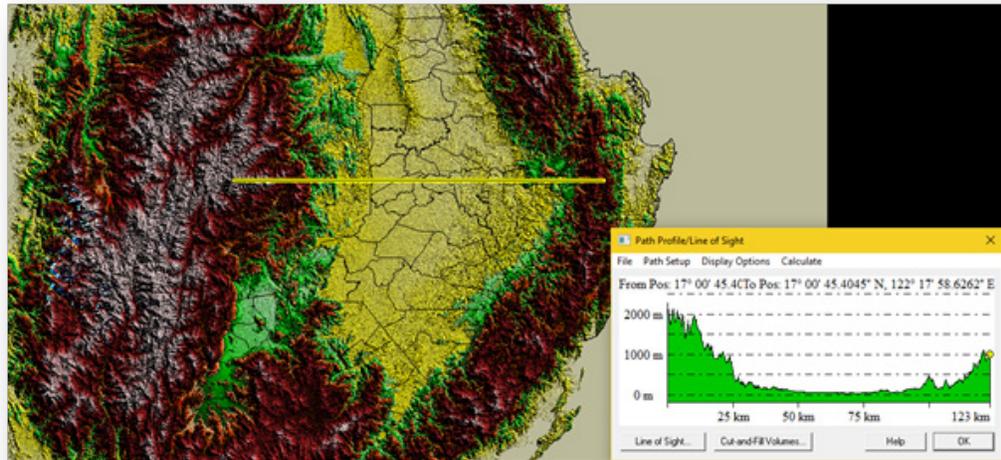
This elicits different policy responses from local government units. There are some which are more responsive and willing to accept the challenges, and this reflects their level of political maturity and its great bearing on policies addressing development divide and spatial inequality. These policies were further translated into economic innovations strengthening forward and backward linkages and increasing market size, thus, translating physical limitations into development opportunities. This explains the reason for the varying development trend and poverty situation among provinces.

Hydrometeorological and Geologic Hazards

Location wise, the region is visited by an average of 2 to 3 destructive typhoons in every 2 years which means that it is along the natural path of typhoons. As a natural catch basin, the alluvial plain, where most of the livelihood and settlements are located, is also subjected to frequent flooding either as a consequence of monsoon rains or typhoons accompanied with heavy precipitation. The past decade has shown the wide extent of flooding in the valley floor primarily due to the increasing unsustainable practices in the upland. Satellite images of the region's forest area indicated massive encroachments mostly upland cultivation of corn. The stripping of the natural forest cover increases erosion of topsoil which finds its way through the various river systems aggravating soil deposits or sedimentation of the river. Sedimentation reduces the holding capacity of the Cagayan River with excessive flood waters inundating low lying areas. While the annual phenomenon replenishes the alluvial plain with nutrient-rich soil, it becomes a bane for farmers if flooding occurs anytime within a cropping season. The reduction of the natural cover also contributes to the reduced capacity of the soil in absorbing water, thus, increasing the volume of run-off water towards the river network.

There are also active fault lines that are within or proximate to the region which pose as a development threat. The possible generation of Magnitude 7 or more earthquake anywhere along these faultlines will have tremendous impact on the people, property or investments and livelihood. Public and private infrastructures are both vulnerable to this type of hazard. It is one of the natural hazards which the region has limited capability to respond once a strong seismic activity occurs. Unlike climate

Figure 3.4 Horizontal Slope Configuration of the Central Isabela Area



phenomena which can be predicted or provides people with lead time to prepare, geologic hazards are the most unpredictable phenomena. Thus, it is imperative for both public and private infrastructure to consider designs that could withstand the strong winds brought about by typhoon or the potential risks of an earthquake.

The long coastline is also under threat of tsunami and storm surges especially the eastern seaboard. The presence of dormant and active volcanoes also poses threat to the population and livelihood mostly in the coastal areas and its lone island province. Also, the natural configuration of the coastal areas of the region hampered the improvement of infrastructure connectivity.

Given the physical features and the natural phenomena which the region is subjected to on regular basis further aggravated by injudicious resource extraction practices highlights the level of vulnerability of its settlements and production areas. However, the people do not have much of a choice but to adapt and further increase their resiliency. There were significant adaptation measures that are practiced in the region as shown in the declining number of casualties

or injuries after the occurrence of disasters. But said adaptation measures are yet to be tested in the advent of the “new climate normals” and the anticipated occurrence of the “big one” in terms of geologic hazards. The bottom line is all about unsustainable human practices that contribute to degradation of the natural environment that may aggravate future conditions.

Production and Protection Areas

The production areas of the region are the alluvial plains mostly for agricultural production. Rice and corn are the dominant products but high value crops are also being produced but in a limited capacity. The production areas of the region are intertwined with the built-up or settlement areas. The production areas transitioned from tobacco production to the current rice and corn farming. About 85 percent of the current agricultural production areas are located in the valley floor and highly dependent on water resources for irrigation coming from the upland. The biggest production areas are located in the province of Isabela which accounts for more than 50

percent of the region's production area. The production areas are highly vulnerable to extreme weather conditions (drought and flooding) with direct impact on the decline in production in both cases. There are also production areas in undulating and rolling lands mostly for corn and high value crops production. But the trend in the 60's to the 80's on the diaspora to the upland expanded the production area towards protected areas. This has been primarily driven by the logging operations where logged-over areas were transformed into farming communities. The insurgency in 70's to 80's discouraged some upland communities, but still a lot others persist to this day. Currently, these areas are used for agricultural production but by definition location of upland communities are classified as protected areas. There are other areas classified as production but this involves tree farm or industrial crop production/plantations. However, suitable production areas will gradually decline with the inverse relationship to an increasing population (demand for other land uses). Unsustainable practices are also contributing to the transformation of once fertile land into idle and unproductive lands. While this may have creeping impact and will not be felt within the Plan period, the long-term effect if left unchecked will reflect in the region's economic performance.

Protection areas are primary forest, secondary forest, forest reserve areas with more than 30 percent slope, areas with 500 meters above sea level elevation, hazard prone areas, and declared protected landscape and seascape. Protection areas also include identified hazard prone areas, waterways, easements along waterways and rivers. Also, within the context of areas needing protection from conversion, irrigated rice areas are considered protected under RA 8435 (AFMA Law). Under the Fishery Code, the 15-km municipal waters are likewise classified as protected. While the municipal waters are not considered as

land per se, for purposes of incorporating natural resource conservation and management, it is being included as buffer zone to the coastal areas of the region. It also boasts of a long coastline and wide expanse of pelagic fishing areas which is within the Exclusive Economic Zone. Unlike on land, the region lacks the necessary facilities for the utilization of its resources within the EEZ.

Access to the Region

The physical characteristics and resource endowment of the region defines its cumulative development trend. Four of its provinces are landlocked without natural harbor for alternative sea connectivity. The mountainous areas to the south serve as the direct passage in and out of the region. The geologic composition in these areas exposes infrastructure to constant rehabilitation due to the frequent occurrence of landslide and erosion, among other human factors contributing to its deterioration. There are only two viable road access into and out of the region - the Manila North Road via Patapat and Maharlika Highway through Dalton, and both go through these mountain passes. About 94 percent of people and cargo movement are dependent on these two land access. Alternative access is only through air via Tuguegarao, Cauayan and Basco airports.

Looking into the growth trends of major cities in the Philippines, most started with ports as major node for trade and commerce which eventually defined the development vis-à-vis settlement pattern. The region lacks an effective alternative sea transport and land transport like railway or expressway which will facilitate the movement of people, goods and services. One of the reasons for the limited infrastructure development is its high vulnerability to the different types of hazards. Infrastructure development is mainly reactive rather than responsive and

proactive. The region will remain dependent on land transportation infrastructure within the planning period but it is high time to start exploring for alternative means.

The region has also limited infrastructure for irrigation to further improve production and productivity in the agriculture, communication to facilitate transaction in the virtual environment, and energy to address immediate and future industry requirement and the frequent power outages during peak months. In addition, efficiency and reliability of infrastructure is a concern due to its vulnerability to different hazards.

The region's infrastructure has yet to transition to the build-back better principle in consideration of more intense and more frequent natural hazard occurrences.

Cross-cutting concerns

The forces of spatial agglomeration and dispersion are defined by the above-mentioned factors. In general, spatial inequality is the net result of the balance of forces of concentration and dispersion. Rural communities persist due to inequality in the access to resources, thus agriculture thrives in the fringes or even in delineated forest lands or protected areas. Satellite images showed encroachments in the forest areas for the practice of unsustainable agricultural production. The LGUs and concerned agencies are unable to enforce laws that will address this concern. The impact of the practice is long-term and irreversible which eventually threaten the ability of the region to sustain its role as key producer of rice and corn.

On the other hand, recent increase in concentration in urban areas has been driven by their gradual transformation into service and commerce centers, thereby providing opportunities for employment

and proximity to better socio-economic services. Natural convergence areas like Tuguegarao City and Santiago City benefitted from this gradual transformation. The natural population growth, though relatively lower compared to other regions, also contributed to the transformation of other urban areas like Cauayan, Ilagan, Solano, Bayombong, Bambang, Roxas, Mallig, Tumauini, Cabagan, Cabarroguis and Tuao. The same trend has been observed in other urban centers in the region but the above mentioned areas showed phenomenal development expansion and population growth in the past five years.

On a regional perspective, the centripetal forces of geographic concentration are natural advantages for service delivery convergence but there are still factors limiting the mobility of goods and services due to high cost or limited transportation facilities. This scenario is advantageous as it discourages further encroachment into protected areas of the region. From the growth center perspective, the most important difference is the addition of new costs of concentration in the form of congestion costs that result from the fixed supply of land. Concentration leads to increased housing and commuting costs as well as social costs caused by greater crime, pollution, and exposure to disease.

It is the imperative role of local government units and by way of complementation with national government to influence the reduction of spatial inequality and ensure inclusiveness of growth at the household level. While location is primary determinant for the identified centers' growth, citizens should have greater awareness and understanding of the political, monetary and fiscal dynamics between the national and local governments in reducing inequality.

Regional Spatial Strategy: *MIDRIB PERIPHERAL GROWTH OPTIMIZATION STRATEGY*

The regional spatial strategy is based on the consideration of physical, social, economic, and environmental factors of spatial development. Understanding the physical environment and other natural phenomena that contributes to region's vulnerability will reduce impact of economic shocks and disasters. The physical environment can thrive on its own without human intervention but the population will not survive in an environment where there is a deliberate and compounded effort of reducing its carrying capacity. In line with the principle of sustainable development, which is its basic principle, the spatial strategy embraces prudent use of land as a critical resource along with the natural environment and provides for the safety of life, livelihood and critical infrastructure. It emphasizes endeavours to preserve spatial identity anchored on the development roles of the identified growth centers that will enhance the region's comparative advantages.

In line with the long-term vision and medium-term development thrust, the regional spatial strategy defines the future spatial direction as well as the priorities and policies for its attainment. Spatial development takes into consideration the effects of rational distribution of the population, guarantee access by the population to basic services, ensure optimum sustainable utilization of resources, and protection of the environment.

The region likewise recognizes the role of the LGUs in the overall spatial development. As espoused in Section

16 of the Local Government Code, the LGUs shall have to respond to the general welfare of the population through the following: preservation and enrichment of culture; promotion of health and safety; enhancement of the right of the people to a balanced ecology; encouraging and supporting the development of appropriate and self-reliant scientific and technological capabilities; improvement of public morals; enhancement of economic prosperity and social justice; promotion of full employment; maintenance of peace and order; and preservation of comfort and convenience. The spatial strategies of the region are attuned to these welfare goals in full consideration of the role of the LGUs to touch-base with the people and the operationalization of sound spatial strategies.

Priorities within the medium-term are: strengthening of internal integration of growth centers, and complementation with growth centers of neighboring regions. It focuses on the growth of polycentric urban system anchored on the vital and well-managed cities and towns with harmonized development of transport and settlement networks. In addition, the government, both local and national, shall develop a conducive environment through an efficient public infrastructure which restores vitality and attractiveness of rural areas, identify enhancement of valuable natural and cultural landscape features, and spatial development in areas with specific potentials and problems. The region defines this as the [MIDRIB PERIPHERAL GROWTH OPTIMIZATION STRATEGY](#).

The strategy is likened to a leaf with the midrib representing the existing major network within the vertical mid-section of the region and full appreciation of the historical significance of Cagayan River and its tributaries that run parallel to the road. The outer extent of the leaf is represented mainly by the production areas in the alluvial plains and the natural forest in the east and west wings. The outer extent encompasses the whole Cagayan River Basin which is a recognition of the need for complementation with neighboring regions. The midrib which is represented by the road and river is both literal and figurative representation of the socio-economic dynamics to the identified centers. The road functions as the main vein for people, goods and services movement contributing to the creation of opportunities for industry and services expansion. The river network also functions as the support mechanism for basic sector growth and expansion.

The overall regional spatial strategy also ensures a balanced development anchored on the protection of the natural environment. The economic standing, population distribution/ concentration, poverty situation and characteristics of the natural environment are the overarching focus of the spatial strategies along Connectivity, Concentration and Vulnerability Reduction. On top of the hierarchy for said strategies is the need to align development with the national thrusts and that of neighboring regions through policies and strategies that will help the region realize its national development role in the next six years and in ensuring the attainment of the long-term vision for its people. It recognizes the role of the region's cities and fast-growing urban areas as engines of economic growth and venues of growth and poverty reduction, with infrastructure providing efficient connective networks of sustainable urban

and rural communities, consistent with the vision under Ambisyon Natin 2040.

Within the framework of the region's spatial strategy is the need to understand the different land uses and highlighting optimal complementation of land capability vis-a-vis potential for any particular activity or land value and vulnerability. It can be understood through the following parameters: that land uses typically complement, and land tends to remain in the same general class of use regardless of physical/structural development incidental to the actual land usage; intensification of use does not necessarily change the land use classification; and land use change varies by location. To certain extent, land management practices are made concrete at the local level through effective implementation of land use zoning ordinances.

One important factor in the operationalization of the regional spatial strategy is the full recognition on the impact of population growth as most demands for land have been associated to it and drives demand hierarchy for land in the order of production first and then followed by settlement and infrastructure. This is an inevitable scenario leading to competing land uses and if left unregulated contributes to urban sprawl and incoherent development in the rural areas. Encroachments into protected areas are still likely to happen as population grows where more lands are available primarily to meet the food, livelihood (income) and settlement requirements. Unregulated urban development are most likely to persist with the perception of absolute land rights. The inability to address these concerns will have long-term consequences in achieving the long-term goal for a balanced and sustainable development.

CONCENTRATION - Agglomeration of Economies

The trend of growth is towards regional centers as national metropolitan centers have reached horizontal expansion limit. The survey for the Ambisyon Natin 2040 indicated that four out of five Filipinos want to live within the same place they work in, and a relatively small number (14%) want to work in a big city. The perception until now is that trend in the future is urban migration mainly for employment. But in the information age, transactions can already be made in a virtual environment, a precursor to the rise of knowledge economy. This trend will and may necessitate a different set of infrastructure requirement which can significantly change the infrastructure setting in the future. Also, the metropolitan centers have lost its appeal of raising a family with the rising cost of living, the persistent and worsening traffic conditions, pollution, among others. Like other regions, Region 02 can explore and ride on the opportunity arising from the socio-economic and environmental concerns in the metropolitan centers. Critical to this is the readiness of the region in terms of infrastructures and services offered. The transformation of the region to encourage growth and development through both public and private investments is a gradual process, relies on complex yet inter-related factors, and this will be given strategic importance and emphasis in the next six years.

The Network of Settlements

The location of the identified regional and sub-regional growth centers has both historical and economic significance. The proposed settlement pattern is along the MIDRIB which runs parallel to the river and the road network with lateral connections in the eastern and western part of the midrib as

spillovers or satellite centers in the context of attaining urban-rural connectivity and complementation while optimizing inter-regional collaboration. This coincides with the physical configuration of the Cagayan River Basin where it encompasses Regions 2, 3 and CAR and for which mutual interdependence and complementation of natural and human resources are taking place and will be further enhanced.

The optimization of growth along the current settlements will be made possible through the proper utilization of resources through complementing strategies in all levels of government. Strategic interventions will involve both reactive and proactive, taking into consideration that, the current settlement areas have already established socio-economic partnerships and cooperation with each other along with the primacy of roles and the order/hierarchy of complementation.

There is also the need for LGUs to ensure alignment and consistency to the regional and national development thrusts through program and project complementation. Critical to this is the need for collaborative mechanisms and regulatory functions of the local governments that corresponds to the mainstreaming of the identified spatial strategies within the bounds of sustainable development, public safety and order and reduced vulnerability to any form of risks.

The Regional Centers. These serve as regional markets and service centers for several provinces. These centers have markets that are large enough to support a range of services and investments. Regional centers have the most direct linkages to metropolitan centers. Their dominant roles include being regional administrative and commercial centers, international gateways, and tourism hubs. These centers are natural convergence area by virtue of its location. Santiago City, as the first independent component city, has all these characteristics

catering to the people of Southern Isabela, Quirino, Nueva Vizcaya and portions of Ifugao. The city is acknowledged for its role as the Regional Commercial and Industrial Center. Tuguegarao City is also a convergence area for the whole province of Cagayan, Kalinga, Apayao and the northern part of Isabela. It is acknowledged as the institutional and administrative center of the region being host to the Regional Government Center and key higher education institutions.

The Provincial Growth Centers. These are relatively large settlements that form the market catchments of regional centers. They also connect to and serve as service centers of smaller provincial and local centers. As sub-regional centers grow, they tend to complement regional centers to further disperse service and market functions for closer engagement with the population. These include Sta. Ana and Tuao in Cagayan; Cauayan City, Ilagan City and Roxas-Mallig Corridor in Isabela, Cabarroguis in Quirino and Solano-Bayombong-Bambang Corridor in Nueva Vizcaya. Through the years, these centers have established themselves as an alternative growth centers and earned investors confidence.

The Sub-Provincial Growth Centers. Along with the growth of the regional and provincial growth centers is to look into the growth of other areas in the region. This will involve the development of strategic municipalities that will act as service centers and catalysts of growth for the more remote parts of region as identified in the Provincial Development and Physical Framework Plans (PDPFPs).

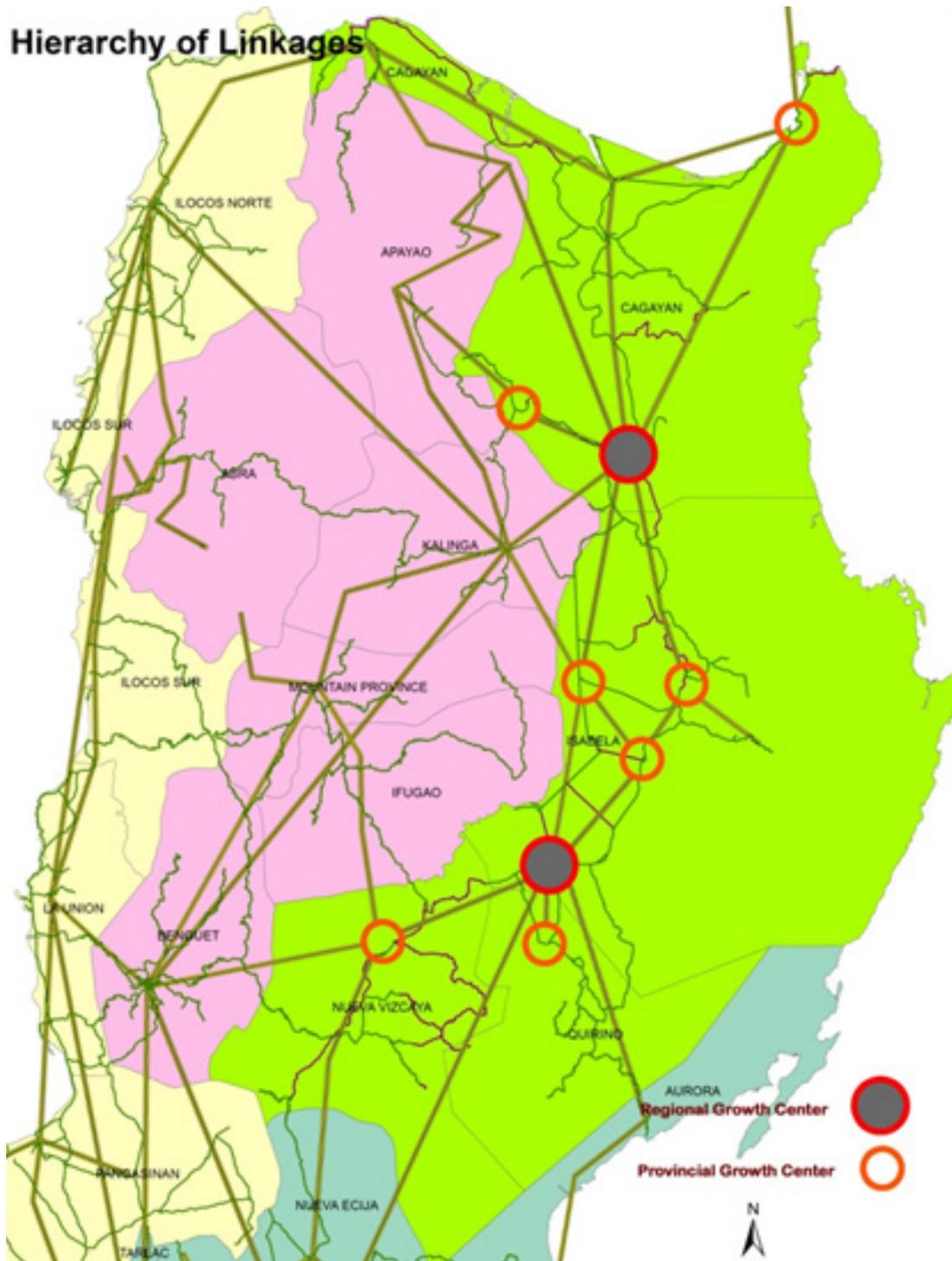
Vertical Expansion of Built-up. Demand for land will increase over time consistent with population growth. Even as the region has relatively low population density and low population growth rate, it shall aggressively pursue land management as land is a finite resource. Thus, optimal utilization of land in

the urban areas through vertical expansion shall be encouraged. This approach will maximize the use of land by increasing the density per meter in a vertical setting thereby reducing population pressure on areas ideal for production, recreation and protection purposes especially those areas that are prone to natural hazards. Consequently, parallel effort on population management should also be given attention to ensure attainment of the long-term goal of simple and comfortable life. The region will also take into consideration potential population growth through in-migration and fertility.

Continuing Protection of Production and Protected Areas. Related to the need to manage urban growth and development is the critical objective to preserve the source of food and other natural resources needed by the population. As population grows, so with the need, thus, protection is necessary to meet the various levels of demand for land. It may opt to allow land owners to have their absolute decision for the use of agricultural land but this will lead to the foreseen scenario of unregulated urban development. There are pertinent laws that provides for regulations and policies on the use of prime agricultural land but until now there were no precedents that will discourage the private owners from premature conversion, reclassification or misuse. Under current circumstances, there is a need to remind if not enjoin LGUs and agencies of their role in the protection of production areas to sustain food requirements for its population.

Also, unverified reports of forest land intrusion and encroachment must be stopped. There were reports of massive conversion of forest areas for corn production through unsustainable manner and practices. Latest satellite images show extensive cultivation in forest areas. If left unabated, it will result to serious implications such as water shortage,

Figure 3.5 Growth Centers and Linkages, Region 02



erosion, landslide, drying-up of rivers and creeks, river sedimentation, flooding, among others. The most critical impact is water scarcity as stripping of natural forest cover reduces the absorptive or water retention capacity of natural watersheds including ground water replenishment. Reduction in ground and surface water will have consequences in the productivity and production level for the agriculture sector. The concerned LGUs, the DENR, DA, DAR and NCIP have to collaborate in order to address this pervasive practice in the forest or upland areas.

Ensuring Optimal Land Utilization and Demographic Dividend. Optimal use of the land can only be achieved through manageable population growth. Both urban and rural population should be made aware of their role in achieving the ideal family size to reduce pressure on the use of the land even beyond the plan period. While there are direct socio-economic benefits to the household to maintain ideal family size, the overall impact at the macro level is a significant reduction in the annual demand for services like education and housing. Providing people with the right information through the inter-related issues and concerns will give them a wider picture or perspective of their contribution to the regional development. On the other hand, it is also worth revisiting government's strategy in managing population growth as the approach may have not been effective for the next generation of women in the productive age. Critical to these is the need to address teenage pregnancy within the first two years of the Plan period.

CONNECTIVITY

Greater access to information technology, better roads, improved education and changing economic realities are increasing the movement of people, goods and services. In the process however, this contributes to environmental concerns of waste and

pollution which blurs the interaction between urban and rural areas. As incomes from agriculture decrease, rural households are forced to develop new and more complex livelihood strategies that include both agricultural and non-agricultural incomes, including remittances from seasonal and permanent migrants. At the same time, low income households in urban areas may rely on agricultural goods from rural relatives to supplement their income. Current changes in the economic, social and political context, including structural adjustment programs and economic reform, have “resulted in deepening social polarization and increasing poverty in both urban and rural areas”.

The strategy of connectivity aims to connect the settlements to form an efficient network. This means improving linkages among settlements and key production areas by connecting rural areas to growth centers or strengthening urban-rural linkages. These linkages will increase people's access to jobs and services, especially those in smaller settlements. Also, it directs growth in areas with greatest economic potentials through efficient transport networks.

Connectivity seeks to equalize opportunities across space. This is not only achieved through physical connectivity but also through investments and human development, particularly in areas where economic opportunities are limited. Investing in human capital through education, health, and other social services will improve people's mobility. Moreover, it is important to have available and accessible social services to improve the quality of life in the locality. These include isolated conflict-affected areas where peace and development efforts can be enhanced.

Rural-urban linkages are important for poverty alleviation and sustainable rural development and urbanization. Strong linkages can improve the living conditions

and employment opportunities of both rural and urban populations. Domestic trade along with the adequacy and efficiency of infrastructure are the backbone of mutually beneficial rural-urban relationships and of the success of the relationship between urban and rural areas.

Connectivity seeks to address socio-economic inequalities by linking rural areas in the region. Rather than forcing a uniform dispersal of development which can create dis-economies and inefficiencies, connectivity will establish a more efficient network of settlements, more opportunities for production and more employment are expected to be generated, thus increasing family incomes and savings for investment and growth, and reducing poverty.

The final gauge of effective connectivity must be an increase in entrepreneurial activities or value-adding activities in the rural areas. In a larger scale, government should look into the agglomeration of efforts to support rural communities in reducing income gap from their urban counterparts.

Connectivity will make urban areas serve as effective engines of growth. Resources have been poured into urban centers — they are generally the main income generators of localized economies. For the centers to have the most impact and remain sustainable for the effective delivery of services, efficient infrastructure and facilities is needed. But rural communities have seemingly been left behind in the rush to embrace urban life. It is not necessarily the trend if urban communities are provided with the appropriate infrastructure and facilities that can mainstream them to the existing centers. The rural communities are needed to address the challenges of urban congestion and vulnerability to natural disasters. Connectivity entails the strengthening of transportation and telecommunication linkages to provide accessibility and integration among production and

settlement areas. In particular, it emphasizes the need to connect various centers within a network of settlements through transport infrastructures to improve people's mobility and accessibility to jobs and services.

VULNERABILITY REDUCTION

As natural-induced disaster events increase in frequency and severity, the field of disaster management is also evolving and expanding. The emergence of drivers such as climate change, poorly planned developments, poverty and environmental degradation, along with the predicted increase in extreme weather events, are prompting responses for a next generation interventions to reduce vulnerability and/or improved resiliency.

The goal of disaster management is vulnerability reduction, instituting prevention and mitigation measures to manage and reduce the impact of natural and man-made disasters on the community. These may include redundancy routes to provide access to areas affected by disasters; strengthened awareness and knowledge of potential hazards and increase resiliency measures through investments, alternative source of income and safety nets for properties, livelihood and life itself.

The region is prone to both geological and hydrometeorological hazards. Climate change contributed to the frequency and severity of hazards, and its impact are also expected to increase. The region is visited by an average of three devastating typhoons every two years as natural path of the phenomenon. The past planning period showed the vulnerability of the region to typhoons and its aftermath to flooding. The most vulnerable groups are the marginal farmers who had to deal with the changing patterns and occurrence and the urban poor along the urban fringes which constantly

exposed to the risk of flooding and water-borne disease. The region also deals with the extreme climate conditions like drought. Geologic hazards have no direct threat to the major centers except in the coastal area in the province of Isabela where Palanan and Divilacan faults are located. But potential impact of geologic hazards should never be downplayed. While it is unpredictable all the more that the region should be ready at all times.

Disaster and climate risks erode development gains. For the years that negative economic growths were recorded, it has been mostly attributed to the natural disasters. Typhoons, excessive rains and El Niño are the major factors affecting the region's agriculture sector. Sustainable growth trend for the agriculture was never achieved as the past planning period indicated 5 destructive typhoons resulting to billions worth of damages and losses. Communities are always at the losing end with the endless cycle of recovering from the impact of disasters and for government to restore and rehabilitate damage public infrastructure and utilities. The build-back-better principle has yet to be institutionalized as typhoons are getting more frequent and more intense.

Communities need to be disaster resilient. Methodologies for determining resilience levels of areas to natural hazards have also been developed. These could be used as basis for planning for infrastructure, housing, and other services, as well as in designing program and projects. Hazard maps and data are useful basis in identifying mitigation measures to minimize negative impacts of hazardous events. Specific disaster risk reduction strategies are best formulated at the regional and local levels where hazards are defined in detail. Furthermore, strategies on vulnerability reduction may be incorporated in sectoral plans to ensure safety and resiliency of the people and the community.

SPECIFIC STRATEGIES

Concentration

- Provide prerequisites for complementation between the urban and rural areas and improve their competitiveness;
- Protect and develop the natural, civilization and cultural values of the territory, including the urban, architectural and archaeological heritage;
- Preserve the unique character of any specific urban pattern, settlement structure and cultivated landscape of communities that characterize its identity, history and traditions. Areas with such a unique character are highly valuable, for example as tourist attractions. However, their protection should not exclude or substantially hinder economic exploitation. Targeted protection of places of special interest is necessary in certain cases, while in other cases entire landscape complexes need to be protected or restored. Landscape restoration or a creative approach to its further development are sometimes more important than the conservation of the status quo. Sometimes a rural landscape may deteriorate due to lack of human intervention. The factors to be taken into account when determining the functional use of the landscape must include nature protection as well as economic development and the people's standard of living;
- Seek balanced solutions in cooperation with the local citizens and other uses of the territory;
- Create conditions for the location of areas to be built up in the structurally disadvantaged and economically

weak areas and contribute in this way to addressing the issues that affect such territories, particularly the high unemployment rate;

- Set out the conditions for efficient use of built-up areas and protect the areas that are not built-up;
- Provide specific prerequisites for the new uses of the underutilized and idle areas;
- Define detailed conditions for the utilization and layout of the area in terms of areas, axes and corridors in compliance with their designation and nature; and,
- Where the urban environment is being created or changed, prevent any segregation in social and territory terms with adverse impacts on the social cohesion of the population.

Connectivity

- Support the polycentric development of infrastructure among the identified centers;
- Collaborate with neighboring regions for the development of infrastructure connectivity for alternative access to the region and extend environmentally friendly public transport networks;
- Build corridors to co-locate the transport and technical infrastructure in order to minimize fragmentation of the landscape;
- Create conditions for preventive protection of the centers against potential risks and natural disasters (e.g., floods, landslides, erosion, etc.) in order to minimize the damage; and,

- Encourage the construction of tourist routes to connect attractive sites and to support the use of the territory for various forms of tourism all over the region (e.g., on foot, cycle, horseback). Depending on the local conditions, create prerequisites for better accessibility of the territory and for a better technical infrastructure, with respect to the permeability of the landscape.

Vulnerability Reduction

- Building solid foundation for the disaster management and safety;
- Create conditions of environmental stability as well as conditions for zones of unbroken greenery, accessible to the public (the green belts), in order to ensure the permeability of the landscape and its recreational use and to preserve its reproduction capacity;
- Create conditions for the development of forest stands;
- Create conditions for the development of various forms of tourism in the landscape (e.g., cycle tourism, agro-tourism, sightseeing tourism) with focus on specific regions, thus contributing to preserving and developing the landscape's values;
- Pay special attention to the protection of the areas where flood protection measures are to be taken and to the delineation of the areas where flood water is to be allowed to overflow;
- Allow building in flood-exposed areas only in exceptional and specially justified cases;
- Delineate and protect the areas that are to be built up as a result of re-location

from the areas exposed to a high risk of flood damage;

- Ensure that conditions are provided for alleviating the consequences of abrupt economic changes;
- LGUs to maximize the use of Community-Based Management System (CBMS) and the National Household Targeting System (NHTS) in identifying vulnerable groups which can be pre-identified for potential impact of hazards; and,
- Identify location-specific hazards through regular area assessment or community-based mapping system.

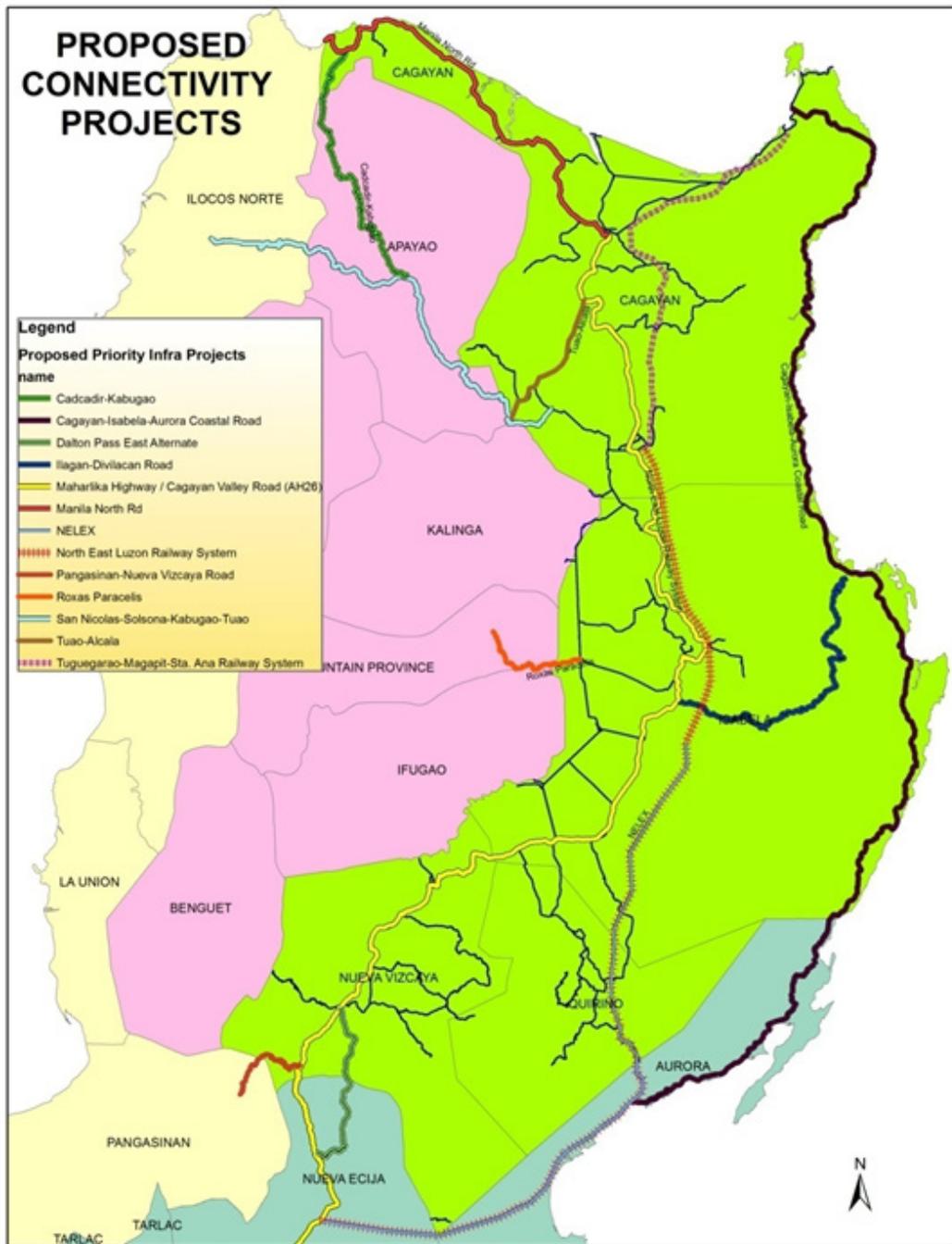
Proposed Programs and Projects

- Various Transportation Projects – to provide a more efficient land, sea and air transport system and redundant access to and from the region (refer to Figure 3.6).
- Various Flood Control/Sea Wall – for reduction of river and sea erosion and reduce loss of livelihood and

infrastructure.

- Various Irrigation Projects and Multi-Purpose Dams – for power generation, irrigation and greater water impounding capacity during extra-ordinary rainfall which can also be utilized during drought.
- Various irrigation projects – support to the primacy of the region's role as one of the grains producer of the country and sustain the employment/livelihood requirement of half of the population.
- Natural regeneration of encroached forest areas – strict implementation of no-entry zones in forest areas.
- Other non-structural measures – continue with the national greening program, encourage community forest rehabilitation management projects and engage business sector groups in area adoption for forest rehabilitation as part of their Corporate Social Responsibility.
- Housing/Resettlement Site Development

Figure 3.6 Proposed Land Connectivity Projects, Region 02



04

Cagayan Valley
Regional Development
Plan 2017-2022
Overall Framework

Cagayan Valley Regional Development Plan 2017-2022 Overall Framework

The Cagayan Valley Regional Development Plan (CVRDP) 2017-2022 framework is consistent with and contributory to the attainment of the national long-term vision spelled out in the AmBisyon Natin 2040, and the medium-term national goals under the Philippine Development Plan (PDP) 2017-2022, which is anchored from the Duterte Administration's 0 to 10 Socio-economic Agenda. Likewise, remarkable in this regional framework is the desired role of the region to be the country's "Prime Water Resource, Agro-Industrial Hub, and Emerging Tourism Destination".

Assessment and Challenges

Growth in the regional gross output over the three-year period was sustained. The Cagayan Valley Region's economy sustained a positive growth pattern over the three-year period, 2013-2015. Likewise, the economic structure of the region has gradually shifted from the Agriculture sector to Services sector. In fact, the major contributing sector to the Gross Regional Domestic Product (GRDP) growth rate during the three-year period consistently came from the Services sector. On the other hand, the erratic performance of the Agriculture sector in terms of its growth rate and contribution to GRDP growth was greatly affected by the extreme weather and climatic conditions that the region experienced over the period.

From 2013 to 2015, the GRDP grew by an annual average of 5.8 percent (at 2000 constant prices) or valued at PhP127.815 Billion. The region's growth rates achieved in 2013 at 6.6 percent and in 2014 at 7.2 percent exceeded the targets for the given years; except in 2015 where the actual growth rate of 3.7 percent was less than the

target growth of 5.4 percent.

Labor and employment status also improved. Based from the 2015 Annual Labor Force Survey of Philippine Statistics Authority (PSA), majority of the employed persons in the region are engaged in agriculture (54%) while the rest in the services (37.3%) and industry sectors (8.3%). Employment (all sectors) is also found to be generally biased towards men (67%). For instance, the industry and agriculture sectors employ more males at 89 percent and 71 percent, respectively while only in the Services sector wherein there are more females (53%) employed than males.

In terms of employment, the average annual addition to the employment level was about 21 thousand persons from 2013 to 2015. In 2015, employment rate was pegged at 96.8 percent with a total of 1.512 million employed persons. For the same year, the unemployment rate of 3.2 percent translates to about 50,000 unemployed persons from a level of 56,000 in 2014 and 48,000 in 2013.

Likewise, there was a noted improvement in the quality of employment in the region as measured through underemployment data. Specifically, the underemployment rate of 12.9 percent in 2013 (190,000 persons) was reduced to 11.6 percent in 2014 (172,000 persons) and further down to 11.1 percent in 2015 (168,000 persons). The underemployment rate in the region is far better than the national underemployment rate of about 18.7 percent in 2015.

Furthermore, another indicator of improved employment status in the region was the decline in the percentage of unpaid family workers or persons who worked without pay on own/family-operated farm or business. The proportion of contributing (unpaid) family workers in total employment decreased from 14.4 percent (212,400 persons) in 2013 to 14.0 percent (207,900 thousand persons) and 13.2 percent (199,584 persons) in 2014 and 2015, respectively.

Incidence of poverty considerably declined in 2015. The region was successful in achieving its poverty targets in the Millennium Development Goals (MDG) on halving the 1991 level (among population) of 42.8 percent. Based from the 2015 Family Income and Expenditure Survey (FIES), the region's poverty incidence among population reduced to 15.8 percent (553,616 poor population) from 22.1 percent (716,754 poor population) in 2012.

Among the provinces, (see Table 3.1, Chapter 3), quite notable was the zero poverty incidence recorded in Batanes in 2015 from a high of 33.3 percent incidence in 2012. However, this estimate should be taken with caution considering the very small sample size that was enumerated in 2015. It is also worth noting that among the five provinces, it is only Batanes where there are no identified beneficiaries of the DSWD's Pantawid Pamilyang Pilipino

Program (4Ps). Three other provinces that experienced improvement in terms of reducing poverty were Cagayan (19.7% to 15.9%), Isabela (24.4% to 15.2%) and Nueva Vizcaya (20.7% to 13.6%).

The target on reducing the subsistence incidence in the region was also met. From 5.9 percent incidence in 2012 or about 189,758 subsistence poor population, it went down to 2.6 percent or about 91,001 in 2015. The province of Quirino (7.4%) had the highest subsistence incidence of population who could not afford to provide for their basic food requirements based on the annual per capita food threshold of PhP15,118. Incidence in the other provinces stood at 3.3 percent in Cagayan, 2.5 percent in Nueva Vizcaya, 1.6 percent in Isabela and no recorded incidence in Batanes. Again, caution is needed in the utilization of these estimates especially with Batanes as earlier mentioned.

The poverty reduction efforts in the region have been influenced by the movement of prices especially of basic food commodities. Inflation rate among basic food commodities managed to slow down to 3.3 percent in 2015 from its 4.6 percent rate in 2014. This rate was also within the bounds set at 3.0-5.0 percent.

Target of decreasing the Gini coefficient was also attained with 2015 figure at 0.4065, which was slightly lower than the 2012 ratio of 0.4096. On the other hand, for a broader measure of human development as measured through the Human Development Index (HDI), latest available data in 2012 revealed varying levels of development among the five provinces – Nueva Vizcaya with the highest index value at 0.644, followed by Cagayan (0.626), Isabela (0.587), Quirino (0.549) and Batanes (0.512).

Despite the gains achieved over the last three years, the region continues to face

many challenges that need to be addressed in this planning period and for the years to come, to wit:

Slow economic growth. The GRDP growth rate of the region has been behaving erratically during the recent years. The desired rapid and sustained growth has not been achieved due to the unstable performance of the agriculture sector.

Prevalence of poverty especially in rural areas. Many of the region's population still live below the poverty line and most are found in the rural areas where agriculture is the major source of livelihood. Based from 2015 FIES, about 2.6 percent of the regional population estimated at 91,000 persons could not afford to provide for their basic nutritional requirements based on the annual per capita food threshold of PhP15,118.

High underemployment. Despite reduction in the number of underemployed over the past three years, the region's underemployment rate is still high at 11.1 percent of total employed, translating to about 168,000 persons in 2015. Most of these employed who need to be provided with better livelihood options or work opportunities belong to agriculture and services sectors particularly wholesale and retail trade.

Low productivity and competitiveness of the agriculture sector. The overall economic performance of the region has been consistently and greatly affected by the performance of the agriculture sector. The erratic growth of the sector has been due to low productivity of most agricultural commodities and the low competitiveness of agriculture and fishery products. The interplay of several factors such as low access to easy credit and financial packages, insufficient government subsidy for crop insurance, insufficient infrastructure

support (poor transportation/logistics system), low adoption to technologies including farm mechanization especially with marginal/fragmented landholdings, high cost of inputs, poor post harvest handling, among others have been hindering the subsistence farmers and marginal fisherfolks to graduate into smallholders who are more inclined about linking to markets.

Limited sources of growth in industry and services (I&S) sectors. The weak forward linkage of the agriculture sector to the I&S sectors limits the potential of these sectors in producing goods and services with higher value added. The minimal contribution of the manufacturing industry and the underexploited potential of the tourism industry in the region needs to be revisited. The high cost of doing business in the region has been unappealing to investors.

Vulnerability to climate change and natural disasters especially agriculture sector. The region's location and topography contribute to the vulnerability of the people to the adverse effects or risks associated with flooding, landslide, ground shaking, and other disasters. Consequentially, the agriculture sector's production and productivity of farmers and fisherfolks is most affected by these natural disasters, further affecting its contribution to the overall economic growth.

Underutilized natural resources. Being endowed with rich natural resources, the region needs to accelerate development from what it has while ensuring integrity of the environment. Despite the region's vast watershed area that can be utilized for irrigation, renewable energy and other uses, rich water resources for fishery development, arable land for farming, scenic sites for tourism, among others, these resources have not been optimally developed due to lack of investments.

Strategic Framework

By the end this planning period, the region will be contributing to the country’s laying down of a solid foundation for more inclusive growth, a high-trust and resilient society, and a globally competitive knowledge economy. Likewise, in the medium-term, the region will seek to perform the role of becoming a “**Prime Water Resource, Agro-Industrial Hub, and Emerging Tourism Destination**” in the country by 2022.

Targets

For the six-year period, the region aims to attain a GRDP growth rate of 6.5 to 7.5 percent, in real terms. Poverty will also be reduced to 8.2 percent by end of 2022. The high economic growth and single-digit poverty target shall translate to an overall improvement in employment

status, and thus, in 2022, unemployment level will decline to 1-3 percent and underemployment rate reduced to 9-11 percent. To ensure affordability of food and other goods and services especially for the welfare of the poor, inflation will be monitored not to exceed the bounds set at 2-4 percent.

The region will also aim to have a more equal income distribution or with Gini ratio declining from its baseline level in 2012. An overall improvement HDI shall also be achieved.

Other specific targets that are contributory to the attainment of regional goals are discussed elaborately in the different chapters of this Plan.

Table 4.1 Plan Targets for CVRDP by 2022

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Societal Goal: Foundation for inclusive growth, a high-trust and resilient society and a globally competitive knowledge economy			
Gross Regional Domestic Product increased (at 2000 constant prices, in %)	2015	3.7	6.5-7.5
Unemployment rate decreased (in %)	2015	3.2	1-3
Underemployment rate decreased (in %)	2015	11.1	9-11
Poverty incidence among population reduced (in %)	2015	15.8	8.2
Subsistence incidence among population decreased (in %)	2015	1.8	Decreasing
Gini coefficient decreased	2015	0.4065	Decreasing
Human Development Index increased			
- Batanes	2012	0.512	Increasing
- Cagayan	2012	0.626	Increasing
- Isabela	2012	0.587	Increasing
- N. Vizcaya	2012	0.644	Increasing
- Quirino	2012	0.549	Increasing
Stable food inflation (in %)	2015	3.3	2-4

**Notes: Targets for poverty is initially set by NEDA RO2 while waiting for the official target from the NEDA-NPPS*

Source: PSA 02

Strategies

Figure 1 shows the overall strategic framework of the CVRDP 2017-2022. The CVRDP 2017-2022 is the first of the four medium-term plans of the region towards the realization of the long-term goal of Filipinos to have a “*matatag, maginhawa, at panatag na buhay*” by 2040. This regional framework translates the national thrusts and priorities into strategies, policies, programs, and activities that are best applied in the local setting.

Parallel to the goal of laying down a solid foundation for more inclusive growth, a high-trust and resilient society, and a globally competitive knowledge economy is for the region to achieve its role of becoming a “Prime Water Resource, Agro-Industrial Hub, and Emerging Tourism Destination” in the country by 2022 (see also Chapter 3). The region covering about 68 percent of the total basin area of the Cagayan River Basin (CRB), the largest in the country, will continue to protect and sustainably manage the sub-basins and the watersheds in collaboration with Region 3 and CAR in order to optimize the Basin’s development potentials. Likewise, as an agriculture-based economy that has been consistently recognized as major producer of grains, the region will strengthen efforts to advance value-adding production activities of grains and other agricultural, fishery and forestry products in order to provide better economic opportunities for the farmers and fisherfolks. The region is also blessed with rich natural and cultural resources that can be explored and developed as ecotourism sites that will serve as an effective strategy to achieve inclusivity while ensuring the protection and sustainable management of the natural resources.

Meanwhile, in order to attain the desired outcomes and for the region to carry out its role, there are three (3) identified strategic

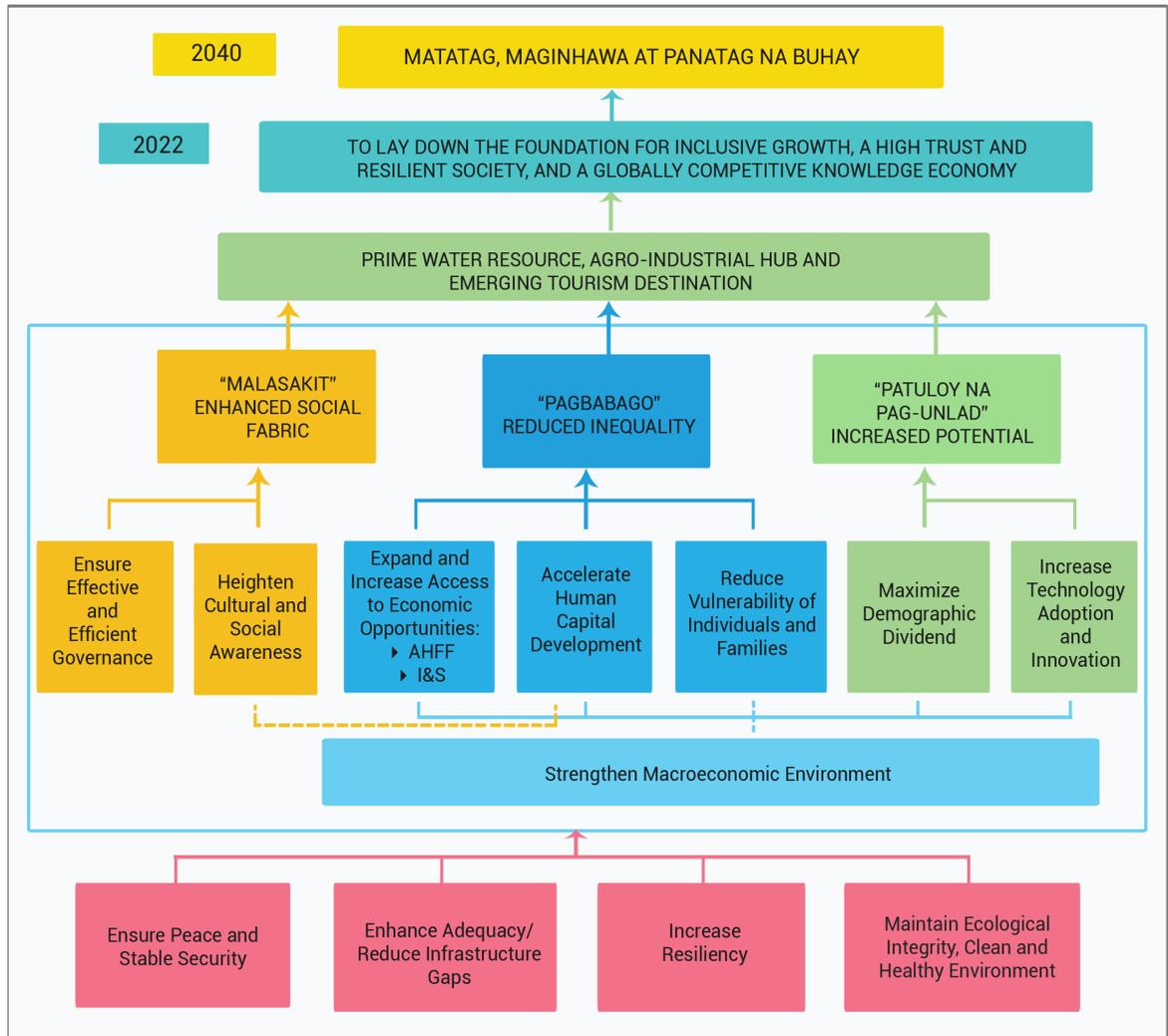
pillars of development which are supported by crosscutting strategies: (1) Enhancing the social fabric (*Malasakit*); (2) Reducing inequality (*Pagbabago*); and (3) Increasing growth potential (*Patuloy na Pag-unlad*).

Strategic Pillar 1. Enhance the social fabric. To be able to regain people’s trust in government, efficiency and effectiveness in governance system particularly in the delivery of public goods and services and administration of justice will be ensured (Chapters 5 & 6). Likewise, efforts to heighten cultural and social awareness of the community will be pursued to develop/increase appreciation of the diversity of local culture and importance of Filipino values (Chapter 7).

Strategic Pillar 2. Reduce inequality. There are three ways identified to reduce inequality. First, is through advancing the growth of the economic sectors namely the agriculture, industry, and services to be able to expand and increase access to economic opportunities of the farmers, fisherfolks, MSMEs, cooperatives, among others (Chapters 8 & 9). Second, is by accelerating human capital development particularly in terms of education and training; and health and nutrition (Chapter 10). Third, is through reducing vulnerability of individuals. (Chapter 11).

Strategic Pillar 3. Increase potential growth. Strategies towards maximized demographic dividend (Chapter 13) and increased technology adoption and innovation (Chapter 14) are expected to sustain and further accelerate growth. Efforts to ensure that families can adequately provide food and non-food needs their children in order to increase employability in the future will be pursued. Use of science and technology and innovation will be promoted to improve performance of the economic sectors, agriculture, industry and services sectors.

Figure 4.1 CVRDP 2017-2022 Overall Strategic Framework



Crosscutting Strategies

Strengthen macroeconomic environment

Regional growth particularly in support to reducing inequality and increasing growth potential also requires a strengthened macroeconomic environment governed under a conducive national competition policy (Chapter 15 & 16).

Ensure peace and stable security

Efforts to ensure lasting peace and security will also be strengthened as peace and order in an area foster economic activities and development (Chapter 17 & 18).

Enhance adequacy or reduced infrastructure gaps

Addressing infrastructure gaps especially in the growth centers will be prioritized in order to stimulate development and to create a conducive business environment especially for prospective investors (Chapter 19).

Increase Resiliency of Communities

Aims to build socio-economic resilience by helping the marginalized sectors, local governments and the private sector establish safe and secure communities (Chapter 12).

Maintain ecological integrity, clean and healthy environment

Ensuring the integrity of the environment through protection, conservation, and sustainable use of natural resources will also be at the top priority in order to provide the needs of the present and future generations (Chapter 20).

PART II

ENHANCING THE SOCIAL FABRIC ("MALASAKIT")



05

Ensuring
People-Centered,
Clean, and Efficient
Governance

Ensuring People-Centered, Clean, and Efficient Governance

The Philippine Development Plan 2017-2022 highlights good governance as a significant element to achieve high public trust and confidence in public institutions. This can be attained by inculcating a transparent, responsive, innovative, and accountable culture of governance between and among key public actors along with the active participation and involvement of private institutions and the entire community. The need for the government and the people to work together towards a more purposeful and sustainable long-term regional development efforts is then underlined in this medium-term plan. Hence, the effectiveness and efficiency of delivering public goods and services in all forms and levels of governance will be further enhanced and transformed to enable a more inclusive, credible and reliable government for the people.

Assessment and Challenges

Improved compliance to transparent fiscal operations. The Cagayan Valley Region remained steadfast in building a transparent government for the regional populace especially on its fiscal operations.

The region boasts of continuous commitment towards a more transparent governance given its compliance to the Full Disclosure Policy (FDP). The LGUs and agencies responded positively to the call for transparency in government operations as necessary financial documents were consistently disclosed through various mechanisms for the general public and local constituents.

Specifically, the Department of Interior and Local Government (DILG) launched the FDP Portal (FDPP) in 2013 in response to the LGUs' difficulty in complying with the FDP mandatory online posting requirement. Based from the 2013 data, only 10

municipalities out of 89 had the capacity to create and maintain an operational website for general purposes. The Portal then proved to be a very effective medium for the LGUs to upload necessary documents and has facilitated the culture of transparency, public trust and public awareness on public fund utilization. The FDP compliance rate of the LGUs rose to 96.30 percent in 2015 from a low of 73 percent in 2012. On one hand, the downside of the Portal is that system failure occurred during the fourth quarter of 2015, thus, reducing the LGU's compliance at 74.6 percent from the 99.4 percent average compliance rate during the three quarters of the year.

Modest performance in enhancing public service delivery. The region's performance was short of the targets in most of the indicators pertaining to the responsiveness of the local governments and institutions in the provision of public services. Overall,

strict observance of the Anti-Red Tape Act (ARTA) was registered among the agencies with a hundred percent compliance rate in 2014. However, this declined to 96.50 percent in 2015 with five agencies marked as non-compliant.

The results of the ARTA-Report Card Survey showed that the region generally achieved an increasing number of agencies with more Good to Excellent ratings from 2013 to 2015. In the ARTA RCS, the service offices are expected to comply with the ARTA provisions and attain overall client satisfaction. It was observed during the recent survey that majority of the service offices' were compliant in some sub-areas but usually had low compliance for the manning of the PACD, wearing of CSC-prescribed IDs and the posting of the Citizen's Charter.

On sustaining good housekeeping among the LGUs, DILG Memorandum Circular 2014-39 scaled-up the Seal of Good Housekeeping (SGH) program to Seal of Good Local Governance (SGLG). The SGLG recognizes the performance of provincial, city and municipal governments on three (3) core assessment areas, namely: Financial Administration, Disaster Preparedness, and Social Protection; and three (3) essential assessment areas, namely: Business-friendliness and Competitiveness, Peace and Order, and Environmental Management. The LGUs must be able to meet the condition of the three core areas and at least one essential area (also referred as "3 plus 1" Principle) in order to become SGLG recipients.

From the initial target of 55 LGUs awarded with SGH in 2013 based from the Revalidated Results Matrix, the actual number of LGUs conferred with the SGLG in 2015 was only fourteen (14) due to the upgraded criterion of the SGLG. LGUs who passed the assessment on SGLG were awarded with the Performance Challenge Fund (PCF) as

an incentive. The continuous recognition and provision of incentives to the LGUs' effort to improve its performances and unwavering commitment to deliver quality and excellent public services provides for a strong motivation and empowerment to uplift the morale of public servants and productivity of the government offices.

Improved government budgeting and spending process. The improved effectiveness and efficiency in said areas were among the priorities of the government to achieve fairness and credibility of local units in its local operations.

From 2013 to 2015, the improvement on the LGUs' compliance to the implementation of the Government Procurement Law or RA 9184 was very evident with the 100 percent observance rate in 2015 from only 56 percent of LGUs in 2013.

In terms of achieving an open and orderly Public Financial Management (PFM), actual accomplishments show an increasing number of LGUs complying with the PFM assessment. All LGUs participating in the Grassroots Participatory Budgeting (GPB) in 2013 and the Bottom-Up Budgeting (BuB)/GPB in 2014 were found compliant to the requirements of PFM. Passing the PFM assessment is a condition that the LGUs should meet in order to avail funds from the BuB to implement their identified priority projects.

In order to further improve this undertaking, the DBM, in partnership with the European Union, launched the PFM Reform to help the LGUs perform better in delivering public services. The PFM Reform Project was implemented in 2014 to June 30, 2015. Pilot LGUs were capacitated on their prioritized needs based from their PFM Improvement Plan (PFMIP). Critical dimensions were prioritized such as on policy-based budgeting, credibility of budgeting, predictability and

control in budget execution, accounting, recording and reporting, and external and internal audits. For Region 02, LGU-Basco was selected as the pilot LGU in the implementation of the PFM Reform. Capacity development activities were provided starting 2015 particularly on the enhanced Comprehensive Development Plan (CDP), updated Resource Mobilization Plan (RMP), the new guidelines on the Local Economic Enterprise (LEE) and Internal Audit Service (IAS).

On financial accountability among the delivery units and executives of the LGUs, the region targeted a zero Commission on Audit (COA) disallowance among LGUs 'till end of the Plan period. However, 2 LGUs were rendered with adverse COA findings in 2015. This shows that LGUs still need to institutionalize a quality and credible accounting and financial system in order to effectively prepare financial statements based from their entire operations for a given year. The rendered COA opinions also stressed that LGUs should be more vigilant in complying with the prescribed laws and guidelines. Based from the PFM implementation assessment in the country, audit reporting has been one of the weaknesses of the LGUs particularly on areas concerning accounting, recording and reporting, and external and internal audits.

Fully operational and functional Local Development Councils (LDCs). The functionality of LDCs is a very significant factor in implementing sound development strategies and appropriate programs and projects at the local level. Thus, it is very commendable that all LDCs across provinces and municipalities were fully operational during the previous Plan period. This demonstrates that the region recognizes the need for a support mechanism to champion the local development agenda based on a consensus decision-making.

Given the assessment of the previous Plan period, the sector has yet to address recurring challenges, while some areas need to be sustained and developed further in order to achieve a higher level of transparency and responsiveness in local governance.

Embedding transparency in the operations of public institutions. Given that transparency is a core value of good governance, the existing efforts of the government should be tightly implemented and continuously enhanced after its institutionalization in order to instill a higher level of integrity and accountability among the local government units and institutions.

- ***Full commitment to transparent reporting*** – Compliance to any disclosure policies among the local government units and institutions should not be a result of mere compliance but should have been a part of the local government's improved management system already.
- ***Lack of enabling policies on the sharing of information*** – The participation of the regional populace through informed-decision making is one of the critical areas in allowing good and responsive governance in all levels of the bureaucracy. The government has to come up with enabling policies or programs to ensure prompt, credible and accountable sharing of information between and among the stakeholders and the general public (e.g., implementation of the Freedom of Information Bill, among others).
- ***Lack of modern technology and facilities among the LGUs*** – The gap in relaying information to the public and full efficiency in government transactions remain on the lack or slow adoption of modern ICT facilities and equipment among local government

offices especially in far-flung areas. The presence of other possible alternative medium such as the popularity of the modern media which has the capability to innovate and provide real-time information to the public when needed should be explored to enable faster communication between and among the stakeholders and the general public especially in times of emergencies and disaster response.

- ***Need to further strengthen community participation in government affairs and administration*** - There is a continuing need to encourage and empower all sectors as development partners of the government in order to mediate different interests in the sectors and reach a broader consensus in decision-making for more appropriate, purposive and inclusive development initiatives.

Making government more efficient and effective. Sustaining the responsiveness of the region's government service providers and aiming for Good to Excellent ratings of agencies in the ARTA Report Card Surveys will be one of the opportunities for improvement in the next years. This needs continuous extension of technical assistances especially to far-flung areas and stricter implementation of the ARTA Law through frequent conduct of surprise ARTA visits. This will institutionalize a state of habitual readiness among the frontline agencies in delivering effective and efficient services to the community.

Strategic Framework

In the next medium-term, the desired outcome for the sector is to enhance the social fabric through sustained participatory and clean governance and efficient delivery of public goods and services. This would in

Meanwhile, on the continuous improvement of LGUs' performance, increasing the number of local governments conferred with the SGLG relative to excellence in their workplaces through extensive technical assistances and monitoring of compliance particularly on the various dimensions of the Program should be prioritized. This is to maximize the corresponding incentives of the PCF grant to be used for more development projects for the community. Likewise, streamlining the process in the government operations would also boost the competitiveness of the LGUs in the region. Increasing the competitiveness of the LGUs in terms of realizing the socio-economic well-being of the populace should also be a priority in order to achieve responsible, self-reliant and receptive local government for the community.

Strengthening performance management and accountability. The level of commitment among the LGUs to improve their budget execution, financial operations and overall performance should be strengthened for the next years. The LGUs must be able to inculcate a certain degree of commitment and efficiency in implementing procurement rules and regulations and other public financial management requirements in all local operations so as to qualify their level of compliance and realize genuine and effective local governance in budgeting and spending.

turn contribute to the country's goal of laying down the foundation for inclusive growth, a high public trust and resilient society, and a globally competitive knowledge economy.

Targets

To assess the performance of the governance sector in terms of transparency, effectiveness, efficiency, and responsiveness,

the following are the indicators and targets for the period 2017-2022:

Table 5.1 Plan Targets to Ensure People-Centered, Clean, Efficient and Effective Governance by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Percent of LGUs observing the Full Disclosure Policy (FDP) of their financial status	2016	97	99% of LGUs fully complied with the FDP
Percentage of agencies, GOCCs, Water District and LGUs compliant with the basic requirement of RA 9485 (ARTA) (CC validation and ARTA Watch) (%)	2016	100	100
Number of LGUs conferred with the Seal of Good Local Governance (SGLG)	2016	22	34 (5% increase annually)
Number of LGUs which passed the SGLG essential area on Business-friendly and competitiveness increased	2016	53	65 (5% increase annually)
Number of Cities and Municipalities with streamlined Business Permit and Licensing System (BPLS) (cumulative)	2017	-	93
Competitiveness index of cities improved (Government Efficiency)			
• Tuguegarao City	2016	30	Improved index of all cities
• Ilagan City		19	
• Cauayan City		53	
• Santiago City		32	
Percentage of LGUs assessed that are compliant with set PFM standards (%)	2017	-	98
Percentage of LGUs adopting PFM Improvement measures (%)	2017	-	98

Source: DILG 02, CSC 02, DBM 02, National Competitiveness Council Website

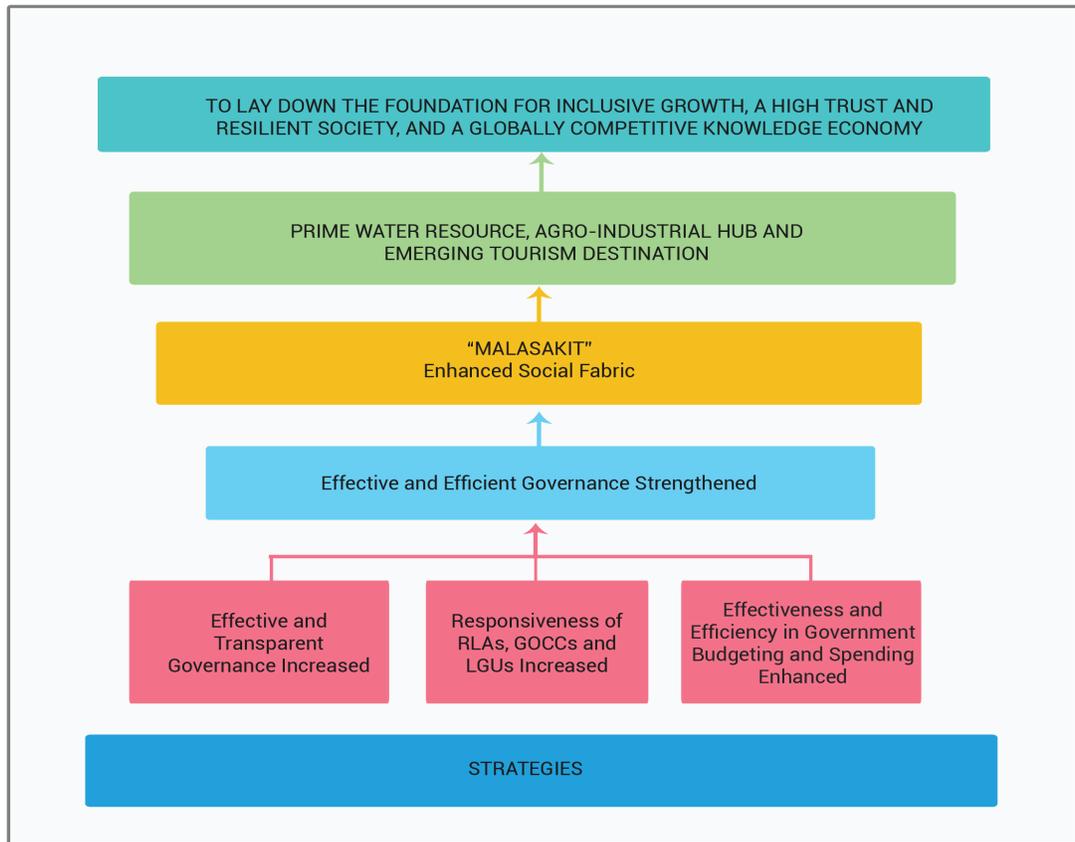
Strategies

For 2017-2022, the region will focus on strengthening the gains achieved in the previous Plan period in terms of bringing an effective and efficient governance system. To achieve this outcome, the government will establish a higher level of engagement among the community, increase responsiveness of the public sector, and enhance efficiency of government transactions in all forms. Priority strategies were also identified for each outcome (see Figure 5.1).

Chapter Outcome: Effective and Efficient Governance Strengthened

To further strengthen the effectiveness and efficiency of governance in all forms, three intermediate outcomes were identified: a) increase effectiveness and transparency of the local governance; b) increase responsiveness of regional line agencies, state universities and colleges, government-owned and controlled corporations and LGUs, and; c) enhance effectiveness and efficiency in government budgeting and spending. Existing efforts of the government

Figure 5.1 Strategic Framework to Ensure People-Centered, Clean, Efficient and Effective Governance, Region 02



shall be sustained along with the expansion and/or innovation and development of new mechanisms to improve public service delivery and effect genuine local governance.

Intermediate Outcome 1: Effective and Transparent Governance Increased

Strengthen LGU capacities for integrated planning, investment programming, budgeting, implementation, monitoring and evaluation. Capacity development among the LGUs will be undertaken in order to enhance local development planning and project development, this as one of the vital factors in catalyzing the development process and integrating the horizontal and vertical complementations of these planning processes effectively. In this light,

improvement in the ability of the LGUs in performing their roles and responsibilities would eventually result to a more effective, efficient and transparent governance.

Strict monitoring of the full disclosure policy particularly on public transactions and fiscal operations including the development of relevant mechanisms to conveniently share information and ensure informed decision-making and collaboration among the citizenry.

Modernization of the local government units. Technological innovations among the LGUs are deemed necessary in order to build better results in their management of public service delivery. Relatedly, national government’s strong support to the local units’ upgrading of ICT facilities

and equipment and increasing access to information technology will enable faster communication and real-time services for the community. Given the role of modern technology to the operations of agencies and institutions, these actions should be able to push forward the effectiveness and transparency of the local governments. Capability development trainings among the public servants shall also be supported given the fast-changing knowledge and skills in this era of technological advancement.

Improve participation of all sectors and ensure consensus-oriented regional governance. The Philippine Development Plan states that the “participation of the civil society and freedom of expression are essential. As different interests will naturally occur in society, governments must reach a broad consensus on what is in the best interest of the whole community and how this can be achieved. Participatory governance is therefore one of the key strategies emphasized by the current administration in the pursuit of its change and reform agenda.” To achieve this, citizens must be empowered and actively engaged in government affairs while promoting shared responsibility and accountability in achieving the medium and long-term goals of Region 02. The involvement of all sectors including the vulnerable groups in all aspects of governance such as budgeting, planning and implementation will enable an accountable and transparent public operations, pro-active synergy among the stakeholders and sound decision-making in managing the development programs and activities.

Through a consultative process, a strong cooperation between and among the government and civil society would materialize, hence, ensuring an active role of the citizenry and the marginalized in building the desired change for local and national governance. One example is DILG’s Assistance to Disadvantaged Municipalities

(ADM) which integrates participatory governance in the budgeting process. Likewise, the promotion of ‘women’s full and effective participation and equal opportunities for leadership at all levels of decision-making, political or economic, will be prioritized as emphasized in the SDG.

Volunteerism will also be a core modality in harnessing citizen engagement to increase public participation in the affairs of the government, promote a consultative process in policy and decision-making, and enhance public accountability in managing development programs and activities. The national and local governments and the civil society will work closely and open platforms for inclusive volunteering to enable ordinary citizens and the marginalized to take an active role in information sharing, public resource management and conflict resolution, all aimed at strengthening the democratic institutions for nation-building.

In addition, existing mechanisms such as the ARTA Report Card Survey of the CSC, the Citizen Satisfaction Survey conducted by the DILG and the Citizen Participation Auditing Program implemented by COA will also be continued to institutionalize response and feedback mechanisms from and to the citizen’s in order to strengthen implementation of public services.

Intermediate Outcome 2: Responsiveness of RLAs, SUCs, GOCCs, and LGUs Increased

Sustain implementation of RA 9485. Agencies and LGUs are expected to adhere to the Anti-Red Tape Act (ARTA) and other anti-corruption laws in order to strengthen trustworthiness of the public sector in terms of manifesting excellence, integrity and purposive public services. In terms of ARTA implementation, service offices subjected to CC validation are expected to comply with the required standards reflected in

their citizen's charter which includes the different frontline services offered with the corresponding number hours, amount of fees and name of action officer.

Beginning 2017, the CSC will direct its effort on improving service delivery of service offices by addressing persistent problems on turn-around time for processing of transactions, delivery of core functions of identified agencies, expanding the coverage of ARTA watch, among others.

Scale-up Seal of Good Local Governance (SGLG). The government's continuous appreciation and recognition of performing LGUs through the SGLG proved to bring significant amount of motivation to the local units. Hence, this award system will be sustained and further enhanced to inspire more LGUs in carrying out their roles and responsibilities effectively and efficiently. For this Plan period, potential improvements in both process and criteria of the SGLG were discussed in a series of consultation. This shall commence in 2017 wherein SGLG will now adopt the 4 + 1 principle: Peace and Order will be added as a core indicator from the previous 3+1 principle. Highly factored in this change were the discussions and considerations on the SGLG's alignment with the DILG Outcome Framework and the thrust of the current administration as well as in intensifying the interest of the LGUs on the program.

Anchoring its actions and efforts on SGLG, DILG Region 02 will maximize and utilize the 2016 SGLG results to implement Programs, Projects and Activities (PPAs) which will ultimately empower the LGUs, increase the number of SGLG passers and enable them to appreciate the intent and objective of the SGLG Program.

Streamlining of business processes and harnessing competitiveness of LGUs. One of the essential factors to expand and

increase the access of the community to a wider range of opportunities is to establish efficient and simplified investment channels or mechanisms. The inclusion of the criteria Business-friendly and competitiveness as one of the essential areas in the SGLG would enable greater competency and productivity in the local units. Likewise, the continuous implementation of the streamlining of business permits and licensing system among the LGUs will be sustained in order to encourage local enterprises as well as expedite transactions with the government.

Institution of Quality Management Systems and other process improvements. Harnessing the productivity in the public sector will boost the responsiveness of delivering public services to the community; hence, continual improvement in the local government's internal and external management system should be prioritized. Specifically, the LGUs and agencies will look into aligning or adhering their processes and management systems to Philippine and/ or international standards such as the adoption of the Philippine Quality Framework (PQF), and certification of a Quality Management System under the International Standardization Organization (ISO) to ensure responsive and effective fulfillment of public services and satisfaction of its clientele.

One of the SDGs for good governance includes ensuring process improvement. In particular, agencies will direct its efforts in improving its human resource systems and processes as envisioned by the CSC. Through its program Program to Institutionalize Meritocracy and Excellence in Human Resource Management (PRIME HRM), agency's human resource management competencies, systems and practices toward HR excellence is assessed. This mechanism presents a more progressive system of assessment as it involves all HRMOs, heads of agencies and rank and file employees. Another intervention identified for the

continual improvement of agencies is the adoption of CSC’s Strategic Performance Management System (SPMS) to enhance and sustain government performance in delivering quality services.

Intermediate Outcome 3: Effectiveness and Efficiency in Government Budgeting and Spending Enhanced

Broaden and enhance PFM Implementation. The assessment on the PFM implementation will up the ante to bring better results and further enhance local government’s service delivery. The PFM standards will cover 7 dimensions, to wit: policy-based budgeting, comprehensive and transparency, credibility of the budget,

predictability and control in budget execution, accounting, recording and reporting, internal and external audit, and citizen’s participation. The extent of the implementation of the Improvement Plans (IPs) of LGUs in various critical dimensions of the public financial management will be strictly monitored.

Institutionalize internal audit service (IAS) to LGUs and RLAs. Activities along this line will be undertaken in order to enable fairness and credibility on the financial and operational transactions of government institutions. Strict implementation or reinforcement of the recommendations provided by the COA in the findings will be pursued.

Legislative Agenda

The region is supportive of the following legislative actions identified in the PDP:

Table 5.2 Supported Legislative Agenda on Good Governance, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Amendment of the Local Government Code	Amend the Local Government Code to address the challenges in local service delivery
Passage of the E-Government Act	Enable interoperability of government data and processes to increase efficiency and economy in the delivery of services
Passage of the Unified National Identification System Act	Expand EO 420 to harmonize ID systems, and cover self-employed, the unemployed, minors and those working abroad
Passage of the Freedom of Information Bill	Require government agencies to allow public review and copy of all official information to promote meaningful and increased participation of the people in government decision-making and public accountability
Institutionalization of citizens' participation in the budget process	Allow the public to participate in decisions regarding the local budget in order to promote shared accountability

Source: Chapter 5 of the PDP 2017-2022

06

Pursuing Swift and
Fair Administration
of Justice

Pursuing Swift and Fair Administration of Justice

The government must always observe the rule of law, uphold the full protection of human rights and ensure that justice is rightly served. One of the priority thrusts of the PDP 2017-2022 is to eradicate corruption, go after abusive public servants and reinforce swift and fair administration of justice. Along this line, the regional development plan will focus on safeguarding the country's justice system through strengthening of the institutions for the complementation of efforts in crime prevention and violation of laws, fair handling of investigations, and managing prosecution of cases, providing respectable rehabilitations and corrections in humanitarian way.

Assessment and Challenges

On safeguarding human rights, the Commission on Human Rights (CHR) Region 02 reported a total of 162 human rights violation (HRV) cases resolved at the end of 2015, these involving cases from the year 2009 up to this period. Among the cases acted upon are violations against women, children, LGBT and grave threats from erring public servants.

On resolving land disputes especially concerning the marginalized sectors, the actual accomplishments from 2012 to 2015 show that further reinforcement of agrarian justice delivery remains a challenge. The number of land disputes resolved by the Department of Agrarian Reform Adjudication Board (DAR-AB) decreased overtime from 1,434 cases in 2012 to 1,092 in 2015. The target was attained only in 2013 with 26 more cases solved than its preceding year. According to DAR, this was possible due to the strict compliance of DAR-AB Rules and Procedures and the continuing

on-site hearing strategy of DAR. Through this, the agrarian courtrooms were placed in field offices so that issues concerning tenant-landowner relationship are immediately verified and settled.

Meanwhile, the constraints cited in the administration of justice particularly on the resolution of cases and rehabilitation of offenders include the following: a) most of the cases filed are adversarial in nature and require a long process involving issuance of summons, setting of hearings, and conduct of clarificatory hearings; b) lack of resources and manpower to speedily handle the cases filed for resolution; c) inadequate technical capacities of concerned agencies; d) need for enhancement of policies and processes within the judiciary; and e) need to enhance rehabilitation and correctional facilities and systems.

STRATEGIC FRAMEWORK

For the succeeding years, the swift and fair administration of justice will be focused on assuring equitable access of the regional

populace to justice as this concretely show the sincere efforts of the government to enhance the social fabric.

Targets

Over the plan period, the following targets will be monitored in terms of achieving a

fair and justice administration of justice:

Table 6.1 Plan Targets to Pursue a Swift and Fair Administration of Justice by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Number of complaints on Women, Children and LGBTI investigated	2016	56	368
Percentage of cases resolved in 15 working days (prescribed period) (%)	2016	80	92
Number of adjudication of agrarian cases resolved	2016	878	8,869

Source: CHR 02, DAR 02

Strategies

For 2017-2022, the region shall pursue swift and fair administration of justice for all. To achieve this outcome, priority strategies were identified to include reforms in the justice system, adherence to human rights, access to agrarian justice, and re-integration opportunities for offenders (see Figure 1).

Chapter Outcome: Effective and Efficient Governance Strengthened

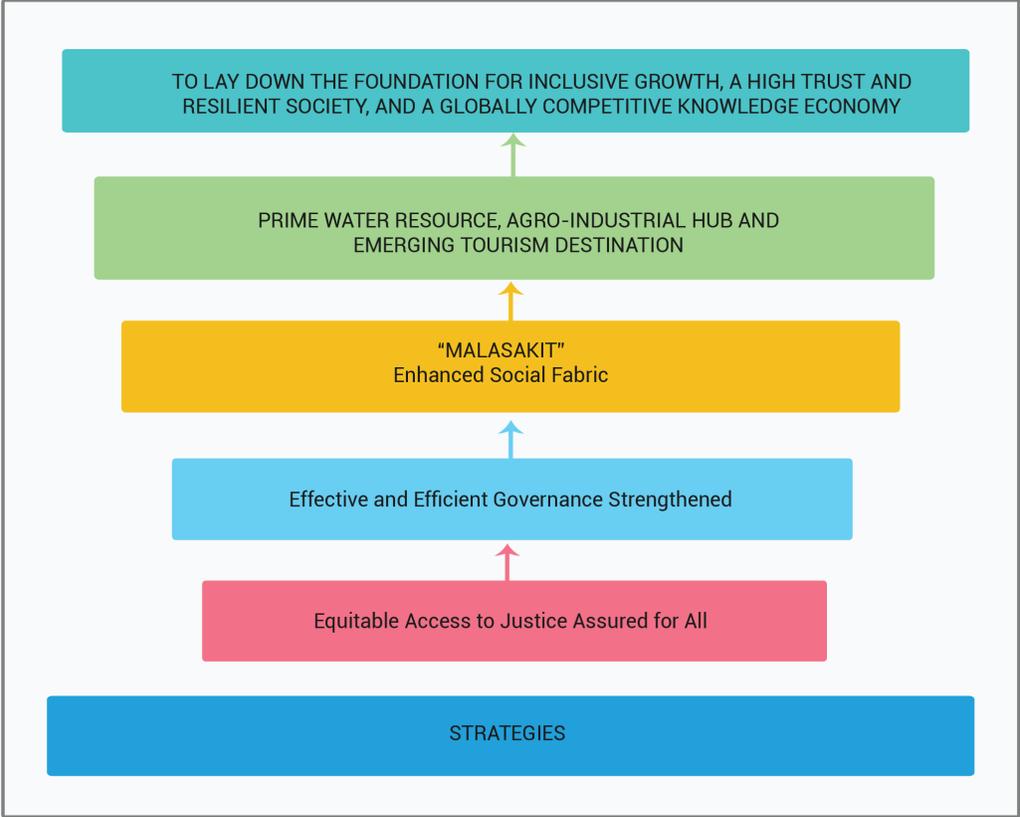
To further strengthen the effectiveness and efficiency of governance and bring back public trust at a higher level of confidence, the medium-term plan will focus on assuring equitable access to justice for and by the people.

Intermediate Outcome: Equitable Access to Justice Assured for All

Implement judicial reforms. Judicial rules and regulations either existing or new reforms will be implemented with greater commitment and political will. Recognizing that policies continue to evolve in consideration of the needs and situation in the community, the influence and leadership to champion these changes is essential. The implementation of judicial reforms then requires the following:

- Court administrations and concerned regulatory agencies must be motivated by the need to provide high quality justice and improve efficiency and effectiveness of the judiciary;

Figure 6.1 Strategic Framework to Pursue Swift and Fair Administration of Justice, Region 02



- Simplification of judicial proceedings, stricter case management and introduction of new technologies enabling modernization of the administration of justice, hence, improving access to justice, efficient managing/handling, and fast resolution of cases; and,
- Pro-active engagement and cooperation of all stakeholders in developing and implementing new procedures, processes and technologies within the judiciary. This will enable sensible and effective reforms resulting to timeliness and quality of justice delivery.

Ensure adherence of human rights to all. The protection of human rights is the assurance that all enjoy their fundamental

freedom. The implementation of the human-rights based approach in the SDGs will be translated at the local level, especially highlighting HRV cases against women and children. Strong institutional linkages of human rights and justice organizations will also be pursued in order to ensure that all are protected and ensured of their fundamental rights including protection from violations of public officials or armed and police force.

Reinforce agrarian justice delivery. Development of institutional frameworks and mechanisms will be prioritized to speed up adjudication of agrarian cases and settlement of agrarian conflicts. Capability enhancements within the concerned agencies will be undertaken to assure credibility and expeditious administration of justice relative to agrarian reform laws, policies and procedures.

Re-integration opportunities for offenders. This includes provision of rehabilitation, counseling and guidance to offenders i.e., children in conflict with the law, self-confessed drug users, and other inmates who aspire for change in their lives. These initiatives shall promote physical

well-being and social re-integration/ acceptance of offenders for them to engage in productive pursuits, educational and livelihood after their rehabilitation.

Legislative Agenda

The region is supportive of the following legislative actions identified in the PDP:

Table 6.2 Supported Legislative Agenda on Pursuing Swift and Fair Administration of Justice, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Codifying the Philippine Criminal Laws	Codify all penal laws, update the Revised Penal Code provisions in the process, and henceforth adopt a historical compilation-type of codification akin to the U.S. Federal Statutes compilation.
Streamlining the criminal investigation process	Guide law enforcers and prosecutors using standards presently set by laws and rules and that is probable cause for the commencement of a criminal action.
Creation of new courts	Restudy the distribution of courts under BP Blg. 129, the Judiciary Reorganization Act, in relation to the population per proposed court location, historical volume of filings, and the existing dockets of the courts in that particular location. Where necessary, the existing courts may be redistributed and new courts created as needed. It is also more practical to vest the Supreme Court with the power to assign and reassign judges to address inequalities in case distribution.
Creation of additional prosecutor and public attorney positions	Increase the number of public prosecutors and public attorneys (who are assigned to courts for trial duty) to coincide with the creation of new courts.
Amendment of Republic Act 9165 or "An Act Instituting the Comprehensive Dangerous Drugs Act of 2002"	Amend RA 9165, particularly its very strict rules for evidence to be considered admissible in court proceedings, and for the same to be given weight.
Review of the standard of proof in determining probable cause	Increase the threshold for the investigation phase to harmonize it with the steep threshold for the trial phase.
Restorative Justice Bill	Craft a clear policy which will be visibly identified by law, providing a humane process through which remorseful offenders accept responsibility for their misconduct, particularly to their victims and to the community.
Review and streamlining of land ownership laws and remedies available, in accordance with National Land Use Act and Indigenous Peoples' Rights Act with respect to jurisdiction of NCIP	Streamline the rules to impose the mandatory consolidation of causes of action relating to the same real property, whether for possession, ownership, and/or damages.
Amendments to the Anti-Rape Law of 1997 (RA 8353)	Amend the Anti-Rape Law, pursuant to the CEDAW recommendation to capitalize "lack of consent" on the part of the victim as an element of the crime, instead of the element of "just force, threat or intimidation."

LEGISLATIVE AGENDA	RATIONALE
Revisions on the Local Government Code	Increase the coverage of the Katarungan Pambarangay and to mandate the composition of the Lupon Tagapamayapa, revising Section 399 of the Local Government Code which only requires for membership that one be a resident of or have work in the barangay concerned; to include the accreditation of service by lawyers on the Lupon as legal aid; and to institutionalize the concept of inhibition due to relationship and interest.
Strengthening of the Victims Compensation Program	Amend its enabling law, RA 7309 to increase compensation for victims of unjust imprisonment or detention and victims of violent crimes as well as to increase access to the program and enhance its administration.
Establishment of the Commission on Human Rights (CHR) Charter	Strengthen the CHR as a National Human Rights Institution (NHRI), compliant to the requirements of the UN Paris Principles affecting NHRIs worldwide. Among the requirements are ensuring NHRI's independence, hence full fiscal autonomy is necessary.
Establishment of a Unified Penology System	Mandate the establishment of a unified penology system.
Strengthening of the witness protection and whistleblower protection	Strengthen the Witness Protection Program to encourage more witnesses to be covered and remain therein, towards successful prosecution especially for heinous and high profile crimes; and the Whistleblower Protection program to encourage and protect whistleblowers.
Addressing dependencies on LGU support through legislation/policy and the national budget	Augment the compensation packages of the affected officials, as indicated in the General Appropriations Act. The perception of dependence on LGU support, specifically through the receipt of allowances and other material assistance, creates a level of doubt, if not distrust, in the mind of the public. Meanwhile, it must be recognized that the present salary levels of our judicial and prosecutorial officials are wanting.

Source: Chapter 6 of the PDP 2017-2022

07 Promoting Philippine Culture and Values

Promoting Philippine Culture and Values

Sociologists defined culture as a way of being which consists of the beliefs, behaviors, objects, and other characteristics common to the members of a particular group or society. Cultural assets include cultural tourism which consists of Natural heritage (i.e. landforms, rural scenery, and flora and fauna); Intangible cultural heritage (i.e. festivals, arts/crafts, and traditional practices/products); and the Built heritage such as historic homes, monuments, churches and industrial sites.¹

Following the PDP 2017-2022 framework's pillar of "*Malasakit*", the CVRDP 2017-2022 will aggressively promote awareness of Philippine culture and values as it helps people recognize the different beliefs and traditions based on origins, not only in the region but also recognizing the beliefs from nearby regions and thus build a better relationship in a diverse environment. Cultural awareness gives a person a chance to easily adjust and adapt with other people.

Assessment and Challenges

The Cagayan Valley Region is rich in culture originating from the different provinces, cities and municipalities. Ibanag, Itawes and Ilocano (in varied intonations) and Malaweg are the common major dialects of Region 02, except for the province of Batanes (Ivatan). Migration made Ilocano the dominant language spoken in the region.

As recognition of the unique culture of each locality, each province and city celebrates festivals where all the cultural communities and tribes participate to show the beauty of their culture through street dancing and other cultural presentations.

The region is characterized by its close family ties such that majority of married couples with children are living with their parents. The value of bayanihan, sharing, brotherhood, respect, love, peace, and dignity, are still very much alive in Cagayan

Valley. Also, old songs, proverbs, and poems alongside the instruments produced by Ilokanos and Ibanags are still sung today². As observed, some indigenous practices such as use of natural herbs in curing and worship rituals are still being practiced in some areas in the region particularly in rural barangays. However, some of these customs and traditions are not being practiced by the present generation and not properly documented.

In recognition of the rights of the Indigenous Peoples (IPs) to cultural integrity, the Indigenous Peoples Rights Act (IPRA) or Republic Act 8371 was passed. This includes the protection of: indigenous culture, traditions and institutions; religious, cultural sites and ceremonies; indigenous sacred places; and indigenous knowledge systems and practices.

¹<http://www.cliffnotes.com>

²Estrella Suyu, PhD, Cagayan State University, Province of Cagayan website

The region recognizes the importance of indigenous knowledge for IP learners as programmed under the IP Education (IPEd) where indigenous knowledge, systems and practices (IKSPs) are accounted to. For 2015, the Department of Education (DepEd) extended Educational Assistance Program (EAP) to 739 IP grantees. The EAP was able to accommodate 29 IP learners in Elementary, 29 in Secondary and 681 in College, of which 65 finished tertiary education in March-April of 2015.

The IPEd Program also supports the realization of the K to 12 curriculums which is culture-sensitive and inclusive. For SY 2015-2016, the region had 181,238 IP learners under the IPEd from which about 84percent(152,787) were in elementary while the remaining 16 percent (28,451) were in the secondary level of education.

An assessment of the cultures and traditions in the region has not been conducted and this is constrained by the lack of a regional focal institution to take charge of the region's culture and arts. Data on ethnicity, cultural traditions and other non-material culture are limited as these are only generated by respective local government units through its tourism and museum offices. However, not all LGUs have established its permanent tourism and museum offices. Moreover, the region has limited cultural experts to conduct an assessment and research on culture and traditions.

Despite the unity in diversity in the region, and the passing of national laws and issuances to promote cultural integrity, conflicts take place and these hinder the full development and promotion of Philippine culture and values. The following are the challenges related to the region's diverse culture:

Legislation on cultural promotion and protection exists but implementation is weak. The government recognizes the

importance of culture in national and regional development as provided for under several legislations such as the RA 7356 (Law creating the National Commission for Culture and the Arts of 1992); RA 9470 (National Archives of the Philippines Act of 2007); RA 10086 (National Historical Commission of the Philippines Act); and RA 10066 (Cultural Heritage Law). Per Section 6 of RA 7356, the creation of artistic and cultural products shall be promoted and disseminated to the greatest number of people. While the provisions under each of these policies are very clear, there is a need for stronger and concrete actions on the promotion and protection of cultural heritage.

Moreover, while DepEd is already integrating cultural education in school curriculum particularly on education for indigenous peoples, appreciation is still inadequate. There is a need therefore to establish and develop an intensified cultural education programs at all levels of the educational system, public and private, to ensure meaningful arts integration across the school curriculum other than IP Education per IPEd curriculum Framework. Moreover, training for teachers to instill pride in Filipino culture is inadequate.

Absence of a regional counterpart of the National Commission for Culture and Arts (NCCA). The NCCA is constrained by lack of manpower in addressing concerns on culture across all sectors and all areas of the country. With the absence of a regional institution with expertise on culture and arts, there is no coordinating body at the regional level to push for cultural promotion and awareness. Furthermore, researches on regional culture and traditions as well as the sharing of research results have been limited. Likewise, there is no particular institution to establish a database to store comprehensive data and information and on local cultural heritage.

Thus, there is a need to lobby for the creation of a Department of Culture or an Institute for Cultural Heritage Conservation of the Philippines to address the increasing needs for equitable access to cultural education, cultural services, and safeguarding cultural resources at the local level.

Though Section 16 of RA 7356 provides for the establishment or coordination with local, provincial or regional government or non-government councils/groups to promote develop and implement programs and plans of the Commission, it is not a mandatory directive as stated in the law.

Insufficient resources and logistics for culture and arts promotion and protection. Implementation of applicable policies on culture and arts in the region is largely challenged by the lack or insufficient resources for cultural promotion and protection. The concerned agencies have limited resources including physical spaces to deliver public services according to their mandates.

Also, choice of cultural activities and the allocation of funding thereof depend on the priorities of the local officials. Moreover, changes in political administrations would often result to non-prioritization of cultural activities that have been earlier initiated.

With the limited resources, the region also lacks the award and incentive mechanisms to extend recognition of artistic achievement to artists and cultural groups which contribute

significantly to the Filipino's cultural inheritance. There is a need to recognize creative and artistic artworks of the people to inspire the imagination of future young artists in promoting local culture and innovation. Young artists use their creative thinking to come up with cultural artworks to communicate various social issues.

Lack of monitoring and evaluation mechanism for culture-related programs. The lack of a mechanism to monitor culture-related programs led to inability to account and assess the progress and impact of such activities. Monitoring and evaluation of culture-related activities should have also enabled concerned agencies to determine whether desired targets were met or if specific problems were addressed.

Climate change and natural disasters pose a risk to heritage sites. Heritage structures provide a sense of identity and belongingness while recognition of its value brings a sense of pride. A good example is the Batanes cultural heritage and eco-tourism zone.

However, these structures are vulnerable to the impact of climate change and natural disasters. Efforts and funding allotment to protect these cultural assets and heritage structures from disasters need to be set in place. But at times, priorities of the local officials are focused on other programs and projects over conservation and preservation of cultural resources.

Strategic Framework

Promoting Philippine values and culture means that by the end of 2022, the following subsector outcomes would have been achieved: (1) Inculcated “*Malasakit*” values for the common good; (2) Valued diverse cultures; and, (3) Strengthened

“*Pagkamalikhain*” values of creativity. Strategies that will drive the realization of these subsector outcomes will address the concerns on cultural diversity, thus government and non-government support and active participation through cultural

appreciation and promotion will be encouraged. These shall be supported by adequate resources, capacity building for government agencies on culture-sensitivity, and increased engagement with stakeholders' appreciation and promotion shall be encouraged. These shall be supported by adequate resources, capacity building for government agencies on culture-sensitivity, and increased engagement with stakeholders.

Targets

Core outcome and output indicators that will be monitored to ensure progress towards increasing the level of cultural awareness, inculcating values for the common good, cultivating creativity, and strengthening culture-sensitive governance and development are presented in Table below.

Table 7.1 Plan Targets to Promote Philippine Culture and Values by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Sector Outcome: Deepened appreciation of Filipino Values			
Increased number of awareness campaign programs (recognized SPED Center) on the rights of indigenous peoples, SPED	2016	20	71
Proportion of over-all Training Feedback Rating (inclusive of values training/orientation)	2016	93% at least VS with at least 40% Excellent	93% at least VS with at least 40% Excellent
Sector Outcome: Strengthened culture-based regional development			
Increased number of visitors in local museums	2016	225,621	293,307 (5% increase annually)
Cultural centers established	-	-	1
Increased number of local ordinances that promote cultural tourism	-	-	16
Orientation/formulation of LGUs local tourism development plan - RA 9593/NTDP	2016	1	12
Increased percentage of LGUs with IPMRs (Indigenous Peoples Mandatory Representation)			TBD
Number of trainings conducted for enhancement of festivals, customs and traditions	2016	2	12
Increased number of continuing education programs for artists/cultural workers	2016	1	11

Source: DOT 02, DepEd 02, PLGUs

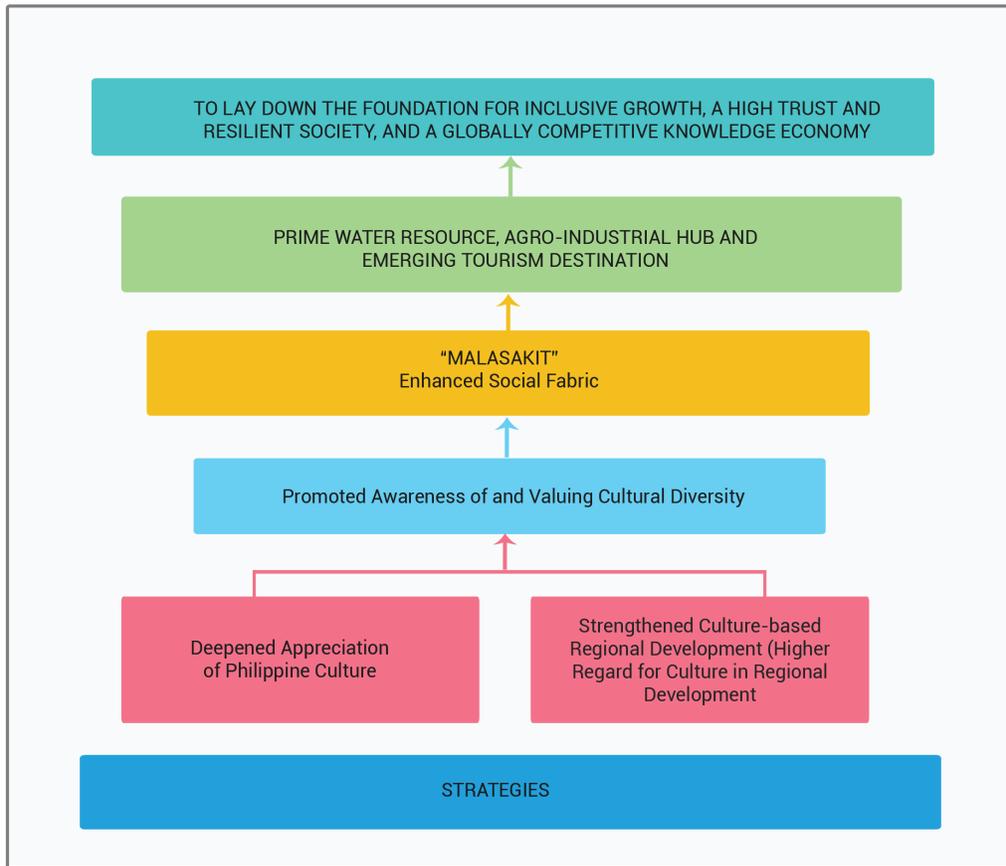
Strategies

The strategies to achieve the targets on promoting Philippine culture and values for 2017-2022 are the following:

Intermediate Outcome 1: Deepened appreciation of Philippine Culture

Inculcate “Malasakit” values for the common good. The value of bayanihan, sharing, cooperation, brotherhood, respect, love, peace, and dignity, are still very much alive in Cagayan Valley. Also, old songs, proverbs, and poems alongside the

Figure 7.1 Strategic Framework to Promote Philippine Culture and Values, Region 02



instruments produced by Ilokanos and Ibanags are still sung today. However, these have not been very popular with the present generation due to their preferences as influenced by media, and greater exposure to foreign lifestyles.

Inculcating the “*Malasakit*” values would therefore help shift the mindset of the people in promoting culture thereby renewing cultural values and eliminating cultural discrimination. Various means (i.e. educational system, mass media, etc.) will be strengthened to achieve cultural oneness and respect.

Sub-strategies

- Establishment of regional institution in charge of culture and arts
- Strict enforcement of cultural laws

promotion and protection. Cultural promotion and protection need to be documented to enrich Filipino culture. Thus, a regional institution in charge of culture and arts promotion and protection in collaboration with all cultural agencies such as the National Commission on Indigenous Peoples (NCIP), Department of Interior and Local Government (DILG), DepEd, Local Government Units and other concerned stakeholders will be established. The regional institution will be tapped to conduct an assessment on cultures and traditions particularly on ethnicity, cultural traditions and other non-material culture in the region.

such as the National Cultural Heritage Act, IPRA law. To further strengthen the protection and effective promotion of culture and arts in the region, stiffer implementation and enforcement of national and local laws such as the National Cultural Heritage Act, IPRA Law and other related policies and plans, will be pursued.

- Promotion of IP educational interventions. IP educational interventions will be supported and promoted to alleviate and improve the life of the IP in the region with dignity and decency. The region will support the national initiative on increasing the Scholarship Fund in the General Appropriations Act (GAA) and/or the allocating funds from other financial sources.
- Development and promotion of culture of eco-tourism. Cultural heritage resources consist of tangible and intangible assets which speak of important past and present human activities that maintain cultural identity and life ways. There were limited eco-tourism developments made in the region due to fear of environmental threats to the preservation of natural resources; and due to limited funds to further improve existing eco-tourism sites. Development and promotion of culture of eco-tourism in the region will be both a conservation strategy and an economic development option through viable partnership with concerned tourism and cultural agencies.

Intermediate Outcome 2: Strengthened culture-based regional development

Value diverse cultures. The Cagayan Valley Region is rich in diverse culture from the different provinces of Batanes, Cagayan,

Isabela, Nueva Vizcaya and Quirino and four cities – Cauayan, Ilagan, Santiago and Tuguegarao, where most of the indigenous peoples are present. The region is composed of several ethnic groups that speak several dialects. However, majority of the population speak Ilocano, Tagalog and Itawes, the rest speak other dialects such as Ibanag, Yogad, and even Bisaya, and others. Based on NCIP, a total of 12 CADTs was approved out of the 55 Ancestral Domains (AD) in Region 02 with a total area of 1.03 Million hectares or 67.37 percent of the total land area of the 55 ADs. These tribes are Agta, Kalanguya, Bugkalot, Ikalahan, Iwak, Ibaloi and Ilongo, and these have its own culture that need to be recognized, protected and promoted.

To ensure preservation of cultural values and heritage, there is a need to establish a database to store information on cultural statistics and comprehensive data on local cultural heritage. Cultural promotion and protection need to be documented to enrich Filipino culture.

Sub-strategies

- Utilize various channels of values inculcation to reach all community members. Families, local communities, civil organizations, workplaces, formal and informal education systems, and media platforms will be tapped to ultimately inculcate the core values in the general population.
- Increase government efforts for promotion of values that foster the common good. To reach the population, learning materials will be developed in order to raise awareness about our culture and values. Various agencies will collaborate to disseminate these information materials to their respective stakeholders. Projects, activities, and programs that promote these Filipino values will also be

created, implemented, integrated, and reviewed across all levels of government.

- Mainstream cultural education in the basic, technical, vocational, and higher education systems. Promotion of the Philippine culture and values can take advantage of the reform of the basic education system through the K to 12 Curriculum.
- Development of Knowledge Centers. Knowledge Centers will be established to document, conserve, and protect tangible and intangible cultural heritage for posterity, as well as to enrich the people's knowledge on, and sense of ownership of, various elements of Philippine culture and values. The establishment of School of living traditions will also be promoted and supported.
- Strengthen the protection of the rights of vulnerable sectors (i.e., IPs, women, youth and children, and PWDs) of society to access cultural resources and live a life free from discrimination and fear. Citizens must appreciate the principles behind cultural protection and become proactive defenders of culture themselves.
- Assessment of status of cultural properties. This will be undertaken in order to determine the needed interventions to ensure that the region's cultural assets are protected from natural disasters, pilferage, vandalism or natural decay.
- Cultural exchanges will be encouraged. There is a need for the general population to increase their level of understanding about other cultures by interacting with people outside of their own culture. Thus, Local culture studies in formal, non-formal

education for all will be strengthened.

- School of living traditions shall be established.
- Gender mainstreaming in culture promotion and protection interventions. The region will also endeavor to mainstream gender concerns in the promotion of culture and values starting from program/project/activity planning to implementation, monitoring and evaluation.

Strengthen Values of Creativity (“Pagkamalikhain”).

Filipinos are artistic and creative in nature as evidenced by the presence of art galleries showcasing the works of local painters, sculptures and folk artists in some parts of the country. However, these are not promoted extensively by the Philippine government due to limited resources. Local or native artwork is very important as it contributes to defining the identity of the locality. The “Pagkamalikhain” of the Filipino is acknowledged but not fully developed culturally due to limited exposure and cultural exchanges and low level of understanding about the importance of preserving Filipino culture.

Sub-strategies

- Build appreciation of Filipino creativity. The agents of creativity will be empowered and supported by an institution that would encourage the production of creative works, invest in human development of its stakeholders, support their products, and develop the industry in order to realize the potentials of the creative process.
- Establishment of historic and cultural center in the region. This will help in showcasing the best in the region in

terms of its history, arts and cultural tourism which can contribute to economic growth.

- Development of IP instructional materials. The IPEd Framework will be supported in developing instructional materials as these are vital to students' development. These materials shall be utilized in line with the indigenized curriculum content and teaching-learning processes to consider artifacts, stories, dances, songs, musical instruments and the like, and ensure that these are representative of the various cultural groups within the local community and the society in general.
- Integration of more IKSPs during learning sessions making sure that the concepts being used to relate to the topic are appropriate while taking into consideration the different methods, strategies and learning competencies.
- Recognize creative and artistic artworks. This will inspire people to transform as future young artists and be advocates in promoting local culture and innovation. Young artists use their creative thinking to come up with cultural artworks to communicate various social issues.

Legislative Agenda

Table 7.2 Supported Legislative Agenda on Promoting Philippine Culture and Values 2017-2022

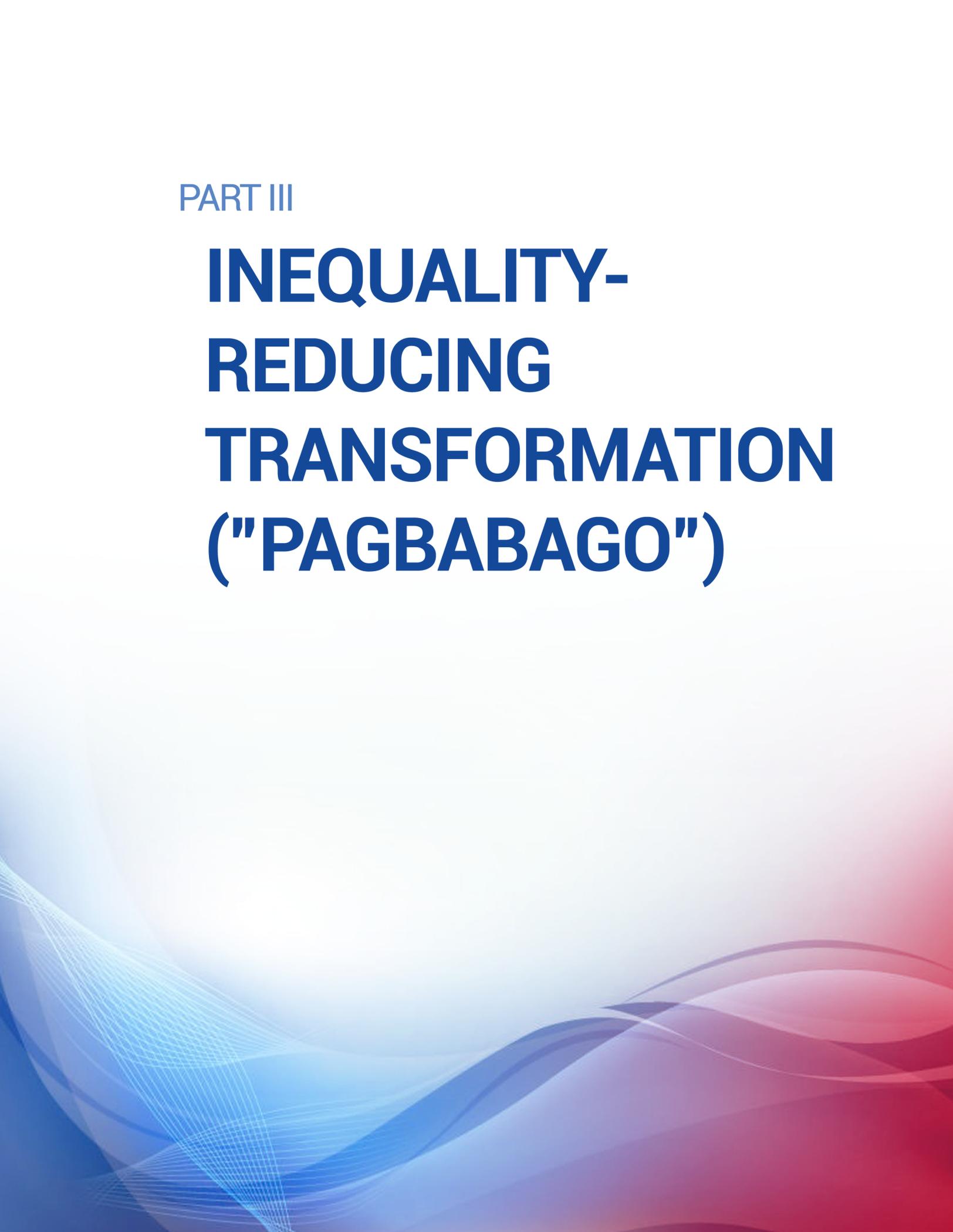
LEGISLATIVE AGENDA	RATIONALE
Modernization Act for National Library of the Philippines	Establish the charter of the National Library of the Philippines to promote full intellectual and cultural development of the Filipino. It will also standardize public libraries and ensure their funding.
National Museum of the Philippines Act	Strengthen the National Museum.
UNESCO Declaration on Cultural Diversity	Ratify the declaration.
Commemoration of the Indigenous Peoples' Rights Act	Declare a national, non-working holiday for the recognition and promotion of the rights of indigenous peoples.
Strengthening the Conservation and Protection of the National Cultural Heritage	Amendment to Heritage Law (RA 10066). Update provisions on jurisdictions.
An Act providing for the welfare protection of Artists and Cultural Workers	Protect and promote the rights of artists and cultural workers (i.e. Conservationists, to be considered as a person actually engaged in cultural work and to benefit from all legal, social and economic advantages pertaining to the status of workers).
Establishment of the Department of Culture	Reorganize the National Commission on Culture and the Arts Into the Department of Culture and the Arts, Define its Power and Functions.
Establishment of Kawanihan ng Pagsasalín/ Bureau of Translation	Establish an institutional mechanism for accreditation and professionalization of translators in Filipino and other Philippine languages.

LEGISLATIVE AGENDA	RATIONALE
Establishment of Local Culture and Arts Councils and Allocate Funding similar to the Gender and Development (GAD) Fund or Special Education Fund	Establish offices for culture and arts in LGUs, with a mandate to protect and promote local cultural heritage and arts.
Establishment of an Institute for Cultural Heritage Conservation of the Philippines	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.
Public Art to Infrastructure	Allocate a certain percentage of the budget for any building to public art as part of infrastructure. An example is the provision of space for art installations in infrastructure projects.

Source: Chapter 7 of the PDP 2017-2022

PART III

**INEQUALITY-
REDUCING
TRANSFORMATION
("PAGBABAGO")**

The background of the slide features abstract, flowing lines in shades of blue and red. The lines are layered and semi-transparent, creating a sense of movement and depth. The colors transition from a light blue at the top to a deep red at the bottom, with the wavy lines following this gradient.

08

Expanding Economic
Opportunities in
Agriculture, Forestry,
and Fisheries

Expanding Economic Opportunities in Agriculture, Forestry and Fisheries

The Cagayan Valley region is greatly dependent on the agriculture sector considering that it provides employment opportunities to more than half of the region's labor force. The sector is also the major provider of raw materials to the other productive sectors of the economy, requiring the strengthening of existing efforts to improve growth within the sector and thus provide the opportunity to expand and increase access to economic opportunities in other production sectors. This will eventually contribute to poverty reduction especially among small farmers and fisherfolks.

Assessment and Challenges

More than 50 percent of the employed in the region is engaged in agriculture. It's interesting to note that majority of the employed are engaged in the primary sector which is agriculture (55%), while the rest are in services and industry sectors. This calls for a need to further develop and improve the sector given the region's high dependence on it in terms of livelihood and domestic production.

Specifically, the Agriculture, Hunting, Forestry and Fishery (AHFF) sector had a share of about 38 percent of the total GRDP or valued at an average of PhP48.287B per year (at 2000 constant prices from 2013-2015). It is still the sector where many employed population are engaged in and the sector where most poor population depends on for their livelihood. Agriculture is seen to be biased towards employing males as the proportion of males to females is at about 90 percent of the total employed in the sector.

The Sector's erratic performance from 2013 to 2015 was highly influenced by extreme weather events and El Niño. During the past three years, the agriculture sector showed an erratic growth performance yielding to the sector's underperformance particularly in 2013 at only 0.8 percent growth (vs. 4.9% target) and a negative 0.4 percent (vs. 5.2% target) in 2015. It was only in 2014 where the target growth of 5.1 percent was reached. Similarly, the sector's contribution to the GRDP growths in 2013 and 2015 suffered with only 0.3 percentage point (pp) and a negative 0.2 pp contribution, respectively. In 2014, on the other hand, the sector contributed a high of 2.0 pp to the GRDP growth.

The non-attainment of annual growth targets of the sector was due to the effects of weather disturbances and climatic condition to the production performances of the crops, livestock and poultry, and

fishery sub-sectors. In 2013 and 2014, the sector was challenged by the occurrence of Typhoons Labuyo, Odette and Vinta in 2013; Typhoons Egay, Lando, Ineng and Nona in 2015; and the adverse effects of El Niño which started in the 2nd semester of 2015.

The modest expansion in the gross value added coupled by the increased number of employed persons dependent on the sector translated to its unstable labor productivity growth of 0.5 percent in 2013; 10.4 percent in 2014; and negative 1.0 percent in 2015.

Crops sub-sector fell short of its targets.

From 2013 to 2015, production and yield performance of most crops was slightly short in attaining its target levels. For palay, accomplishments in production and yield in 2013 and 2015 were slightly below target. The annual average increase in the production of palay was 1.04 percent while yield grew at 0.80 percent. Likewise, targets for corn on the same indicators were not attained. The annual average growth in the production of corn was negative 1.31 percent while yield diminished by 0.81 percent. In spite of the loss, the region was able to sustain its rank as a major producer of corn (1st rank) in the country and even near to becoming a world class corn producer for food, feeds and for industrial uses. For palay, the region also maintained its being the 2nd top producing region in the country.

On the other hand, targets for other crops were generally attained during the three-year period. For the major fruit crops - banana, pineapple and mango, accomplishment rates for the volume of production were more than 100 percent while the yield targets particularly in 2015 were slightly not achieved. Similarly, vegetable crops in general, reached their production targets but not in terms of their yield or average production per hectare. For the major non-food and industrial commercial (NFIC)

crops, almost all fell short of the target production and yield especially coffee and cacao.

Livestock and poultry sub-sector performed positively.

Targets on the volume of production for livestock and poultry were generally 100 percent accomplished. Swine and chicken, which largely represent the livestock and poultry subsector as they comprise about 80 percent of the total output, performed relatively well from 2013 to 2015. Production of hog and poultry increased at an annual average of 0.18 percent and 4.7 percent, respectively, over the three-year period.

The performance of the sub-sector can be ascribed to more and bigger sizes of slaughtered animals as a result of improved feeding, favorable weather condition, increasing demand; and the opening of new and the rehabilitation of existing broiler farms in Isabela.

Aside from swine and chicken, focus was also directed to the development of small and large ruminants where among the priority interventions include the adoption of appropriate technologies for production, product development, improved support services, market access and infrastructural development to stimulate productivity.

Declining production under the fisheries sub-sector.

Equally vulnerable to the weather condition is the fisheries sector. From 2013 to 2015, the weather condition was generally unfavorable to fisheries as production continued to decline over the years. Consequently, production targets were not achieved as the annual average recorded growth in production was at negative 2.06 percent. All sub-sectors – commercial, municipal and aquaculture fisheries decreased their yearly production by an average of 3.74 percent, 0.20 percent and 4.06 percent, respectively over the

three-year period.

The region's relatively unattractive performance in the fisheries sub-sector is generally due to the unfavorable weather condition affecting the hatchery and nursery operations, fluctuating cost of fuel and lack of investors.

Land tenure services remain deficient. Lands distributed under the Land Acquisition and Distribution (LAD) component of the Comprehensive Agrarian Reform Program (CARP) totaled to 10,421.58 hectares from 2013 to 2015, leaving a balance of 44,707.63 hectares for distribution to potential Agrarian Reform Beneficiaries (ARBs). The remaining balance composed of smaller CARPABLE private agricultural landholdings (PAL) is generally categorized as problematic or contentious landholdings.

For the non-land transfer component, the accomplishment on Leasehold Contract Execution was 200 percent, which was more than the target of 204 hectares during the past three years. On the other hand, accomplishment rate achieved during the same period for the re-documentation of Collective Certificate of Landownership Award (CLOA) was only at 31.57 percent (4836.58 hectares vs. target of 15,318 hectares) largely because some ARBs chose to maintain collective ownership. However, other ARBs are no longer actually tilling the land and thus, require for re-screening of other potential ARBs and re-documentation of the respective claim folders before award of individual CLOAs.

The sector faces perennial challenges hindering its sustained and rapid growth. Most of these challenges relate to the sector's linkage to industry and services sectors, productivity and food security, competitiveness, climate change and disaster risks, and institutional linkages. These contribute to the vulnerability of the

people especially women who are dependent on the sector, to wit:

Weak linkage between agriculture and industry and services sectors. Despite the region's big potential to produce raw materials, this has not been optimized due to weak forward linkage to the other sectors of the economy that can put higher value to the agricultural products and services. The lack of investors for processing industries (i.e., food processing, feed mills) hindered the transformation of the raw agricultural, fishery and forestry products. Investors are often discouraged to invest due to high cost of doing business especially with insufficient infrastructures and utilities which are necessary in business operations.

Low productivity. The slow growth in the region's agriculture sector has been greatly affected by the low productivity performance of most agricultural commodities. The low productivity of farmers and fisherfolks is caused by the interplay of several factors such as farmers' lack of capital and low access to easy credit and financial packages, insufficient government subsidy for crop insurance, insufficient infrastructure support (poor transportation/logistics system), and low adoption of technologies including farm mechanization especially for marginal/fragmented landholdings, among others.

Uncompetitive agricultural and fishery products. While the region has been producing surpluses in some agricultural commodities, it has not been able to compete well in the market due to relatively low quality of produce. The high cost of inputs/production cost, inadequate infrastructure support (e.g., transport system and pre- and post-harvest facilities, etc.), and poor handling and packaging of products contributed to the low quality of tradable products in the domestic and international markets.

Delays in land acquisition and distribution under CARP. Land is a major input in farm production and it significantly affects productivity. In the region, processing of land titles under the CARP experienced delays as landowners tend to avoid or delay the submission of the documentary requirements. Likewise, the processing time is highly dependent on the pace of other partner agencies such as DENR on survey concerns; Agrarian Operations Center (AOC-LBP) in the conduct of Field Investigation; and Land Valuation and Registry of Deeds/Land Registration Authority (ROD/LRA) on CLOA registration.

Illegal and premature land conversion. Land conversion into residential, industrial, institutional and other non - agricultural purposes has been evident, threatening food security especially with population continuously growing. The formulation of the Comprehensive Land Use Plan (CLUP) and Zoning Ordinance which serves as the long-term guide for the physical development of the local area, the framework for the management and co-management of the local territory, have not been done by several LGUs (see Chapter 20).

Illegal fishing/poaching and high cost of inputs for aquaculture. The weak fisheries subsector performance in the region is attributed to illegal fishing/poaching (see Chapter 18) and the high cost of inputs (i.e.,

fuel and feeds) particularly for aquaculture industry.

High vulnerability to the negative impacts of climate change and agro-climatic disasters. Apparently, the vulnerability of the agriculture sector to climate variability and natural disasters has become a perennial contributor to the overall underperformance of the sector. The region being located at the “Typhoon Belt” and its being mostly mountainous and low plains, pose a high risk during the occurrence of typhoons and other disasters. Many areas in the region are frequently submerged with floodwaters, which severely affect agricultural areas causing huge losses in the sector and subsequently, in the lives of many farmers and fisherfolks.

Weak convergence of institutions and extension services. Different agencies implement their own mandate and in the process, overlapping and fragmentation of functions happen causing inefficient delivery of services and unsustainable project outputs. Lack of coordination and cooperation also cause delays that hamper implementation and attainment of desired objectives of the agricultural programs and projects leaving the farmers and fisherfolks incapacitated/ unempowered. Likewise, the limited human resources and funds in the local government units have resulted to the slow diffusion of agricultural technologies and extension of other services to farmers and beneficiaries.

Strategic Framework

For the region’s agriculture sector to be able to contribute to the reduction of inequality in economic opportunities in the next six years, the desired outcomes shall focus on: a) expanding economic opportunities of those who are currently

engaged in producing Agri-Forestry and Fishery (AFF) products; and b) increasing access to economic opportunities by small farmers and fisherfolks who are typically subsistence producers and have limited market participation.

Targets

Table 8.1 presents the key indicators to monitor the desired outcome for the sector. At the end of this planning period, the sector aims to achieve a growth of 4.5 to 5.5 percent by intensifying efforts to

improve productivity of major crops and production in the livestock and poultry and fisheries sub-sectors. Likewise, access of small farmers and fisherfolks to economic opportunities will also be facilitated through technology, value-chain, financing, and land/water resources.

Table 8.1 Plan Targets to Expand Economic Opportunities in Agriculture, Forestry and Fisheries by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Sector Outcome A: Economic opportunities in AFF expanded			
Growth of GVA in AFF increased (year-on-year at 2000 prices, in %)	2015	(0.4)	4.5-5.5
Yield of major commodities increased/sustained (in Mt/ha)			
- Palay	2016	4.19	4.79
- Corn	2016	4.05	5.13
- Banana*	2015	14.58	18.0
- Coffee*	2015	0.26	0.52
- Cacao*	2014	0.14	0.35
Volume of animal population increased (no. of heads)			
- Sheep	2016	9,864	34,157
- Goat	2016	115,533	121,914
- Cattle	2016	184,173	194,345
Volume of production increased (in '000 Mt)			
- Hog	2015	68.85	71.5
- Chicken	2015	59.32	60.43
- Tilapia	2015	13.04	14.22
- Seaweeds	2015	0.266	0.366
- Oyster	2015	0.634	0.951
Postharvest losses of key agricultural commodities reduced			
- Rice	2016	4.26	5.00
- Corn	2016	2.00	2.13
Sector Outcome B: Access to economic opportunities by small farmers and fisherfolk increased			
Growth in labor productivity of farmers and fisherfolk increased (in 2000 prices, in %)	2015	(1.0)	Increasing
Adoption rate of new technologies by small farmers increased (in %)	2015	18	60
Agricultural loan amount provided by DBP increased (in Million Php)	2016	3.5	8.36
Share of small farmers and fisherfolk with agricultural insurance to total number of farmers and fisherfolk increased (in %)	2016	3.2	30.8
Distributed lands under CARP increased (in hectares)	2016	1,070	7,536

Notes: *yield is per tree in kilograms

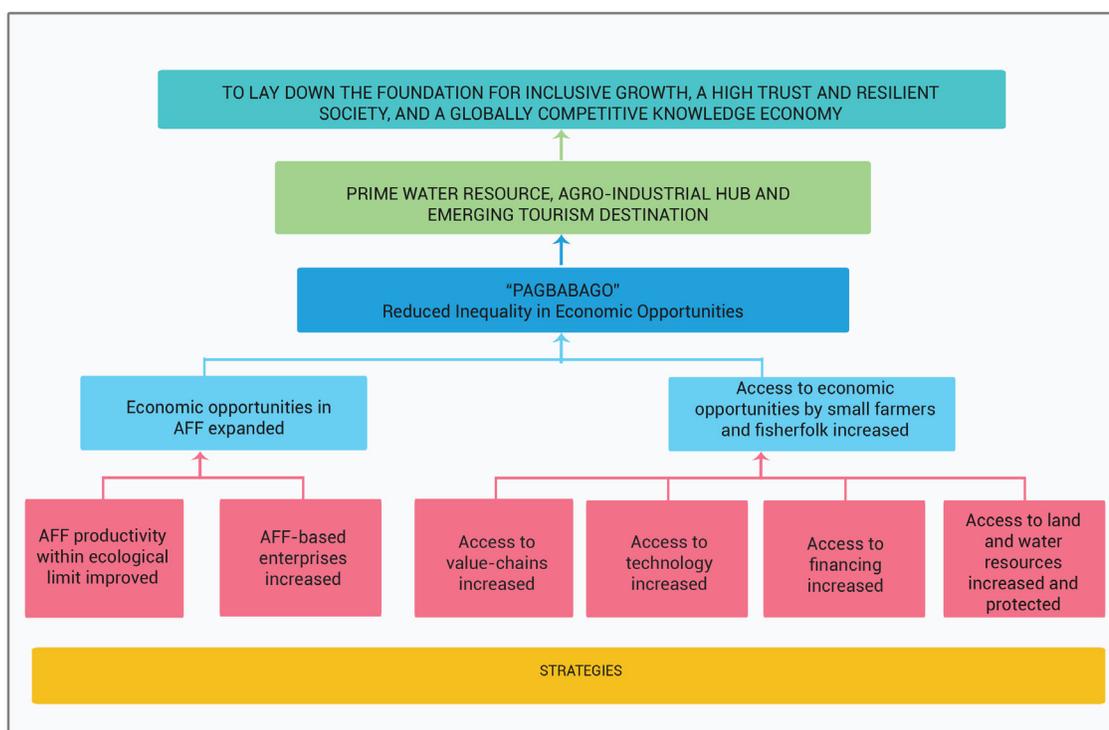
Source: PSA 02, DA-RFO2, BFAR 02, DBP

Strategies

Figure 8.1 presents the framework to achieve the desired outcomes for the agriculture

sector in order to reduce inequality in economic opportunities. Several strategies are identified so that set targets will be realized.

Figure 8.1 Strategic Framework to Expand Economic Opportunities in Agriculture, Forestry and Fisheries, Region 02



Chapter Outcome A: Economic opportunities in AFF expanded

In order that economic opportunities for existing AFF producers will be expanded, interventions towards productivity must be improved within ecological limit; and the number and capacity of AFF-based enterprises must increase aiming for a higher value of products.

Intermediate Outcome 1: AFF productivity within ecological limit improved

Strengthen AFF extension services. This will be undertaken by promoting

and providing modern, high-yielding and climate-resilient seeds and planting materials, fingerlings/fry, brood stock, animals and other similar interventions to farmers, fisherfolk and other beneficiaries engaged in agriculture and fishery activities in partnership with the LGUs, private sector, community organizations and other stakeholders.

Provide rural infrastructures that are disaster and climate-resilient. This shall include roads, bridges, tramlines, irrigation systems/facilities and other related facilities. Productivity in areas deemed too small to be served by the National Irrigation Administration (NIA) will also

be provided with supplemental irrigation for rice, corn and other high-value crops through construction, installation, and rehabilitation of small-scale irrigation project/systems and alternative irrigation systems. Sustainable approaches such as integrated water resources management (IWRM) will be practiced.

There is also a need to expand and enhance farm-to-market roads connecting major road arteries to the agricultural production areas including coastal landing points and postharvest facilities where farm and fish produce are being mobilized and transported by farmers and fisherfolks to the market.

Promote utilization of modern farm and fishing technology, machinery and equipment. Government will encourage the use of modern farm and fishing machinery and equipment to lower production costs and improve production and productivity levels and helps reduce losses especially during unfavorable weather conditions. The use of locally-designed technology that have been appropriately tested for commercial use shall be encouraged to ensure suitability to local conditions and at the same time encourage local inventors to further innovate and improve their craft.

Increase investments in research and development (R&D) and intensify application of mature technologies. Continuous research and development of new technologies will strengthen the capacity of the sector to adapt to new trends and challenges for the sector. The continuum from basic and applied research being done by the research institutions, SUCs, and few private entities to technology dissemination/commercialization and adoption is bridged through the intensified conduct of mid-stream and downstream R&D projects to include localizing or adapting technologies up to the farmer

level. On the other hand, the adoption and localization of technologies is mainly the responsibility of the research unit of the DA RFO collaborating with LGUs, local SUCs, private sector farmer intermediaries, farmers' groups and individual farmers which should be actively performing to improve productivity and resiliency.

Ensure consumers safety. Consumer safety will be safeguarded through the formulation and enforcement of agriculture and fishery-related standards and regulations. This will also in a way promote the competitiveness of agriculture and fisheries products both in the domestic and external markets.

Intermediate Outcome 2 : AFF-based enterprises increased

Create new markets and develop new products. This will include products that are of high value and high demand in both domestic and international markets. Provision or facilitation of activities and services that support or promote the entry, sale, and consumption of agricultural and fishery products and by-products in domestic and international markets will be prioritized. This can be done by creating a cohesive and easier access to necessary agricultural marketing information (e.g. price, volumes, supply, demand, buyers, etc.); reinforcing the creation of value-adding activities to agricultural products in every level of the supply chain to eliminate unnecessary intermediaries and make marketing channels more efficient; facilitating accessible, efficient and well-organized marketing of agricultural products, thru a state of the art trading centers; and establishing local and global networking activities through the conduct of and participation to local and international agribusiness enterprise-related activities.

Intensify capacity building and business advisory services. Target beneficiaries

will include agrarian reform beneficiary organizations (ARBOs), cooperatives, community organizations and associations that operate or intend to engage in agri-enterprises. These farmers/fisherfolk groups will serve as the conduit of growth and thus should be provided and equipped with the necessary competencies.

Strengthen linkage with agro-processing industry. Engagement of farmer/fisherfolk beneficiaries in other income-generating modes such as contract farming, agri-tourism, and other forms of entrepreneurial activities will be promoted. Appropriate forms of assistance will be provided by government to include capacity building, product development, market linkaging, financial support, among others.

Chapter Outcome B: Access to economic opportunities by small farmers and fisherfolk increased

For the second desired sector outcome on increasing access to economic opportunities by small farmers and fisherfolks, intermediate outcomes shall focus on increasing access to value-chains, technology and financing while ensuring the protection of rights.

Intermediate Outcome 1: Access to value-chains increased

Provide and improve connectivity of production areas to economic centers. This will involve the provision of adequate transport support infrastructure such as roads, bridges, tramlines and necessary transport facilities.

Capacitate farmers and fisherfolk on value-adding activities. Those engaged in agriculture and fishery will be provided the opportunity to sell agricultural produce for a higher price. Diversification of production

and livelihood options will also be introduced to increase sources of income.

Provide support to affected rice farmers. Given the expected lifting of the quantitative restriction (QR) on rice in June 2017, affected farmers will be provided with safeguards to mitigate the possible negative effects of such lifting of restrictions on the importation of rice. While consumers will generally benefit from free trade, the local rice farmers with less competitive produce will be most affected since they need to increase efficiency in production to command a competitive price.

Intermediate Outcome 2: Access to technology increased

Encourage adoption of climate-responsive technologies, innovations and standards.

Among the interventions to be undertaken include intensive and consistent information dissemination and actual demonstrations in the communities of climate-responsive technologies. Likewise, training activities will cover a wide range of topics along the value chain such as production and post-production technologies, irrigation management, product standards, good agricultural practices (GAP), good aquaculture practices, good manufacturing and hazard analysis critical control point (HACCP). Other topics or subject matters that appropriately respond to the needs of the target clientele or a specific target area including strengthening capacity in climate change resilience and disaster risk management will also be essential.

Enhancing extension services is also vital in accelerating the adoption of new technologies, and provides an effective venue for farmers to learn new practices and encourage them to innovate to boost production, increase productivity and income.

Provide postharvest and storage facilities, machineries and equipment. Facilities for drying/cooling, processing, cleaning, sorting, packing such as warehouses, cold storage, and feed mills will be provided. This will help reduce losses/improve efficiency, maintain quality, ensure safety, and lead to climate-resilient agricultural production.

Intermediate 3: Access to financing increased

Increase availment by farmers and fisherfolk of agricultural insurance. This will be done by improving the awareness and appreciation of small farmers and fisherfolk on risk insurance. Innovative agricultural insurance schemes such as weather index-based and area-based yield index insurance will be promoted. The coverage of insurance guarantees will include crops, fishery, agricultural facilities, among others.

Improve access to affordable and easy credit. Farmers/fisherfolks will be empowered in managing their own farm production. This will also avoid farmers'/fisherfolks' dependence on traders who finance their production inputs and in

return buy their harvest at their set price. Information dissemination on available loan products will be intensified to educate farmers and fisherfolks on available and affordable financing schemes and on how to manage loan repayment.

Intermediate Outcome 4: Access to land and water resources increased and protected

Fast-track LAD completion to improve productivity and income of farmers. Agencies involved in the process will strengthen coordination and cooperation to facilitate awarding of land titles.

Crosscutting Strategies

1. Strengthen coordination among implementing agencies, LGUs, private sector and other stakeholders involved in the development of the sector; and
2. Update and improve database of farmers and fisherfolks to ensure accurate targeting in agriculture programs and projects.

Legislative Agenda

The region is supportive to the priority legislative agenda identified in the same chapter of the Philippine Development Plan (PDP). The list and description of legislative

agenda, which are in support to the desired growth of the agriculture sector, in general is presented below:

Table 8.2 Supported Legislative Agenda on Expanding Economic Opportunities in Agriculture, Forestry and Fisheries, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Abolish the irrigation service fees for small farmers	Waive the irrigation service fees to small farmers as many of them cannot afford to pay the fee imposed by the National Irrigation Administration on its national irrigation system. A minimal fee may be imposed on pump-driven irrigation systems as they have higher operating expenses. Wholesale condonation of past-due irrigation service fees of farmers and corporations with large landholdings (e.g., those owning 5 ha) may have to be restructured under mutually agreed terms and conditions so as not to additionally burden them, but at the same time be fair to those who regularly paid the required fees.
Comprehensive Forestry Law, and Delineation of the Specific Forest Limits	See Chapter 20
Amend the Revised Charter of the PCIC Act of 1995 or RA 8175 as well as other relevant laws	Reorganize the Philippine Crop Insurance Corporation (PCIC) and increase its authorized PHP2 billion capital stock to cater more effectively to the demands of small farmers and fisherfolk.
Amend or repeal Presidential Decree No. 4 of 1972 as well as other relevant laws	Decouple the regulatory and proprietary function of the National Food Authority (NFA). The NFA will continue to exist but its role will focus on rice buffer stocking for food security
Amend the Agricultural Tariffication Act of 1996 or RA 8178	Replace quantitative restrictions on rice with tariffs. The tariff proceeds from rice imports will be ploughed back to the rice sector.s.
Provide guidelines for the utilization of the Coco Levy Fund.	Consolidate all assets and benefits emanating from the coconut levy. Create a Coconut Farmers and Industry Trust Fund to exclusively benefit coconut farmers and farm workers.
Pass the National Land Use Act (NALUA)	Protect prime agricultural lands, thereby ensuring the viability and sustainability of on-farm employment and overall rural development. The definition of prime agricultural lands in the NALUA should represent a socially-acceptable minimum agricultural land requirement that will maintain a certain level of agricultural industry in a given economic or spatial context at a given point in time.
Land Administration Reform Act	See Chapter 20
Genuine and Comprehensive Agrarian Reform Program.	Distribute for free or without amortization agricultural lands to landless farmers and agricultural workers. Its coverage will include: all public and private agricultural lands exceeding five hectares; lands that have been declared and/or reserved for non-agricultural uses but remain unutilized and undeveloped; and lands that have been reclassified or converted for commercial, industrial or residential uses but have remained undeveloped and used for agricultural purposes.

Source: Chapter 8 of the PDP 2017-2022

09

Expanding Economic
Opportunities in
Industry and Services
through *Trabaho at
Negosyo*

Expanding Economic Opportunities in Industry and Services through *Trabaho at Negosyo*

The region's economy is gradually experiencing structural transformation. The fundamental source and driver of recent economic growth has shifted to the services sector, which contributed to about half of the economic output over the past three years. However, the industry sector remains to contribute only about one eighth of the region's output and it continuously faces hurdles in advancing the economic value of the region's agri-based products particularly the manufacturing industry.

Assessment and Challenges

Almost half of the employed population is engaged in the I&S sector. About 40 percent and 10 percent of the employed population in the region are engaged in the services and industry sectors, respectively. Employment in the industry sector is biased towards men as more are males while females are relatively greater in number in the service sector.

Services sector remained to be the leading driver of the region's economy. The Services sector has primarily driven the region's economy from 2013 to 2015 contributing 3.7 percentage points (pp) of the 6.6 GRDP growth rate (gr) in 2013; 4.0 pp of the 7.0 percent gr in 2014; and 3.1 pp of the 3.7 percent gr in 2015. The sector's significant contribution to the overall economic growth was a result of the growth rates achieved over the period, specifically 7.7 percent (vs. 4.6% target) in 2013; 8.3 percent (vs. 5.0% target) in 2014;

and 6.3 percent (vs. 5.5% target) in 2015.

Likewise, the Services sector contributed almost half (49.2%) of the region economic output in 2013-2015 valued at an annual average of PhP62.981 Billion (at 2000 constant prices). All industries under the Services sector grew during the three-year period and the major contribution of sector's growth came from the Transportation, Storage and Communication (TSC) industry with 0.9 percentage point average annual contribution.

Industry sector likewise significantly contributed to overall economic growth but at a lower pace. Another major productive sector is the Industry sector. The percentage share of the Industry sector to the region's economic output was about 13 percent from 2013-2015. Moreover, the average annual GVA at 2000 constant prices of the sector was valued at PhP16.546B

from 2013-2015. In terms of the GRDP growth contribution, the sector contributed 2.5 percentage points in 2013; 1.2 pp in 2014; and 0.8 pp in 2015. The significant contribution of the sector to the overall growth was attributed to the exceeded targets during the three-year period, which is 22.9 percent (vs. 5.3% target) in 2013; 9.2 percent (vs. 5.6% target) in 2014; and leveled at 5.8 percent in 2015.

The Construction and Mining and Quarrying sub-sectors particularly in 2013-2014 contributed significantly to the sector's growth performance. In 2013, the Construction and Mining and Quarrying industries contributed 1.0 percentage point each to the GRDP growth rate of 6.6 percent since both industries grew at high rates of 54.5 percent and 17.2 percent, respectively. This trend was maintained in 2014 where contribution of both industries was 0.8 pp (with 30.6% growth rate) for Mining and Quarrying and 0.5 pp (with 7.4% growth rate) for Construction. However, a negative growth of 18.3 percent in 2015 for Mining and Quarrying was recorded because of the cancellation orders issued to holders of Mineral Processing Permit since the third quarter of 2014 and the decline in copper production.

Meanwhile, the region's manufacturing industry contributed minimally to the region's total economic output at an average of only 0.1 pp in 2013-2015. There is a need to develop further the agri-industry of the region to be able to maximize value of the region's agricultural produce and eventually help generate employment and address poverty.

The sufficient allocation of funds to the concerned implementing agencies supporting the industry and services sectors contributed to their achieved growth rates from 2013 to 2015. For instance, funds provided for PAPs implemented by the

Department of Trade and Industry (DTI) Region 02 was higher than the region's investment target as reflected in the Regional Development Investment Program (RDIP).

Labor productivity improved for both industry and service sectors. Meanwhile, the region achieved its target on improving the labor productivity per employed person in the Industry and Services sectors from 2013-2015 as it grew by an average yearly increase of 6.8 percent and 3.3 percent, respectively. Among the three major productive sectors of the economy, the Industry sector produced the highest productivity value and thus, the more that government should strengthen the manufacturing industry especially along agri-industry.

Investments in the economic zone declined while those generated from the BN registration continued to increase. Major capital investment in the region comes from the operation of the Cagayan Special Economic Zone and Freeport (CSEZFP). From the period 2013 to 2015, the Zone performed fairly well achieving its annual target investment. It was able to increase investments at an annual average rate of 9 percent because of the recorded increase in the number of locators in the Zone. However in 2016, the Zone experienced a decline in investments due to the non-renewal of registration of some established locators with big capital investments. This is based on the premise that some locators/ investors are on a wait and see mode pending the possible transfer of online gaming industry under the jurisdiction of the Philippine Amusement and Gaming Corporation. The Zone has likewise generated employment particularly along tourism industry.

Meanwhile, Business Name (BN) Registration, which is a principal frontline service of the DTI 02 that aims to maintain a region-wide registry of business names

mainly on Sole Proprietorship also gained positive performance during the three-year period. Investment generated from the BN Registration increased annually at an average rate of 12 percent with the notable increase of registered firms; and the job opportunities that were augmented through this program. However, only about 5 percent of the total registered firms were directly engaged in manufacturing despite the potential of the region to produce the raw materials for such industry.

Domestic sales generated mostly from MSMEs met targets. Domestic sales come from the actual sales of the assisted MSMEs during participation in DTI-initiated events and activities. The region's target from 2013-2015 for this indicator was attained, growing annually at 21 percent. Effective implementation of the DTI on its program on product development, marketing, and entrepreneurship; as well as DOST's Small Enterprises Technology Upgrading Program (SET-UP) helped augment domestic sales in the region. Financing institutions also play important role in the development of the MSMEs. The Land Bank of the Philippines (LBP) and the Development Bank of the Philippines (DBP) during the period in review assisted MSMEs by providing loans especially to start-up MSMEs and enterprises that wish to expand and improve productivity and competitiveness.

Nevertheless, most MSMEs in the region are still constrained by their limited management and financial capabilities in areas such as maintaining a healthy cash flow. This is beside the fact that many MSMEs also need to improve on their efficiency in production and in establishing more market linkages. Thus, there remains a lot of work to do in these aspects as well as in creating an enabling business environment that would bring greater productivity and efficiency to MSMEs.

Tourism industry in the region flourished over the three-year period. The actual tourist arrivals greatly exceeded the yearly targets, growing at an annual rate of 63 percent. Parallel to the positive performance in the total arrivals was the increase in tourist receipts generated during the period.

Domestic arrivals, which comprised more than 90 percent of the total arrivals in the region, recorded an annual average growth rate of 58 percent. Foreign arrivals, on the other hand, reached a notable annual average increase of 231 percent during the same period. Among the top 10 markets for foreign tourists are China, Taiwan, USA, Canada, Japan, Indonesia, Korea, India, Singapore and Australia.

The aggressive efforts of the Department of Tourism Regional Office 02 (DOT-RO 2), Cagayan Economic Zone Authority (CEZA) and the local government units resulted to the positive performance of the tourism industry. Despite the limited human and financial resources of the DOT and LGUs, they were able to undertake activities to develop new tourism products with packages and encourage more visitors/ tourists in the region. Meanwhile, the airing of the international series *Survivor: Blood vs. Water* and *Survivor: Cagayan* last 2013 catapulted the influx of tourists in Sta. Ana, Cagayan and resulted to the average increase of 20 percent tourist arrivals in the whole region for the past four (4) years. Similarly, the DOT-DPWH Convergence Program, the DPWH 02 national roads and bridge projects, and various Bottom-up Budgeting (BUB) projects, among others, contributed to the positive performance of the industry. Likewise, the efforts of the LGUs to conduct festivals in the region added to the good number of arrivals recorded every year.

Considering the gains achieved in the tourism industry, the region still has more to show and offer to potential tourists. The region has rich natural resources but these resources should be developed and managed sustainably. Along with the necessary infrastructure support, a critical component that needs to be ensured is a strong community involvement and cooperation to realize a more holistic and inclusive growth in the tourism industry.

While the region gradually shifts its growth source to the services sector, it is still far from developing as industrializing region of the country due to limited sources of growth for both I&S sectors and low competitiveness. Likewise, despite I&S sectors' potential to bring high labor productivity and value added to the region, it has yet to face several challenges to attract more investments, create market, and improve competitiveness that will eventually create jobs, help reduce poverty and achieve inclusive growth.

Low investments. The region has the comparative advantage of producing raw materials that can be processed by the industry and services sectors. However, low level of investments especially along agro-processing industries hinders this to happen due to lack of infrastructures for external market connectivity.

Untapped resources especially along tourism. The region is also rich in land and water resources that can be developed as tourism sites. However, low level of priority given by LGUs and other stakeholders coupled with weak capacity and cooperation

and; poor infrastructures linking potential tourism sites resulted to slow progress.

High cost of doing business. The cost of doing business in the region remained to be high due to several procedural activities that need to be undertaken when registering and/or operating a business or even when constructing a building. The bureaucratic system is tedious and frequently costly which discourage investors to put up businesses.

Lack of technical know-how on entrepreneurship Given the lack of big investors operating in the region, farmers and fisherfolks themselves, including women groups should boost their technical know-how on areas like value-adding activities that would bring them into the business and entrepreneurship industry and eventually form their own enterprise and become entrepreneurs themselves.

Low access to easy credit and financial packages. The resistance of some entrepreneurs to adopt new and modern technologies that would help them in advancing and improving their production and income has been constrained by low access to easy credit and financial packages.

Uncompetitive local produce. The competitiveness of local produce has been affected by several factors including high production cost, lack of infrastructure, poor handling and packaging, and unstable supply of raw materials due to lack of connectivity between production areas and processing centers.

STRATEGIC FRAMEWORK

By the end of this Plan period, the industry and service sector will help achieve the desired outcome of reducing inequality through: *Trabaho*, that is expanding

economic opportunities in the sector; and *Negosyo* or increasing access to economic opportunities by MSMEs, cooperatives and Overseas Filipinos (OFs).

Targets

For the six-year period, the region aims to achieve 7.7 to 8.8 percent growth in the output of the industry sector and 7.5 to 8.5 percent growth rate in the Services sector.

The growth in the output of I&S will also be translated to increased employment levels and better incomes. Specific targets that will contribute to the attainment this overall goal is presented in Table 9.1.

Table 9.1 Plan Targets to Expand Economic Opportunities in Industry and Services through Trabaho at Negosyo by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Sector Outcome A: "Trabaho" : Economic opportunities in I&S expanded			
Growth of GVA in Industry sector increased (year-on-year at 2000 prices, in %)	2016	5.8	7.7-8.7
Growth of GVA in Services sector increased (year-on-year at 2000 prices, in %)	2016	6.3	7.5-8.5
Employment generated from the Industry sector increased (in '000)	2016	125	Increasing
Employment generated from the Services sector increased (in '000)	2016	564	Increasing
Proportion of employed manufacturing employment to total employment increased (%)	2016	2.8	Increasing
Capital investments in CSEZFP increased (in Million PhP)	2016	-	11,297
Business Name Registration investments increased (in Billion PhP)	2016	4.523	increasing
Number of exporters assisted	2016	38	-
Number of investors assisted	2016	1,065	1,160
Number of MSMEs assisted in the priority industries increased	2016	-	1,750
Number of IP applications filed	2016	-	30
Number of MSMEs doing e-commerce increased	2016	-	50
Visitor arrivals increased			
Tourist			
- Domestic	2016	555.04	662.74
- Foreign	2016	263.35	314.46
Same-Day Visitor			
- Domestic	2016	1,800.17	2,149.50
- Foreign	2016	10.56	12.61
Sector Outcome B: "Negosyo" : Access to economic opportunities in I&S for MSMEs, cooperatives and OFs increased			
No. of new MSMEs assisted	2016	10,486	13,000
No. of Negosyo Centers established maintained	2016	40	93
BNR registered within 15 min increased	2016	15,550	20,720

Source: PSA 02, DTI 02, DOT 02, CEZA

Strategies

Figure 9.1 presents the framework to achieve the desired outcomes for the I&S sector and the following discussion enumerates the corresponding strategies that will be prioritized.

Chapter Outcome A: "Trabaho": Economic opportunities in I&S expanded

To expand economic opportunities of all who are currently engaged in the sector, three outcomes are prioritized: (a) increase local and foreign investments; (b) increase competitiveness, innovativeness, and resilience of industries; and (c) improve market access.

Intermediate Outcome 1: Local and foreign investments increased

Strengthen value and supply chain linkages. Continue to undertake value and supply chain studies to improve efficiency in production and develop markets. Continuous research and development of new approaches and technologies aid in strengthening the capacity of the sector to adopt to new trends and challenges for the sector.

Implement existing and develop new industry roadmaps. Existing roadmaps and new one will be developed as necessary and will be seriously implemented and monitored to take advantage of the comparative advantages of the region.

Accelerate provision and improve infrastructure support system. Soft and hard infrastructure support (i.e., transport, power, logistics, ICT) will be provided as these are very crucial in facilitating business operations in the region.

Develop and market diversified tourism products. This is especially along eco-tourism through formulation of tourism plans and business plans that would ensure sustainability and marketing of the tourism enterprises to prospective investors. The National Tourism Development Plan which is anchored on improving competitiveness, enhancing development, and pursuing sustainable and inclusive growth, and convergence will be vigorously implemented

Intermediate Outcome 2: Competitiveness, innovativeness and resilience increased

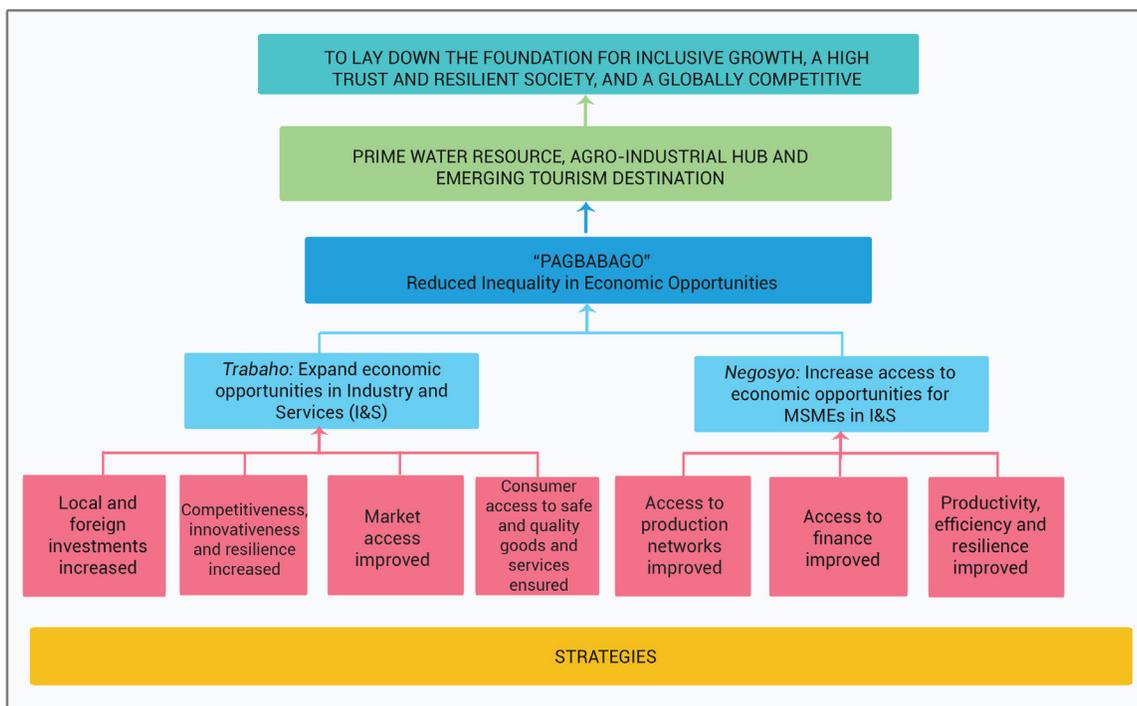
Intensify efforts to capacitate would-be entrepreneurs and service providers. This concerns various and necessary skills that are most demanded in the domestic and international markets. This areas will include agri-business, electronic manufacturing services, automotive, tourism, construction, IT-BPM, among others. Participation of women in these areas will be ensured to harness their potentials in contributing to economic growth.

Encourage innovation and adoption of new technologies to spur development of new services and to become at par with other regions and countries.

Provide and improve/rehabilitate infrastructures to encourage more investors and increase efficiency of business operations.

Streamline and harmonize procedures in business registration and licensing, entry and exit, payment of taxes, and access to finance to encourage more business operations.

Figure 9.1 Strategic Framework to Expand Economic Opportunities in Industry and Services through Trabaho at Negosyo, Region 02



Intermediate Outcome 3: Market access improved (see Chapter 15)

Increase competitiveness of products and services and strengthen partnership and linkages to prospective markets to be able to create new markets and expand existing ones. The region should also optimize exiting growth centers in the region.

Intermediate Outcome 4: Consumer acces to safe and quality goods and services ensured

Promote consumer protection especially against unfair trade practices. Consumers have to be aware of their rights and thus, intensified IEC should be conducted.

Chapter Outcome B: Increase access to economic opportunities for MSMEs

The second chapter outcome deals on increasing access to economic opportunities for MSMEs and cooperatives/women groups and it shall give priority on improving access to production networks; finance; and productivity, efficiency and resilience of MSMEs.

Intermediate Outcome 1: Access to production networks improved

Actively tap MSMEs and cooperatives in trade fairs and other market development activities to showcase their products and create linkages with prospective markets.

Intermediate Outcome 2: Access to finance improved

Streamline and simplify procedures in loan processing for MSMEs and cooperatives to encourage registration.

Continuous education and monitoring of their loan repayment should also be done to avoid past dues and ensure sustainability of business.

*Intermediate Outcome 3:
Productivity, efficiency and
resilience improved*

Promote entrepreneurial culture and competency to develop MSMEs. Small farmers and fisherfolks should be able to level up from mere producers to entrepreneurs to increase income and become more resilient.

Expand programs that promote innovative, appropriate and cost-effective technologies such as as SETUP and SSF; and continue to monitor their operations to ensure sustainability.

Promote consumer welfare by increasing awareness of their rights. Consumers' protection against unfair trade practices should also be ensured.

Crosscutting Strategies

1. Strengthen coordination among implementing agencies, LGUs, private sectors and other stakeholders involved in the development of the sector; and
2. Update and improve database related to I&S sector (e.g., investment data, tourism data, etc.) to ensure accurate reporting of the sector status and targeting in programs and projects related to the sector.

Legislative Agenda

The region is supportive to the priority legislative agenda identified in the same chapter of the Philippine Development Plan (PDP). The list and description of various legislative agenda to support the growth in the industry and services sectors are presented in Table 9.2.

Table 9.2 Supported Legislative Agenda on Expanding Economic Opportunities in Industry and Services through Trabaho at Negosyo, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Amend certain economic provisions of the Constitution	Relax restrictive foreign ownership provisions of the Constitution to attract more FDI
Pass the Ease of Doing Business Act	Enhance market competition through improving ease of doing business. This legislation will sustain the intention of Project Repeal to review existing policies, statutes, and regulations, and eventually repeal unnecessary issuances.
Amend the Public Service Act	Define "public utility".
Amend the Retail Trade Liberalization Act	Align guidelines for foreign investments with the Foreign Investment Act and lower capital requirements for foreign enterprises and harmonize with those observed in Asian countries.
Repeal or amend the Flag Law (Commonwealth Act 138)	Create a level playing field for foreign firms when bidding in government procurement.
Adopt an open access policy	Adopt and enforce open access in various segments of the telecommunications market (e.g., backhaul and backbone facilities) on a nondiscriminatory basis and publish prices in order to introduce effective competition in the broadband or telecom market
Set up a National Quality Infrastructure system	Integrate and coordinate standardization, metrology, testing analysis, quality management, certification, and accreditation.
Amend the Consumer Act	Increase protection of consumers and harmonize existing law with current and future technological advancements.
Institutionalize the industry cluster approach	Pursue local economic development through inter-local cooperation among LGUs and strengthen people participation in community development.
Inclusive Business Bill	Develop a national strategy for the promotion of inclusive businesses to be implemented by the Inclusive Business Center. This also provides policies for accreditation, support, and incentives.
Social Enterprise Bill	Provide a framework for the planning and implementation of a National Poverty Reduction Through Social Entrepreneurship Program. This also promotes social enterprises as a tool in the government's poverty reduction program.

Source: Chapter 9 of the PDP 2017-2022

10

Accelerating
Human Capital
Development

Accelerating Human Capital Development

Increased human capital and expansion of opportunities and choices is rooted in the region's human development strategies particularly on equal access to better health, knowledge and skills. Disparity in access to health and education services in the region shall be reduced in order to improve human development.

Assessment and Challenges

The Cagayan Valley Region endeavored on the attainment of the Millennium Development Goals (MDGs) set within 2015 of which 68 percent of the targets on health and primary education were attained. The collaboration of all stakeholders, both in the private and public sector, made this possible.

Health and Nutrition Services

NHIP coverage reached 86 percent. The region's total projected population for enrolment in the National Health Insurance Program (NHIP) for 2015 is estimated at 3.5 million. About 86 percent of which were actually enrolled or a total of 2,971,453 composed of the members, their qualified dependents and beneficiaries. The point-of-care program significantly contributed to the inclusion of indigent members in the NHIP.

Infant and child mortality is low. Infant (4.51%) and under five (5.94%) mortality were significantly reduced with mortality rates lesser than the MDG targets. This was attributed to the effective promotion of exclusive breastfeeding in the first 6 months of life of an infant and micronutrient

supplementation of pregnant and lactating women and children.

Child nutrition improved. The percentage of fully immunized children increased by 3.53 percent from the baseline data in 2012 of 68.59 percent. Proportion of children below 1 year old immunized against measles was recorded at 73.94 percent in 2015 as against the 91.25 percent Plan target. The reduced prevalence rate of 4.11 percent in underweight children under 6 years old was above target.

One out of three children under 5 years old is stunted across all regions in the country. Once stunting is established, it typically causes permanent impaired cognitive development. This portion of our future generation may become incompetent. Stunting is high in teenage pregnancies as it starts from pre-conception when an adolescent girl and who later becomes a mother is undernourished; it worsens when infants' diets are poor, and when sanitation and hygiene is inadequate. It is irreversible by the age of two. Child survival and health is inseparably connected to reproductive and maternal health.

Maternal deaths increased. The MDG

2015 and the previous plan's target to reduce maternal mortality to at least 32 deaths per 100,000 live births was not achieved. Instead, maternal mortality increased to 56.59 percent from the 2012 baseline value of 33 percent. Poor health-seeking behavior of patients remained to be the main cause of delays in determining the required treatments or use of appropriate health care providing services and facilities. Sixteen (16) or 44.44 percent of the total 36 maternal deaths in 2015 were due to post-partum hemorrhage which was observed to be a result of type 1 delay attributable to the patients' poor health-seeking behavior. The increase in MMR was also attributed to the increasing trend on the incidence of teenage pregnancy in the region. As of the latest Young Adult Fertility and Sexuality Survey conducted by University of the Philippines Population Institute in 2013, teenage pregnancy of 18.10 percent is higher than the national incidence rate of 13.6 percent and second highest among the 16 regions. There were 5 reported teenage maternal deaths for 2015.

Reproductive health improved but still below target. The region's provision of contraceptives to couples of reproductive age, though increasing was not sufficient enough to attain the regional and MDG target for 2015. The 2015 contraceptive prevalence rate increased to 60.25 percent from the 2012 baseline value of 54.69 percent. The proportion of deliveries assisted by skilled birth attendants in 2015 of 94.57 percent also exceeded the regional target by 7 percent and MDG target by 8 percent with the additional birthing facilities provided by the government under the Health Facility Enhancement Program.

The emerging operational issues on the implementation of the Responsible Parenthood and Reproductive Health (RPRH) Law remain a challenge. The Supreme Court temporary restraining order (TRO) dated June 17, 2015 on family

planning (FP) commodities will result in a stock-out of family planning supplies in accredited public health facilities affecting 5,817 couples (Online RFPF Reporting System) with unmet need for FP services in Region 02. The delay in the issuance of FP commodities may compel the affected couples to obtain unregistered contraceptives and counterfeit products. There will be more unwanted pregnancies/births, increase in newborn, child and maternal morbidity and mortality.

The local government units have been investing less for health and nutrition. Their dependence on national agencies and non-government organizations (NGOs) will result to discontinued provision of health and services to the identified recipients. Fund support and manpower are also major considerations to carry out intensive and effective information and education campaign to advocate the importance of breastfeeding, infant and maternal care and other health information which the poor located in the Geographically Isolated and Depressed Areas (GIDAs) are deprived of due to the absence of technologies. Sufficiency of competent and committed health workers in the barangays would entail an attractive package of benefits with security of employment.

Patterns on prevention and control of communicable diseases vary. Malaria cases were significantly reduced by 1.46 percent for 2015. This translates to 140 cases per 100,000 population region-wide. The province of Quirino was declared a malaria-free province during the year, second to Batanes which was declared in 2011. The Province of Nueva Vizcaya is due for validation in 2016. Zero incidences of malaria deaths were consistently attained for the year. The sustained strong collaboration of DOH, LGUs and technical and funding assistance providers from (NGOs) contributed to this exceptional performance.

Tuberculosis case detection and cure rate of sputum positive patients attained both the regional and MDG targets. However, the region fell short of sustaining less than one percent HIV prevalence for 2015 with 95 new HIV Absero-positive individuals resulting to a total of 279 (Male-87%, 243; Female-13%, 36) HIV cases in the region. Nonetheless previous year's HIV prevalence of one percent was maintained. Aside from the advocacy activities on HIV, the DOH RO2 has expanded its "People Living with HIV (PLHIV) Support and Care" program through the development of satellite treatment hubs in the region.

Dengue is a notifiable disease in the region with 87 confirmed dengue cases out of the 13,557 cases reported for 2015. The reported number of dengue cases posted a 262 percent increase to the previous year's 3,745 reported dengue cases. Seven thousand fifty-one (52%) were males and 6,506 (48%) were females. Ages ranged from 3 to 99 years old but the most (4,838, 36%) affected were those in the 5-14 years age group followed by 15-24 years age group (3,662, 27%). Most of the cases were from Cagayan (4,539, 33%) and Isabela (4,232, 31%). Among cities, Tuguegarao City had the most (962, 7%) number followed by Santiago City (858, 6%). There were 23 deaths reported for 2015 higher by 28 percent compared to the previous year's 18 deaths reported.

Access to water supply and sanitation increased. Access to safe water supply in the region met the MDG target but was still below the 2015 RDP target by 0.82 percent. Nonetheless, a significant increase in performance is noted from 88.2 percent in 2014 to 92.73 percent in 2015. In terms of sanitary toilet facilities, there was a significant increase of 10.35 percent (97.35%) in 2015 from the previous year's proportion of households with sanitary toilet facility.

Education

Basic education performance improved but still short on target. Kindergarten participation rate was progressive since its first implementation in 2013. The Elementary participation rate was high at 2015 level of 105.98 percent. The desired annual increase in elementary completion and cohort survival rates in the previous Plan was consistently achieved while school leaver and drop-out rates, despite the unmet annual targeted rates, had been decreasing.

However, secondary participation and achievement rates remained low. Even with the unmet target on secondary education participation rate by 8.79 percent, secondary drop-outs and school leaver significantly declined to 0.89 percent (baseline-4.94%) and 1.85 percent (baseline-6.27%) respectively in 2015. The Abot-Alam Program was a very effective instrument to achieve these accomplishments especially for the 574 out-of-school youth in the 6 municipalities of Batanes, enabling the Division of Batanes as the first division in the country with a zero Out-of-School Youth. The secondary NAT-MPS achievement rate fell short by 1.44 percent from the 2015 target of 66.36 percent although it managed to reach a rate of 64.92 percent from the 46.97 percent achievement rate in 2014.

Low enrollment and graduates in higher education. Higher education enrollment remained low at 149,555 enrollees in 2015, a rate still short of the 24 percent target increase or at least 156,778 enrollees. The number of HEI graduates was diminishing since 2014 at 14.33 percent less than the target graduates in 2015.

Technical-Vocational education enrollees and graduates increased. Enrollees in all delivery modes of the Technical-Vocational Education and Training (TVET) have always been above target. An increasing trend in the number of TVET graduates was

also observed for 2012 to 2014 but declined in 2015 by 2,686 graduates. However, employed TVET graduates continued to increase.

Indigenous Peoples Education pursued.

The Educational Assistance Program, a merit-based scholarship to qualified IPs, was extended to 739 IP grantees in CY 2015, 732 in 2014 and 1,140 in 2013. The DepEd finalized the Indigenous Peoples Education (IPEd) Curriculum Framework (DepEd Order No.32 series 2015) in consultation with IPEd focal persons, IP leaders, elders and culture bearers on the Indigenous Knowledge Systems and Practices (IKSPs) of the indigenous cultural communities. The IPEd Curriculum Framework engaged the indigenous communities in localizing, indigenizing, and enhancing the K to 12 Curriculum and contextualization of lesson plans. For SY 2015-2016, there was a total of total of 181,238 IP learners under the IPEd (see also Chapter 7).

The private HEIs get lesser government support compared to that of the public HEIs. Almost all educational assistance/scholarship programs offered by government schools are given absolutely free unlike the scholarship programs offered by private HEIs which require a corresponding service obligation thereby resulting to low enrollment in private HEIs. In some cases, beneficiaries of these scholarship programs do not belong to the poor category, hence, defeat the purpose of the assistance to poor but deserving students.

The availability of resources for the full implementation of the K to 12 program will always post a challenge. Balik-aral programs should be attractive to improve participation rate especially in secondary education. The role of the LGUs in the wider implementation of the Abot-Alam Program of the DepEd is very vital as it considerably contributes in addressing the low participation rate in basic education.

Region 02 capacity map for 2014-2016 showed a vast demand of skills in agri-fishery, construction, electronics, garments, homestyle production and automotive but there is a short supply of available skills.

Labor and Employment

The employment situation in the region steadily improved. Throughout the years, agriculture sector continued to make up the majority of the total employment in the region, followed by the services sector while the industry sector with the least number of employed persons.

Employment status improved. The region's employment level in 2015 increased by 4.35 percent compared to the 2012 baseline data. Majority of the employed were engaged in the primary sector, agriculture (54.4%) while the rest were in services (37.3%) and industry sectors (8.3%). This implies the big role played by the agriculture sector in terms of employment in the region.

Meanwhile, looking at the breakdown of employed persons, an improvement was also noted as the percentage of unpaid family workers or persons who worked without pay on own family-operated farm or business decreased to 13.2 percent in 2015 as compared to the 2012 baseline figure of 16.8 percent (see also Chapter 4). Unpaid family workers are classified as vulnerably employed and therefore, the attained decline in their share to total employed is an indication of better quality jobs being created as well as increased safety nets provided by the government to this vulnerable group of employed persons.

Labor force participation slightly improved. Persons in the labor force are either employed or unemployed; while persons not in the labor force are those who are not looking for work because of reasons such as housekeeping, schooling, etc. Out

of the total 1.556 million economically active population in 2015, 97 percent were employed (1.508 million) while the rest were unemployed. The number of employed population increased by 1.8 percent as compared in 2014; although, in terms of employment rate, it slightly improved by 0.5 percentage point. This achievement may mean that there was an increase in the availability of work offered or job/business opportunities in the region; or an increase of motivation/willingness by the working age population to look for work.

Underemployment rate decreased. Corollary to the increased job opportunities was the positive gain in terms of the quality of employment as measured by the underemployment rate which declined by 0.5 percentage point (11.1%) in 2015 as compared to 2014 or in nominal terms, the number of underemployed reduced by 2.3 percent at 168,000 in 2015. About 4,000 employed persons who expressed desire to have additional hours of work in their present job or an additional job, or to have a new job with longer working

hours were successfully granted with such opportunities.

Unemployment diminished. On the other hand, another indication of improved employment status in 2015 was the diminished unemployment rate. The unemployment rate at 3.2 percent was lower by 0.4 percentage point to the level in 2014 and translates to about 10.7 percent decline in the actual number of unemployed in 2015 at 50,000 from 56,000 last year.

Employment in Region 02 is generally biased towards men. More than half or 63.6 percent of the total employed persons across sectors in 2015 were males. This is more evident in the industry and agriculture sectors where proportions of males were at 89 percent and 71 percent, respectively. It was only in the services sector where percentage of males (47%) was relatively lower than the females (53%). This reveals that women need to be integrated at work especially in the sectors of agriculture and industry.

Strategic Framework

Targets

For 2017-2022, indicators have been identified and targets have been set to

monitor the attainment of the sub-sector outcomes. These are outlined as follows:

Table 10.1 Plan Targets to Accelerate Human Capital Development by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Life Expectancy at birth	2015	72.77 (2015-2020)	75 (2020-2022)
Male	2015	69.63	71.26
Female	2015	75.91	77.54
Total Fertility Rate	2015	3.2	2.4
Maternal mortality ratio per 100,000 live births	2015	56.59	<52
Neonatal mortality ratio per 100,000 live births	2015	TBD	TBD
Infant mortality rate per 1,000 live births	2015	4.51	4.33
Under-5 mortality rate per 1,000 live births	2015	5.94	5.02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Proportion of households with per capita intake below 100% dietary energy requirement	2015	TBD	TBD
Prevalence of stunting among children under 5 (%)	2015	TBD	TBD
Tuberculosis incidence per 100,000 population		322	250
Malaria prevalence per 100,000 population	2015	TBD	TBD
Number of new HIV infections (newly diagnosed cases/year)	2015	TBD	TBD
Contraceptive Prevalence rate-all methods (%)	2015	60.25	66
Net Enrolment Rate			
Kindergarten	2015-2016	85.8	89.76
Elementary	2015-2016	96.31	100.27
Secondary	2015-2016	70.21	74.17
Completion Rate			
Elementary	2015-2016	91.35	95.31
Secondary	2015-2016	79.62	82.92
Percentage of ETEEAP Graduates (%)	2015	78.35	70
Percentage of tertiary graduates in science, engineering, manufacturing, and construction (%)	2015	17	TBD
Certification rate of TVET graduates (%)	2015	85	87
Number of curricula and programs evaluated based on revised policies, standards and guidelines and outcomes based education	2015	181	254
Decreased percentage of adult NEET	2015	TBD	TBD
Percentage of females with advanced degrees employed (%)	2015	TBD	TBD
Increased labor force participation rate of women (%)	2015	TBD	TBD
Labor productivity in industry sector increased (%)	2015	4.1	TBD
Labor productivity in service sector increased (%)	2015	2.3	TBD

Source: DOH 02, DepEd 02, TESDA 02, PSA 02

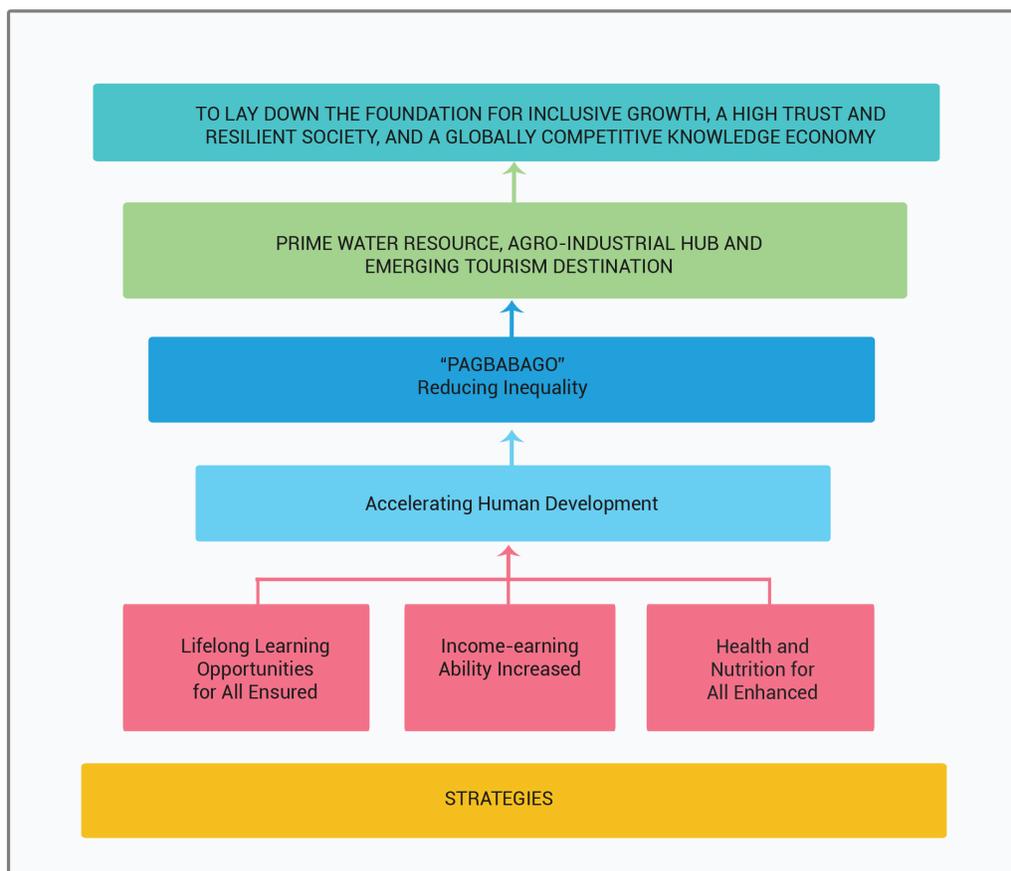
Strategies

The overall objective is to lay down a solid foundation for more inclusive growth, a high trust and resilient society and a globally competitive knowledge economy by reducing inequality and increasing potential growth. Reducing inequality will be addressed through accelerating human capital development by means of education and training. In like manner, as human capital improves, outcomes in nutrition and health have to be enhanced, which shall translate to increased potential growth. Below are pre-identified strategies or interventions to attain the region's desired outcomes.

Intermediate Outcome 1: Lifelong Learning Opportunities for All Ensured

Pursue full implementation of the K to 12 program. Full implementation of the Senior High School began in school year 2016-2017. Among the enrollees were Grade 10 completers, the balik-aral students and passers of accreditation and equivalency test. This progress in the K to 12 program implementation recognizes the need for resources to sustain the program. Among the critical logistics needed are school buildings, provision of land by LGUs for the school buildings, provision of intensive trainings and related

Figure 10.1 Strategic Framework to Accelerate Human Capital Development, Region 02



skills development for teachers, effective/pertinent learning materials and laboratory equipments for the tech-voc track of the Senior High School and financial support through the voucher system for senior high school. In the event the government is unable to provide the necessary logistics, especially on skills development trainings for teachers, the practice of engaging the services of volunteers shall always be an option. Eventually, achievement rates for both elementary and secondary education will reach its optimum level.

Boost participation in basic education and enrollment in higher and technical education. The increasing incidence of teenage pregnancy in the region

contributed to the low secondary education participation rate. A special program or alternative education modality for teenage parents will be developed to bring back the teenage parents to school considering their difficulties for full-time schooling due to child-bearing/rearing and their financial conditions. The voucher system of the senior high school will also help keep the students stay in school. The Abot-Alam program of DepEd should be sustained with greater involvement of the LGUs and volunteer groups. There is also a need to fully mainstream the Indigenous Peoples learners by increasing funds for Educational Assistance Program for IPs and avoid merit-based educational assistance, indigenize literacy materials and increase access of IPs

to schools. Schools should also attend to the socio-psychological needs of students.

Republic Act 10687 or the Unified Student Financial Assistance System for Tertiary Education (UniFast) Law was designed to harmonize scholarships, grants-in-aid and student loans for tertiary education to improve efficiency and ensure that deserving Filipinos are given equitable access to higher educational opportunities. This reform is an opportunity to increase enrollment in higher education particularly among poor men and women but academically proficient and highly motivated students. However, fund support should be sustained and implementation should be fast-tracked. The UniFast law should also take into consideration the scholarship programs for women who are going into non-traditional courses and scholarship programs for the IPs and Persons with Disabilities.

Increase employability through job-skills matching. Relevant Skills training or curricular offerings for technical-vocational education will be regularly determined to respond to industry needs, both local and foreign, in order to improve employability of TVET graduates. Continuous upgrading of skills will also be undertaken to respond to the rapidly changing technology. Consequently, training equipments and facilities of TVET schools will be upgraded. Similarly, HEIs will give focus on the enhancement of quality assurance in higher education.

The TVIs and HEIs will regularly monitor and consult with firms and determine the key employment generators and emerging industries in the region to guide them in their career counseling and for consideration in curriculum/skills upgrading. TVET will also be accessible to women, youth and the disabled. The Philippine Qualifications Framework (PQF) will be institutionalized (see also Chapter 5).

Enhance Quality Assurance in technical vocational and higher education.

Program offerings of higher education institutions need to be regularly reviewed and accredited. The process of accreditation should also be reviewed from time to time given the fast pace of internationalization and globalization in higher education. The Unified TVET program Registration and Accreditation System should remain in place to ensure quality of TVET trainings. Training regulations will be revisited when there are significant changes in the TVET programs. TVET trainers will have to acquire the required competence and must undergo a certification process. Likewise, TVET graduates will also undergo assessment and certification by TESDA accredited assessment centers.

Intermediate Outcome 2: Income-earning ability increased

Capacity development of workers in the agriculture sector. Given the big role played by the agriculture sector in terms of employment in the region, there is a need to develop the capacities of the farmers, fisherfolks and other stakeholders on value-adding, agribusiness development and value chain management that would help them become entrepreneurs while developing more and improve investments in the agriculture, fishery and forestry sector. In addition, there is a need for an increased provision of social protection programs especially to the vulnerably employed, for instance, cash for work during off-cropping seasons.

Strengthen employment facilitation services. Assistance to workers entering the labor market, especially first-timers, will be strengthened. Career advocacy, coaching, and counseling will be enhanced, both for those seeking employment locally or overseas. Online services for OFs will also be included. There is a need to capacitate LGUs to respond to the challenges in

their respective areas. In particular, Public Employment Services Offices (PESOs) need to prepare for the needs of Senior High School graduates and the differently-abled, and consider opportunities beyond their localities.

A dynamic and competitive labor market requires high-quality and easily-accessible labor market information (LMI) to effectively facilitate job search. A regional public system similar to the PhilJobNet, the government's web-based LMI, job-search, matching and referral portal, plays a significant role in providing free access of job-seekers in the region to labor market information. The regional public system will be developed to (a) meet the LMI needs of the vulnerable groups of workers in the region; and (b) serve as the labor market information portal of the region, capable of housing the critical supply and demand database systems. To ensure availability of labor requirements for the expected surge in demand from public works projects, labor market information, skills registration, employment facilitation services, training and monitoring must be accessible in communities.

Strengthen and expand internship, apprenticeship and dual training programs that facilitate school-to-work transition. Current programs of the government that can be strengthened are the: (a) Government Internship Program (GIP) for those who want to pursue public service; (b) JobStart Program to enhance the employability of “at-risk” youth; and (c) apprenticeship, learnership and dual-training programs. Employer/enterprise-led skills training will be explored. The government will support the skills training networks across a wide range of industries/sectors and geographical areas to address work placements for the job seekers, particularly the long-term unemployed.

Implement programs that encourage women to participate in the labor market.

Strategies to increase labor participation of women include (a) fully implementing the RPRH Law; (b) improving access and affordability of child care services; (c) formulating policies that promote work-life balance; (d) providing re-training services for women returning to the workforce; (e) enhancing maternal and paternal benefits; and (f) improving access of women to entrepreneurial opportunities.

In addition, the data essential to understand the full range of work carried out by women, including unpaid domestic and care work, will also be developed.

Strengthen the implementation of the two-tiered wage system.

The two-tiered wage system will be continuously implemented as an approach to minimum wage-setting and as a strategy to tighten the link between wage and productivity growth by encouraging and capacitating workers and enterprises in formulating productivity-based incentive schemes. As mandatory minimum wages will continue to be set, enterprises will also be encouraged to adopt productivity-based pay schemes to accelerate productivity growth and ensure commensurate growth in wages.

Ensure safety and health in the workplace.

Sound, gender-responsive occupational safety and health (OSH) practices will be ensured through vigorous enforcement of existing regulations. Implementation of enhanced workplace emergency plans and disaster risk reduction programs will be encouraged. There is also a need to intensify workforce-focused OSH programs, such as information campaigns and industrial dialogues that will promote and cultivate a culture of OSH. Integration of OSH in the local health development plans as well as a comprehensive health and safety program for government workers will likewise be

pursued. In terms of education, integration of OSH in the secondary and tertiary educational curriculum will be advocated.

Intermediate Outcome 3: Health and nutrition for All enhanced

Attain universal health coverage and protection from financial risk. Equal access to quality health services is achieved when out-of-pocket spending is reduced and there is equity in health financing in order to reduce financial burden. Thus, the region will manage to:

- Attain 100 percent health insurance coverage through intensive communication and social marketing strategies in order to sustain or increase NHIP coverage and ensure a high benefit delivery ratio of the social health insurance availments
- Safety nets on those not covered. There is a need to sustain the indigents' point of care program and the automatic PHIC coverage of teenage mothers patients.
- Implementation of the provision of the KASAMBAHAY Law on PHIC coverage
- Intensify health insurance coverage of OFs
- Reduce out-of-pocket cost for indigent patients attended by salaried physician in a non-private accommodation.
- Make out-of-pocket cost of health care services predictable for non-indigent patients especially when government physicians are not available for their required treatment.

Access functional Service delivery network. Efficient delivery of quality health care services is always a demand regardless of geographical location, age, sector and socio-economic status. To achieve this,

there is a need to improve on the following strategic actions:

- Accessibility of health services (primary care level up to the specialty centers, services mustd be patient/client-friendly and culturally-sensitive services)
- Networks enhanced by reliable data and regular feedback by obtaining accurate feedback, streamline monitoring and evaluation systems
- Capacity building of health service providers, community health workers
- Upgrading of public health hospitals and other facilities to ensure availability health services

Protect from triple burden of disease.

Health and nutrition for all is enhanced through the provision of better care and services for keeping the well healthy and providing cure to the sick in all life stages. Focus of interventions shall be directed in the following areas:

- Communicable diseases such as HIV, Tuberculosis, malaria, dengue, leptospirosis, Ebola and Zika
- Non-communicable diseases such as cancer, diabetes and heart disease along with their risk factors
- Injuries, substance abuse and mental illness will be addressed through advocacy, treatment and rehabilitation of drug-dependents
- Prioritize investment on water system development projects to increase the proportion of households with access to safer water supply.
- Strengthen the school health and nutrition program (supplementary feeding program) to address malnutrition in all forms

Legislative Agenda

The region supports the following legislative agenda which are required in the realization of the strategies identified in achieving the goal of accelerating human capital development.

Table 10.2 Supported Legislative Agenda on Accelerating Human Capital Development, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Increasing Taxes on Sugar-Sweetened Beverages and Junk Food	This aims to lower consumption of sugar-sweetened beverages and junk food through higher taxes. It will be a cost-effective intervention to the increasing incidence of lifestyle-related non-communicable diseases (NCDs) by addressing risk factors.
Amendment to the Philippine HIV-AIDS Law	This seeks to strengthen the current HIV Law to make it more responsive and relevant to the current epidemic. It will restructure the legal framework to harmonize evidence-informed strategies and approaches on the prevention, treatment, care, and support for HIV and AIDS patients and MARPs with government's response
Local Population Development Act	This will provide for the establishment and operation of population offices to ensure the effective implementation of population management strategies and measures at the local level.
Prevention of Adolescent Pregnancy Act	This act will facilitate the development of a National Program of Action and Investment Plan for the prevention of teenage pregnancy. The program of action will serve as the national framework for inter-agency and inter-sectoral collaboration at all levels to address the various health, cultural, socio-economic and institutional determinants of teenage pregnancy.
Amendment of the law on the Barangay Nutrition Scholar (BNS) Program	This is to upgrade incentives and benefits and ensure security of tenure of BNS. This is essential in the provision of continuous frontline nutrition services to the community. This law would ensure that trained and experienced BNS are carried over by succeeding political administrations.
Magna Carta for Day Care Workers	This bill proposes that day care workers be provided with proper compensation and benefits.
Philippine Qualifications Framework Bill	The bill envisions a quality-assured national system for the development, recognition, and award of qualifications based on the standards of knowledge, skills, and attitude acquired by learners and workers in the country. It aims to institutionalize the PQF to encourage lifelong learning of individuals, provide employers specific training standards and qualifications that are aligned to industry standards, ensure the training and educational institutions adhere to specific standards and are accountable for achieving the same, and provide the government with common taxonomy and typology of qualifications as bases for granting approvals to stakeholders.
Apprenticeship Bill	The bill will establish a reformed apprenticeship program that will ensure the availability of qualified manpower in the field of critical and in-demand technical skills through the active participation of all workers, enterprises, government agencies, and non- government organizations concerned.
Amendment to the Dual Training System Act of 1994	There is a need to review RA 7686 in order to entice more companies to engage in DTS. The current law stipulates the responsibilities of the trainees and establishments, and incentives for participating establishments.

LEGISLATIVE AGENDA	RATIONALE
100-Day Maternity Leave Act	This will institutionalize a mechanism to expand the maternity leave period of women workers. This will provide ample time for mothers to regain health and overall wellness as well as assume maternal roles before resuming paid work. (An extended paternity leave is also proposed to allow fathers to participate in childrearing.)
Productivity Incentive Bill	In order to encourage enterprises to adopt productivity improvement and gainsharing schemes, RA 6971 or the Productivity Incentives Act should be amended to liberalize its restrictive provisions. These include the basis for computing baseline productivity data, the manner and frequency of distributing productivity-based bonuses, and the sharing scheme. Workers and enterprises must be allowed to design their own productivity incentive programs depending on the growth requirements of the enterprise.

Source: Chapter 10 of the PDP 2017-2022

11

Reducing
Vulnerability of
Individuals and
Families

Reducing Vulnerability of Individuals and Families

The CVRDP 2017-2022 will endeavor to achieve universal coverage of social protection programs to enable individual and families to deal and cope with risks. The risks that the individuals and families will face vary across their life cycles. Thus, the objective of the Plan is to enable the region's populace to cope with these risks by reducing vulnerabilities of persons and decreasing their exposure to risks.

Assessment and Challenges

Risk Factors

Inherent Vulnerability. Poverty incidence among population in Region 02 for 2015 is down to 15.8 percent or 553,616 poor population from the 22.1 percent rate in 2012 (see Chapter 4). Despite the decline in the region's poverty incidence, a considerable number of individuals and families are still below the poverty threshold, making a significant number or sectors of our society inherently vulnerable. The Philippine Development Plan identified these groups as the poor, the children, women, persons with disabilities (PWDs), indigenous peoples, overseas Filipinos (OFs) and their families, and older persons.

Children. For the past three years, there was an increase in the number of Children-In-Conflict with the Law (CICL) as committed by the courts to the Cagayan Valley Regional Rehabilitation Center for the Youth (CVRRCY). For 2016 alone, a total of 52 child rehabilitation cases were reported. Emerging issues on children in the region include child labor, pornography, bullying and violence against children.

Women. Traditionally, women are considered to be the weaker group compared to men and are always seen to be at the disadvantage compared to men. Their role was limited to reproductive, household, and child care such that they are the primary victims in cases of economic crisis due to lessened priority given to them. For families living in poverty, women are among the most vulnerable to violence in their respective homes and exploitation in their communities.

Persons with Disabilities (PWDs). The region has yet to improve the total well-being of the disabled persons and their integration into the mainstream of society. The inclusion of PWDs is an issue that crosscuts development and essential in poverty eradication. Existing laws on PWDs' welfare and integration into the mainstream is not fully implemented particularly on livelihood, disaster preparedness and infrastructure support.

Indigenous Peoples. Cagayan Valley is a dwelling place to various ethno linguistic groups or Indigenous Cultural

Communities/Indigenous Peoples (ICCs/IPs). Although there are no accurate IP population statistics in the absence of a formal census, the region has various tribal communities situated in diverse geographical settings (see also Chapter 7).

Long before the passage of the IPRA, the IP groups were faced with several problems such as illiteracy or low education, unemployment, low productivity, poor health and housing conditions, high mortality, unjust displacement from their territories in the guise of development introduction, and vulnerability to both man-made and natural calamities. Many cause-oriented groups and rights advocates strongly believe that IPs/ICCs belong to the discriminated, exploited, underprivileged, abused and neglected groups in our society.

Older persons. Emerging issues concerning the older persons such as health, absence of income sources, abuse, exploitation and discrimination makes them vulnerable.

Economic risks. The PDP 2017-2022 identified economic risks usually faced by the working population such as unemployment, underemployment, low and irregular income, end of source of livelihood, price instability of basic commodities and financial and economic risks.

Overseas Filipinos (OFs) and their families. The Survey on Overseas Filipinos showed that OFs accounts for 6 percent of the region's population or 2,447,000. OFs are vulnerable due to economic downturns and threat to peace and security in host countries.

Workers in the informal sector (WIS). The PDP defines WIS as those that are outside the regulatory ambit of government. They could be working in hazardous conditions; they could be receiving substandard pay; they are typically not covered by social security. Based on this definition, the

WIS in the region are those working in urban centers as ambulant vendors, service providers, parking space attendants and mainly unskilled construction workers. In rural areas, this type of workers could be found mainly in farms working as laborers on a seasonal basis.

Workers in the formal sector. Formal sector workers also face economic risks. Given that about 98 percent of the region's business establishments are MSMEs, many of the region's workforce experience income instability due to unstable business operations, low wage rates, retrenchment, firm closures, among others.

Natural hazards and human-induced shocks. Location wise, the region is visited by an average of 2-3 destructive typhoons in every 2 years which means that it is along the natural path of typhoons. As a natural catch basin, the alluvial plains where most of the livelihood and settlements are located, is also subjected to frequent flooding either as a consequence of monsoon rains or typhoons accompanied with heavy precipitation. The past decade has shown the wide extent of flooding in the valley floor primarily due to the increasing unsustainable practices in the upland. This makes majority of the region's population in both urban and rural areas exposed to natural hazards such as typhoons and flooding.

Social Protection Mechanisms

Social Protection Services were intensified. Social protection services increased in terms of coverage due to the lowered age qualification for the availing of the social pension under the expanded Senior Citizens Act and launching of the LISTAHANAN 2. The operationalization of the Modified Conditional Cash Transfer Program was also intensified to attain desired social development outcomes. The

DSWD 02 has identified 135,824 poor from the 625,020 households assessed during the conduct of its 2nd nationwide assessment under the LISTAHANAN or the National Household Targeting System for Poverty Reduction (NHTS-PR), the bulk of which were beneficiaries of several services shown below:

Poor families covered by Philhealth increased. The identified poor households listed in the NHTS-PR were granted health insurance coverage through the sponsorship of DOH. The indigent program of the PHIC which includes poor families identified under the NHTS-PR accounts for 60 percent of the total beneficiaries of health insurance in the region. This translates to 528,191 members including senior citizens with their 1,273,444 dependents. The indigent program also includes members qualified by the PHIC's Point of Care (POC) program. These are members who were not listed in the DSWD's NHTS-PR but were found to be poor belonging to Class C-3 and D confined in government hospitals.

Conditional Cash Transfer Program intensified. As of 2015, there were 96,540 active households out of the 112,600 registered households in the regular CCT and 6,071 families for the Modified CCT for IPs covering 38 IP classifications in geographically isolated and disadvantaged areas. The number of CCT beneficiaries in 2015 decreased by 8,373 HH when compared to the 2014 of 104,880 HH beneficiaries. The regular CCT beneficiaries also included 19,829 households from the 24 indigenous peoples group. Female IP grantees accounted were 87.46 percent (17,343) and 12.54 percent male grantees. There is a need to generate full commitment of LGUs and community participation in sustaining the improved well-being of the 4P beneficiaries.

Indigent Senior Citizens covered by the Social Pension Program. Effective 2015,

the age qualification of senior citizens for the availment of the social pension program was lowered to 60 years old from 77 years old as provided by RA No. 9994 or the Expanded Senior Citizens Act of 2010. A total of 58,414 (97.77%) out of the targeted 59,744 indigent senior citizens were granted their monthly stipend amounting to PhP350 Million.

The grant of monthly stipend in Region 02 started in 2011 with 3,074 beneficiaries covering indigent senior citizens 80 years old and above. The cut-off age was later lowered to 65 years old in 2015, thereby increasing the social pension beneficiaries to 58,414 with a total grant of PhP350 Million. For 2016 DSWD has a budget allocation of 476 million for the 79,341 identified social pension beneficiaries and expected to increase in the coming years as the program continues to intensify the assessment of senior citizens qualified to the said program.

Out-of-school youth assisted under Government Internship Program. The Government Internship Program served achieved its annual target of twenty out-of-school youths who need additional sources to support their school needs. As of CY 2015 a total of 115 youths were assisted by the Program. The out-of-school youth beneficiaries were those who intend to enroll after availment of the program. Majority of the recipients were 4Ps beneficiaries and deployed in various government agencies.

Social protection for OFs. OWWA's consolidated statistics for CY 2014 to 2015 showed a total of 54,121 members, both land-based and sea-based. An additional 618 OF Social Security System (SSS) members through the SSS voluntary membership and 46,670 OFWs with health insurance under the overseas welfare program of PHIC.

Social protection services are also extended to the region's OFs and/or their dependents

in the form of various scholarship programs (Table 11.1). Some were skills-based, others were offered education cum livelihood assistance and others were through the congressional migrant workers scholarship program. The levels of performance of program avilment vary due to the qualifications set for each type of scholarship/assistance program. EDSP and CMWSP scholars are required to meet a general weighted average of at least 80 percent for every semester.

High remittance cost is one of the hindering factors why OFs are reluctant to apply for social security membership. SSS contribution for OFs is still voluntary and the sole burden of the OF. More OFs would be encouraged to be covered with social security if employers will be compelled to shoulder a portion in the monthly contribution, a case similar to SSS members employed in the country.

Recognized and formalized ancestral domains. The Indigenous Peoples in Region 02 claim ownership of their lands by getting formal recognition of ownership through the acquisition of a certificate of ancestral domain title (CADT). This process of includes social preparation, conduct of perimeter survey, approval and finally the registration and awarding of CADTs. Through the past 3 years, all key performance indicators to formally recognize ancestral domains achieved all its targets except for the registration/awarding of the targeted approved CADT.

As of 2015, a total of 12 CADTs was approved out of the 55 Ancestral Domains in Region 02 with a total area of 1.03 million hectares or 67.37 percent of the total land area (1.53 million hectares) of the 55 ADs. Still on process are 7 CADTs with a total area of 82,608.67 hectares and 35 ADs with ongoing applications by IPs/ICCs.

Table 11.1 OFWs/Beneficiaries Covered Under the Various Scholarship Programs, Region 02, 2012-2015

INDICATOR	BASELINE		2013		2014		2015	
	YEAR	VALUE	Target	Actual	Target	Actual	Target	Actual
Skills for Employment Scholarship Program	2012	20	49	190	110	44	212	77
OFW Dependents Scholarship Program	2012	75	208	108	162	295	60	68
Education cum Livelihood Assistance Program (for Children & Surviving Spouse of deceased OFW)	2012	8	43	43	52	42	70	53
Education for Development Scholarship Program	2012	5	2	2	-	no qualifiers	1	2
Congressional Migrant Workers Scholarship Program	2012	2	46	46	-	56	-	18

Source: OWWA 02

Strategic Framework

Aligned with the PDP 2017-2022, the RDP 2017-2022 aims to build socioeconomic resilience of individuals and families by reducing their vulnerability to various

risks and disasters through a universal and transformative social protection for all Filipinos.

Targets

Table 11.2 Plan Targets to Reduce Vulnerability of Individuals and Families by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Percentage of population covered by PhilHealth Insurance (%)	2016	100	100
Percentage of out-of-pocket expenditure over total health expenditure (%)	2016	TBD	TBD
Proportion of senior citizens covered by social pension (%)	2016	TBD	100
Percentage of SSS regular members over the total number of workers employed by private sector	2016	TBD	TBD
Percentage of OFW membership to OWWA over total documented OFWs increased (%)	2016	100	100
Proportion of children aged 5-17 years engaged in child labor, by sex and age	2016	TBD	TBD
Number of deaths due to disaster per 100,000 population	2016	TBD	TBD
Number of missing persons due to disaster per 100,000 population	2016	TBD	TBD
Emergency Shelter assistance provided	2016	17,819	130,995

Source: PhilHealth RO 2, OWWA, PSA 02, POPCOM 02, DSWD 02

Strategies

To achieve the goal of a universal and transformative social protection for all Filipinos, the strategies shall focus on social protection programs for the vulnerable groups (See Figure 11.1).

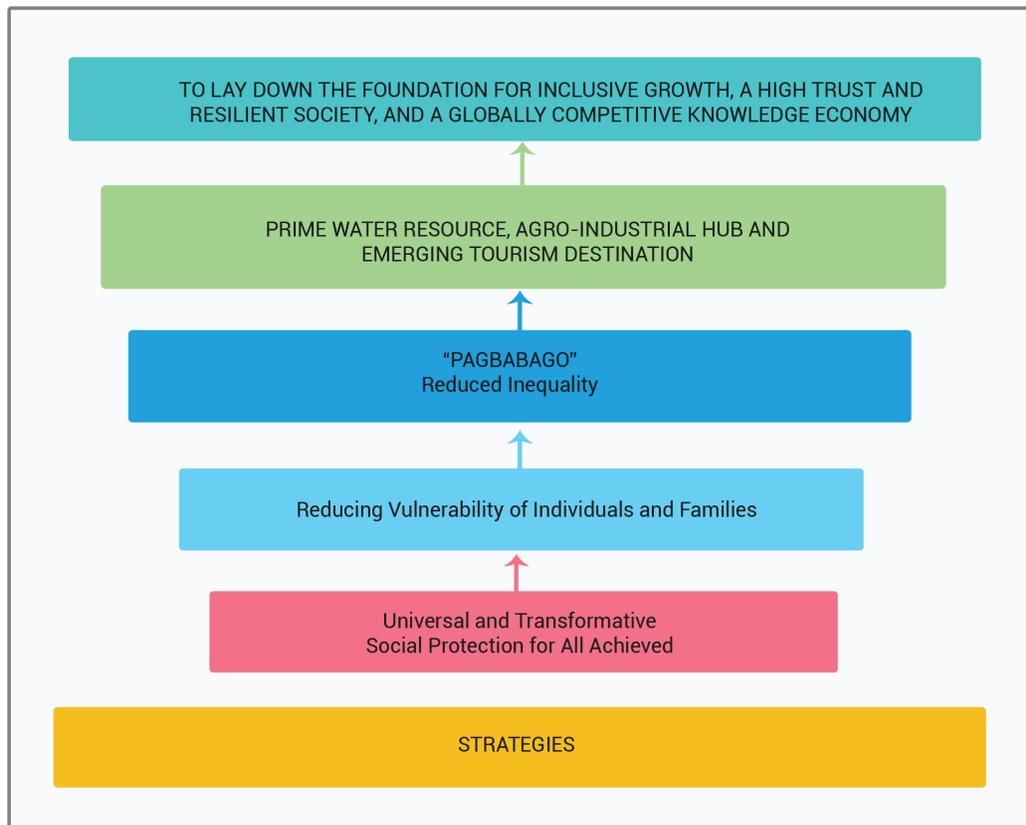
Intermediate Outcome 1: Universal and transformative social protection for all achieved

Close monitoring of the level of well-being of 4P beneficiaries. The region will ensure a regular periodic monitoring on the education and health compliance of the beneficiaries. Households who will be enrolled under the program will be provided with modular capacity building package on basic parenting education with sessions that include values formation and responsible parenthood, continuous health and nutrition education, environmental sanitation and safety, home management,

functional and financial literacy for women, gender sensitivity and awareness, micro-enterprise development and leadership development especially for women heads of households. Attendance to and completion of the capacity building package shall serve as a major responsibility on the part of the beneficiaries and will serve as the basic requirement for the continuity of the cash grants.

Expansion of coverage of the Social Pension Program. Given the latest progress in the grant of the monthly stipend, the Social Pension Database will be updated to capture the total number of beneficiaries entitled to the program. Corresponding funds for social pension will also be given priority in order to cover ALL qualified indigent SCs. Also, the monitoring of LGUs adopting the fund transfer implementation on social pension will expedite distribution of monthly stipend of social pension beneficiaries. An impact evaluation of the social pension program will also be

Figure 11.1 Strategic Framework to Reduce Vulnerability of Individuals and Families, Region 02



conducted.

Improve social protection services for OFs. Social protection programs will be developed for the protection of OFs and their families. This will include disability, death and burial benefits, education and livelihood assistance program for OFs’ families/dependents. Repatriation-related services, family support and re-integration services will also be intensified to improve social protection of returning, repatriated and displaced OFs especially the women OFs. Programs will also be harmonized particularly the financial assistance provided by different line agencies for expatriated and returning OFs through the regional reintegration Network in order to avoid duplicity of assistance extended

thereby expand the number of OFs assisted.

The membership of OFs to the SSS is still voluntary in nature. The SSS will advocate the importance of social security among OFs and make remittance centers accessible and remittance cost affordable to encourage more OFs to be covered with social security.

Expedite awarding/titling and registration of approved Certificate of Ancestral Domain Titles. Processing of documents for awarding of CADTs will be streamlined to address the delays (process of segregation /exclusion of titled properties inside the surveyed ancestral domain) and speed up the requests for projection and verification of ancestral domain survey plans.

The institutional issues (DAR, DENR) and indifferences of government agencies on request of other agencies in the issuance of certificate of ancestral domains will

be resolved. This would require the implementation of Joint DAR-DENR-LRA-NCIP Administrative Order No. 01, s.2012.

Legislative Agenda

To complement the strategies identified, legislative action will be sought in support of the goal of achieving universal and transformative social protection program for all Filipinos.

Table 11.3 Supported Legislative Agenda on Reducing the Vulnerability of Individuals and Families, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Philippine Adoption Act for Abandoned and Neglected Children and for Children with Special Needs	Improve the quality of foster care for abandoned and neglected children, particularly those with special needs
Anti-Senior Citizen Abuse Act	Protect senior citizens from all forms of abuse.
An Act Establishing a Disability Support Trust Fund	Support PWDs in terms of rehabilitation services, appropriate assistive devices, technology, education, employment, and other disability support services. It will also involve capacity-building of LGUs in provision of services for PWDs and build their own trust fund.
Amend Republic Act 8972 on Benefits and Privileges to Solo Parents and their Children	Increase the benefit package for solo parents.
Social security initiatives	Review the SSS Charter to ensure its long-term viability.
Amend Accessibility Law (BP Blg. 344)	Include information, communication, and technology.
Unemployment insurance or involuntary separation benefit system	Provide meaningful jobs, guarantee income security during sudden unemployment, and provide financial assistance linked to active labor market programs.
Subsidy on social insurance for the informal sector	Provide social insurance for the informal sector workers to safeguard and incentivize them by registering in government programs.
Extension of maternity leave benefits	Improve and harmonize the existing maternity benefits including increasing the leave period from 60 to 78 days to at least 100 days for women in both public service and private sector.
Mandatory Establishment of Women-Child Friendly Spaces in All Evacuation Centers in the Country	Protect and promote the general welfare of women and children especially during times of disaster.
Evacuation Center Act	Establish permanent and typhoon-resilient evacuation centers with the necessary facilities to avoid the practice of using classrooms as evacuation centers during calamities. Centers should also have PWD-friendly and elderly-friendly spaces. The NDRRMC will be in charge of identifying which municipalities and cities will be given priority.

Source: Chapter 11 of the PDP 2017-2022

12

Building Safe
and Secure
Communities

Building Safe and Secure Communities

One of the government's priorities is to ensure that all have access to safe and secure shelter, this as one of the aspirations of the Filipinos in the next 25 years to have a "*Maginhawa*" *na pamumuhay*. As the economy grows, appropriate programs, measures and policies should be appropriately in place in terms of housing and urban development planning in order to prevent risks to health, life, property and environment especially with the unexpected occurrences of extreme natural hazards and disaster. Through the strategies specified in this Chapter, the socio-economic resilience of the community including the marginalized sectors shall be pursued.

Assessment and Challenges

Recognized and formalized ancestral domains. The Indigenous Peoples in Region 02 claim ownership of their lands by getting formal recognition of ownership through the acquisition of a certificate of ancestral domain title (CADT). The process of which includes social preparation, conduct of perimeter survey, approval and finally the registration and awarding of CADTs. Through the past 3 years, all key performance indicators to formally recognize ancestral domains achieved all its targets except for the registration/awarding of the targeted approved CADT.

As of 2015, a total of 12 CADTs was approved out of the 55 Ancestral Domains in Region 02 with a total area of 1.03 million hectares or 67.37 percent of the total land area (1.53 million hectares) of the 55 ADs. Still on process are 7 CADTs with a total area of 82,608.67 hectares and 35 ADs with ongoing applications by IPs/ICCs. Five of the twelve approved CADTs were already registered.

Modest gains in shelter security services.

As of 2016, a total of forty six sites were identified for socialized housing purposes by the National Housing Authority with the concerned LGUs out of the 53 LGUs assisted in site identification. There were 46 projects for resettlement assistance program with a total of 7,649 lots/units generated. Seventy-two LGUs were provided assistance related to their local shelter plan formulation. Nonetheless, there was no project for housing loan program of the LGUs. The Social Housing Finance Corporation (SHFC) assisted 28,273 households amounting to PhP66.89 million under the Home Material Assistance Program (HOMA). The SHFC also completed 18 projects of the community mortgage program costing PhP194.55Million with a total of 3,421 beneficiaries.

In 73 LGUs assessed as of December, 2016, a total of 83,706 housing backlog (Table 12.1) was generated by the Housing and Urban Development Coordinating Council (HUDCC) during the conduct of technical

Table 12.1 Summary of Housing Need Per Province, Region 02, as of December 2016

No. of Cities/Municipalities	Province	Housing Backlog		
		Doubled-up Household	Displaced Households	Homeless
6/6	Quirino	639	1,226	0
14/15	Nueva Vizcaya	5,908	12,131	339
32/37	Isabela	13,499	27,612	1,767
21/29	Cagayan	5,157	15,341	87
0/6	Batanes			
73/93	Total	25,203	56,310	2,193

Source: HUDCC

assistance to LGUs on Local Shelter Plan (LSP) formulation. Displaced households are those whose houses are situated in danger areas, along the riverbanks and affected by road-right-of-way.

LGUs assisted for the preparation of Comprehensive Land Use Plans (CLUPs) almost tripled as planned. The technical assistance rendered was more on the

preparation of land use planning and zoning ordinance documents. Thirty-nine LGUs are yet to update their CLUPs. LGUs will endeavor for the completion of the CLUPs integrating Disaster Risk Reduction/Climate Change Adaptation and prioritize the identification of resettlement areas in municipalities especially those that are highly vulnerable to flooding and other natural calamities.

Strategic Framework

For the period 2017-2022, the housing sector shall target the following tables which includes housing assistances, access

to financing and other housing needs of the communities:

Targets

Table 12.2 Regional Shelter Program Direct Housing Assistance Targets, Region 02, 2017-2022

Program	Agency	2017-2022
Resettlement for ISFs	NHA 2	14
Community Mortgage Program (take-out)	SHFC-NL	16
End-User Financing	HDMF	647

Source: NHA 02, HUDCC

Table 12.3 Plan Target to Build Safe and Secure Communities by 2022, Region 02

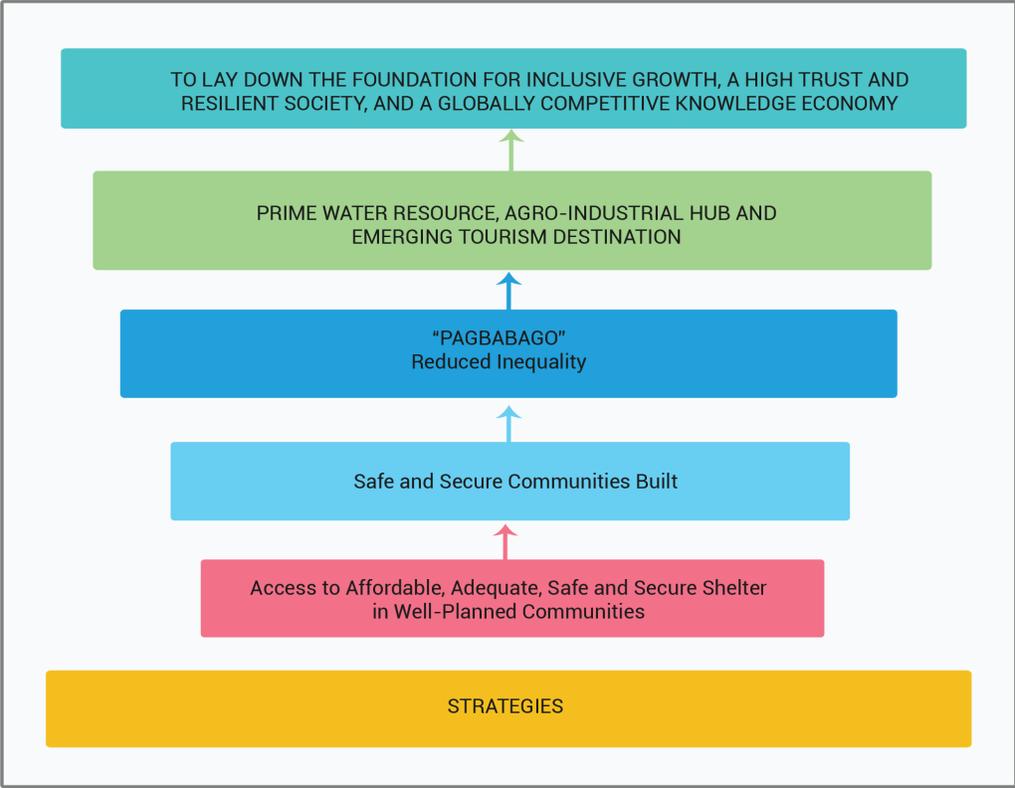
Program	Baseline (2016)	End-of-Plan Target
Access to affordable, adequate, safe and secure shelter in well-planned communities		
Proportion of informal settlements or inadequate housing decreased	12.2	12
Proportion of socialized housing target to housing needs improved	8	10

Source: HUDCC

Strategies

To achieve the targets for building safe and secure communities, the following strategies will have to be implemented:

Figure 12.1 Strategic Framework to Build Safe and Secure Communities, Region 02



Formulation of DRR-enhanced CLUP completed by all LGUs. The Housing and Land Use Regulatory Board (HLURB) will continue to capacitate the LGUs on

the new requirements for the enhanced CLUP guidelines. The support of the LGUs particularly on fund support for the conduct of trainings is very much required.

Identification of resettlement areas and sites for socialized housing. Resettlement areas will be properly identified in municipalities especially those that are highly vulnerable to flooding and other natural calamities. Feasibility of resettlement areas to livelihood sources will have to be considered through the assistance of the concerned LGUs. Identified resettlement areas will need further evaluation as to its suitability since some of the identified areas are within the forest lands, agricultural

and privately-owned lands still subject for negotiation with the owners.

LSP Formulation. The HUDCC will continue the provision of technical assistance to the remaining 20 LGUs on LSP formulation in order to assess their housing needs. The support and cooperation of the LGUs is very important especially on cost-sharing scheme for the conduct of trainings. The personal participation of the Local Chief Executives is very much encouraged.

Legislative Agenda

To complement the strategies identified, the region adopts the PDP 2017-2022 legislative action that will be sought in support of the

goal of building safe and secure shelter in well-planned communities.

Table 12.4 Supported Legislative Agenda on Building Safe and Secure Communities, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Creation of the Department of Housing and Urban Development (DHUD)	Integrate all housing and urban development policies, plans, programs, and projects. This department will be the sole planning and policy-making, regulatory, program coordination, and performance-monitoring entity of the NSP.
Creation of the Social Housing Development Finance Corporation (SHDFC)	Strengthen the role of the previously created SHFC (by virtue of Executive Order No. 272, s. 2007) by redefining the powers and functions of the President, Board of Directors and of the Corporation, providing incentives, and enabling the SHDFC to enter into loans and/ or issue bonds and other debentures to raise funds for housing construction.
Passage of the National Land Use Act (NaLUA)	Establish a national land use framework that will define the indicative priorities for land utilization and allocation across residential, infrastructure, agricultural and protective uses and integrate efforts, monitor developments related to land use, and evolve policies, regulations and directions of land use planning processes.
Passage of the Comprehensive and Integrated Shelter Finance Act (CISFA) II	Enact the continuation of CISFA or RA 7835, to increase budget appropriation for the socialized housing program of the government, and significantly increase the provision of housing and tenure security to poor informal settlers in order to attain the SDGs.
Passage of the Idle Lands Tax	Promote the productive use of land by rationalizing taxation of idle lands, thereby repealing sections of the RA 7160 otherwise known as the Local Government Code (LGC) of 1991.
Creation of Local Housing Boards (LHBs) in every city/ municipality	Strengthen the roles of the LGUs in the provision of shelter to the households through the mandatory establishment of local housing boards in every city and municipality.

Source: Chapter 12 of PDP 2017-2022

PART IV

**INCREASING
GROWTH POTENTIAL
("PATULOY NA
PAG-UNLAD")**



13

Reaching for the
Demographic
Dividend

Reaching for the Demographic Dividend

The likelihood of achieving the desired increase in potential growth can be assured when all women and men, girls and boys, enjoy their rights to expand their capabilities, secure their reproductive health, and able to find decent work in order to contribute to economic growth. It is imperative that we know the size, sex and age structure of the region's present and future generation. Besides good health, quality education and decent employment, a lower proportion of young dependents to the working age population provides an opportunity for optimizing the potentials brought by demographic dividend. Few children per household will lead to large share of investment per child, more freedom for women to be gainfully employed and more savings generated for old age. This ideal scenario will help the region contribute to the national long-term vision of having a prosperous, predominantly middle-class society where there is equal opportunity and no one is poor.

Assessment and Challenges

The population of Region 02 continues to grow in numbers but at a slower rate.

The 2015 population of the region was recorded at 3,451,410 based on the 2015 Census of Population (POPCEN 2015). This number is higher by 222,247 and by 638,251 compared to the 2010 and 2000 population, respectively.

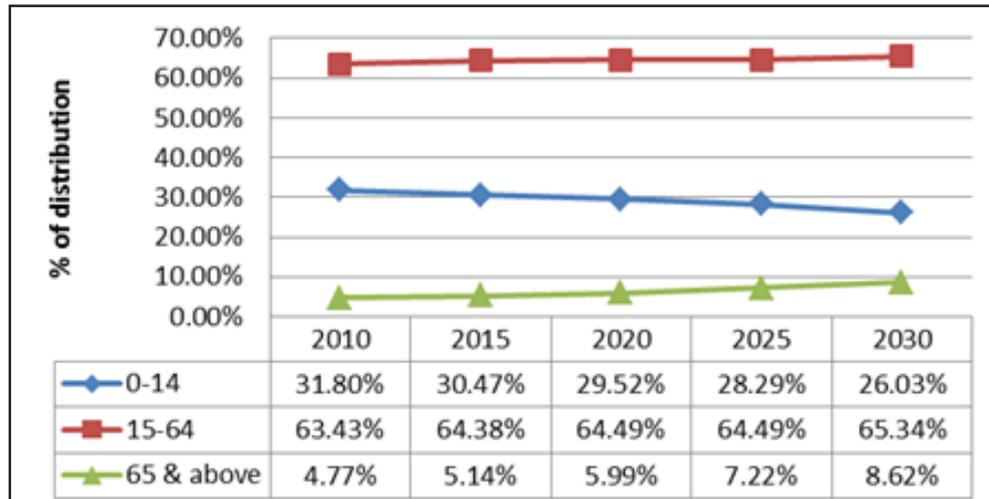
On the average, the population of Region 02 increased by 1.27 percent annually during the period 2010 to 2015. The region's population growth rate is on a decreasing trend when compared to the period 2000 to 2010 (see also Chapters 2 and 3).

Table 13.1 Population and Annual Growth Rates for the Philippines and Region 02 (Based on the 2000, 2010, 2015 Census)

CENSUS YEAR	Total Population (in Millions)			Population Growth Rate (%)		
	01-May-00	01-May-10	01-Aug-15	2000-2010	2010-2015	2000-2015
Region 02	2.81	3.23	3.45	1.39	1.27	1.35
Philippines	76.51	92.34	100.98	1.90	1.72	1.84

Source: PSA 02

Figure 13.1 Percentage distribution of 2010 Census-Based Population Projection by Age Group, Region 02, 2010-2030



Source: PSA 02

The proportion of dependents to the working age is on the downtrend. In 2015, the region’s population aged 65 and above comprised about 5 percent of the total population, those aged 15-64 (working age) was 64 percent of the total population while those aged 0-14 represented about 30 percent of the total population. Thirty-five percent of the region’s population depend for financial support from the working-age adults. The increasing proportion of working age (Figure 13.1) offers prospect of demographic dividend if all the necessary population and socio-economic preconditions are put in place.

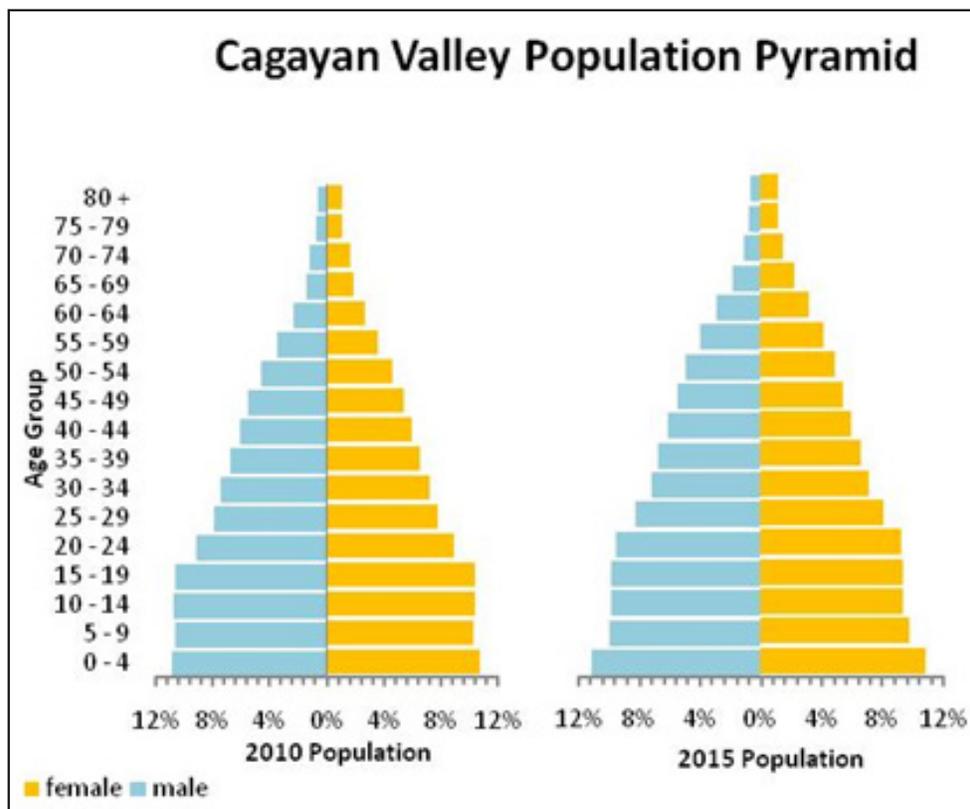
Young Filipinos continue to form the base of the region’s population age structure. The 2015 Population Census show that 30.47 percent or about 1.07 Million of the region’s total population were below 15 years of age, 64.38 percent (2.2 Million) were 15 to 64 years old and 5.1 percent (179,900) were 65 years old and above. Forty-eight percent of those below 15 years old were female. There were about 47 young dependents (below 15 years old) and 8 old dependents (65 years and above) for every

100 persons of working age (15 to 64 years old). The percentage of productive work force increased from 63.43 percent in 2010 to 64.38 percent in 2015. Compared to the 2010 Census of Population, the number of young and old dependents decreased by 3 and 1 respectively. Further, having a young population means a continuing increase in population due to the large cohorts of young women who will soon enter the childbearing years and contribute to the fertility level in the region.

Fertility rate is on the decline. While infant and under five mortality in the region is low compared to the MDG targets, the number of live births in 2014 decreased by 1,300 from the 2013 data. A total of 62,320 and 63,620 live births were recorded for 2014 and 2013, respectively. The percentage of deliveries in a health facility increased to 50.6 percent as of 2013, this is higher by 21.7 percentage points compared to the 28.9 percent in 2008 based on the National Demographic and Health Survey (NDHS).

Families had more children than the intended number. The result of the 2013

Figure 13.2 Population Distribution by Age Group and Sex: Cagayan Valley, 2010 and 2015



Source: PSA 02

NDHS showed one in ten young Filipino Women age 15 to 19 was already a mother or pregnant with first child. The increasing incidence of teenage pregnancies contributes to the rapid growth of population and also increases the possibilities of health risks for both the child and the teenage mother. Filipino women have children more than their intended number. Poor women actually have 5 but wanted only 3 children. A Filipino woman is expected to have 3 children within her child-bearing years. However, under medium fertility assumption, the replacement fertility level of 2.1 children will be achieved within the 2035-2040 period. Under low fertility assumption, such replacement fertility level of 2.1 will start to happen as early as 2020.

As of 2013 NDHS, Region 02 has a fertility replacement level of 3.2.

Low contraceptive use and high unmet need for family planning. The region's 2015 contraceptive prevalence rate for all methods of 62.03 percent is below the regional target of 63 percent and MDG target of 65 percent. The Commission on Population's Online RFPF Reporting System as of December 31, 2016 showed a total of 5,817 couples with unmet need for family planning.

The 2013 NDHS reveals that fertility is considerably higher in rural areas (3.5 births per woman) than in urban areas (2.6 births per woman). Factors such as

better education, higher status of women, better access to health and family planning information and services are evident reasons. The total fertility rate in Cagayan Valley Region is recorded at 3.2 while the mean number of children ever born to women age 40-49 is at 3.7. This means that fertility have increased by 0.5.

Demographic dividend and investments in voluntary family planning is non-negotiable. However, with the issuance of the Temporary Restraining Order on family planning commodities in June 17, 2015 by the Supreme Court, government investment on procured FP commodities will be wasted. This will also deprive around 9,754 couples in the region with FP needs.

The emerging operational issues on the RPRH policies hinder the full implementation of the RPRH law, these includes human rights issues on the access to sexual and reproductive health and culture.

As prescribed by the Philippine's 1991 Local Government Code, the LGUs are allocated with their share of the national taxes through

the Internal revenue Allotment (IRA) considering three factors with 50% percent weight given to population. It is therefore an disincentive for LGUs to promote the RPRH Law as the more population the LGU has, the more funds it gets through the IRA to deliver services to its people.

Another crucial factor on population management is internal migration as it affects various population and development variables such as housing, food security, employment, education, health, among others. Region 02 Migration data from 2010 Census of Population and Households show that there were 38.98 percent (23,000 HH) long-distance movers or people who lived in a different province in 2005. Persons who resided in 2005 in a different city or municipality but within the same province accounted for 49.15 percent (29,000 HH). The remaining 7,000 HH were immigrants to foreign countries. Migration will certainly have an implication in the region's population growth. The attainment of the region's goal as an emerging tourism destination may attract more immigrants either as an addition to the labor force or the aging population.

STRATEGIC FRAMEWORK

The overall objective of this Plan chapter is to lay down a solid foundation for more inclusive growth, a high trust and resilient society and a globally competitive knowledge economy by increasing potential growth through a maximized demographic dividend.

Large number of young people can represent great economic potential, but only if families and the government can adequately invest in their health and education (see Chapter 10) and stimulate new economic opportunities for them and acquire decent employment (see Chapters 8 and 9)

Targets

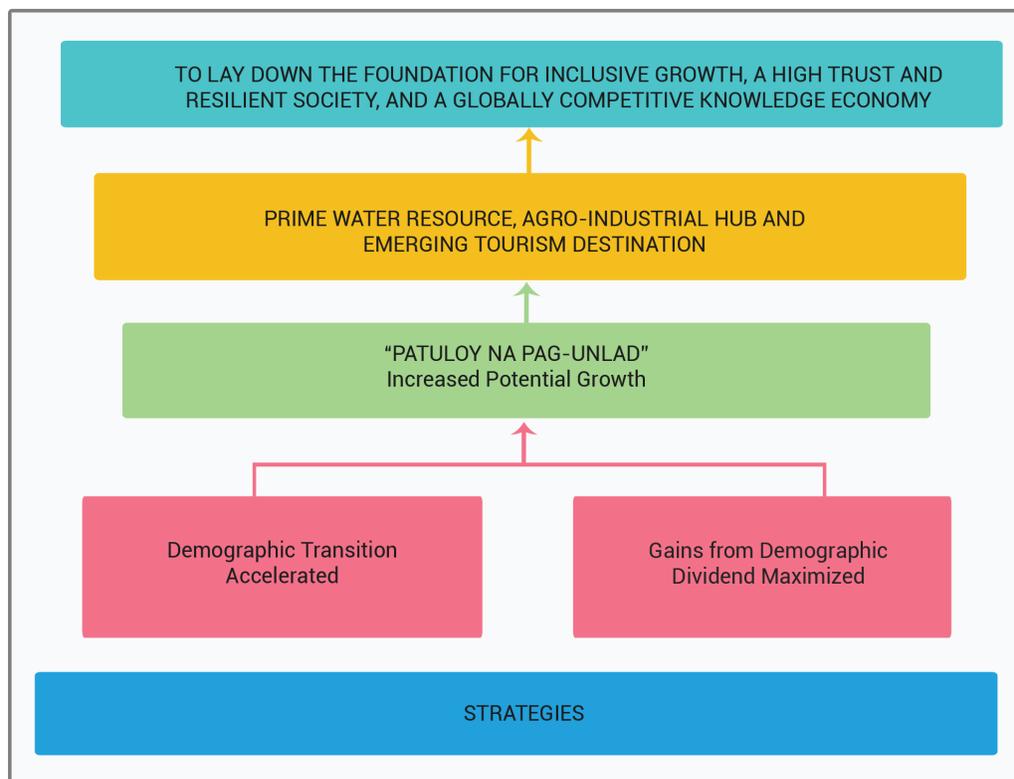
Table 13.2 Plan Targets to Reach for the Demographic Dividend by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Reduce crude death rate	2016	TBD	TBD
Reduced total fertility rate (children)	2016	3.2	2.4
Reduced proportion of adolescent who have begun childbearing	2016	36.5	29.5
Increased contraceptive prevalence rate for modern FP	2016	60.25	66
Increased contraceptive prevalence rate for modern FP	2016	56.59	<52
Under-five mortality rate per 100,000 live births	2016	5.94	5.02
Prevalence of stunting among children under 5	2016	29	26.5
Reduced youth employment	2016	TBD	TBD

Source: DOH 02

Strategies

Table 13.3 Strategic Framework to Reach for the Demographic Dividend, Region 02



Full implementation of the RPRH law to reduce fertility. The objective is to attain zero unmet need for modern family planning in order to avoid unwanted pregnancies. This entails the widening of access to modern FP services especially among the poor and those in Geographically Isolated and Disadvantaged Areas (events-based FP provision). To achieve demographic transition, the region will focus on providing women in reproductive age with voluntary family planning information and services, educate men and women on use of modern FP methods to eliminate myths/misconceptions about FP methods.

Resolve Gender issues on Family planning. Women are unable to choose the number, timing, and spacing of their children due to gender issues. There is a need to intensify awareness on gender equality among families thus the resolution of gender issues on FP. When parents have fewer children, they are better able—and more willing—to invest in their children's health, education, and well-being.

Intensify Information & Education Campaign on RPRH including Parenting Education and conduct regular monitoring of LGUs' implementation of RPRH law

Reduce teenage pregnancies and make teenage parents productive. Priority will be given to secondary education especially among girls. Research shows that primary education helps the youth the basic skills of reading and writing but secondary schools helps delay marriage and pregnancy and gives young people the skills and confidence to be effective in the labor force. It is just

proper that a comprehensive sexuality education in school curriculum is integrated including Alternative Learning System for out of school youth.

Support system will also be made available for the teenage parents in terms of education and reproductive health in order to make them economically productive citizens and avoid the incidence of poverty in their generation.

Access of adolescents to reproductive health services including maternal and FP services for young parents will be improved. The point-of-care program of Philhealth for pregnant women will be sustained. The LGUs will be encouraged to intensify their Adolescent Health and Youth Development programs to empower the youth and make them more productive.

Encourage participation/involvement of CSO & community support to population management programs. The government will provide budget support to Civil Service Organizations assisting in the RPRH law implementation to sustain their RPRH and population management-related programs. Procedures will be reviewed towards streamlining requirements for CSOs to enter into partnerships with government agencies in the implementation of the RPRH law, particularly in the provision of FP information and services.

Legislative Agenda

Legislative support to the PDP 2017-2022-identified agenda is supported by the region.

Table 13.3 Supported Legislative Agenda on Reaching for the Demographic Dividend, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Institutionalization of Local Population and Development Policy	There is a need to have a cohesive policy in addressing population and development at the local level.
National Policy on the Prevention of Teenage Pregnancy	EThe alarming levels of teenage pregnancy requires a comprehensive policy to address the problem at all levels of government.
Strengthening of the National Population and Development Policy	A comprehensive policy for population and development will address the fragmentation of government efforts and initiatives for population and development. It will ensure that population and development is mainstreamed.

Source: Chapter 13 of the PDP 2017-2022

14

Vigorously
Advancing Science,
Technology, and
Innovation

Vigorously Advancing Science, Technology, and Innovation

Science, technology and innovation (STI) is one of the key drivers of productivity, growth, and advancement. It also serves as an effective strategy to improve global competitiveness amidst the new challenges and trends especially global trade, population growth, urbanization and climate change.

While the Cagayan Valley is among the lagging regions of the country in terms of research and development (R&D) expenditures based from 2013 PSA data, it will vigorously advocate for the use of STI to enhance countryside development, sustained economic growth and competitiveness especially of the MSMEs and increase resiliency of the regional community during the Plan period.

Assessment and Challenges

Cagayan Valley has low R&D expenditures. Based from the 2013 data of the Department of Science and Technology (DOST) Survey on Research and Development (R&D) Expenditures and Human Resources (SRDEHR), Cagayan Valley ranked 5th and 7th among the regions with lowest R&D expenditures (0.6% share) and number of researchers (2.5% share), respectively. Most R&D activities in the country are concentrated in few regions such as NCR, CALABARZON and Central Luzon which comprise of about 85 percent of the country's total R&D expenditure and 66 percent in terms of the total number of researchers. The low ranking of the region was due to the centralized nature of the R&D initiatives in the country. Also, most of these R&D centers are located in the regions with relatively advanced levels of development.

The DOST as the agency mandated “to provide central direction, leadership and coordination of scientific and technological efforts and ensure that the results therefrom are geared and utilized in areas

of maximum economic and social benefits for the people” is on top of the Science, Technology, Innovation (STI) initiatives in the country. On the other hand, the regional offices serve as focal points for the planning and implementation of Science and Technology (S&T) programs and projects in their respective regions in consonance with the national S&T Plan. They provide S&T services to the local populace and coordinate with other government agencies and other stakeholders on S&T matters.

The Regional Research and Development Agenda (RRDA), 2016-2022 as framework for R&D initiatives. With the expected updating of the region's Harmonized RRDA, research initiatives may be improved. The RRDA is a document which identifies sectoral priority research areas, namely, economic development, social development, infrastructure development, development administration (DevAd), and environment and natural resources (ENR). These researches are being conducted by research consortia, NGOs, and HEIs in the region. As of 2016, among the researches lined up

for the period, percentage of completed projects under economic development was about 17 percent (6/35); 28.6 percent for social development (6/21); 40 percent for infrastructure (4/10); 22 percent for DevAd; and none for ENR.

Regional platforms are in place to promote STI in spurring economic development. DOST 02 continued to lead the promotion of S&T as key strategy in in pursuit of inclusive growth. Major S&T programs in technology transfer include the Small Enterprise Technology Upgrading Program (SETUP). It serves as the flagship program to upgrade the productivity and competitiveness of the Micro, Small, and Medium Enterprises (MSMEs) in Cagayan Valley. Under this program, several technological interventions have been provided to MSMEs, LGUs and academe such as upgrading of equipment and facilities, time and motion analysis, energy balance, product label design and packaging, technical consultancy services on food safety and standardization, good manufacturing practices, cleaner production technology, energy audit, among others. From 2013 to 2015, about 1,339 technological interventions (or a total of 151 firms) were established which generated a gross sales of 1.652 Million and generated an employment of 3,891.

Likewise, individuals, firms and LGUs have been assisted with S&T services such as: a) Regional Standards and Testing Laboratory for Microbiological and Chemical Testing and the Regional Metrology Laboratory; b) packaging and labeling designs; c) technical consultancy services under the Manufacturing Productivity Extension Program (MPEX), Consultancy for Agricultural Productivity Assistance (CAPE), Cleaner Production Technology (CPT)m and energy audit; d) technology training/clinic/for a; e) S&T scholarship; f) S&T information and promotion through quad media, celebration of the regional S&T

week, S&T fairs, among others; and g) S&T networks and linkages (i.e., the Cagayan Valley Industry and Energy Research and Development Consortium (CVIERDEC), the Cagayan Valley Health Research and Development Consortium (CVHRDC), the Cagayan Valley Agriculture and Resources Research and Development Consortium (CVARRD); the Cagayan Valley Nutrition Communication Network (CV-NUTRICOMNET), the Equipment Manufacturing Cluster Region 02 (EMC-RO2), and the Cagayan Valley Laboratory Consortium (CLVC)).

DOST 02 is also actively involved in implementing national strategic programs addressing socio-economic concerns. In support to stimulating innovation and development of processed food in the region, the Food Innovation Center (FIC) is being maintained. The FIC, which is located at Cagayan State University was launched in 2014 under the High Impact Technology Solution (HITS) project. To date, a total of 78 innovative products have been produced.

Another project that aims to boost economic activity is the oneStore.ph. It is an e-commerce platform that caters to local MSMEs in marketing their products in the local and global markets.

To empower and increase resiliency of the communities, the Community Empowerment thru Science and Technology (CEST) is being implemented through interventions in health and nutrition, water and sanitation, basic education and literary, livelihood/economic development, and disaster risk reduction and climate change adaptation. Also, other programs addressing health concerns include the National Dengue Vector Surveillance Program, and Ceramics Water Filter (CWF) technology to ensure safe drinking water in rural areas.

Furthermore, to enhance the capability of the region to respond to disaster risk

and climate change, the DOST 02 also implements program on deployment of early warning systems (DEWS) to include Automatic Rain Gauges (ARGs) and Water Level Monitoring Stations (WLMS) to monitor parameters such as water level, rainfall, and air pressure along tributaries of the Cagayan River Basin and other minor river basins in the region.

Operationalization of the Cagayan Valley Integrated Agricultural Laboratory (CVIAL). The start of operation of the CVIAL by the Department of Agriculture Regional Field Office 02 (DA-RFO 02) in early 2016 is also expected to strengthen the sector by preparing, educating, capacitating, and equipping the actors or stakeholders with right technologies and Good Agricultural Practices (GAP) to improve food production practices. The CVIAL serves as “one stop shop” harmonized laboratory, which aim to increase production and ensure quality and bio- safety of agricultural products. The CVIAL will also support the existing R&D program of the DA-RFO 02.

STI changes rapidly over time and given the region’s current expenditure on R&D and even with the current initiative at hand, many inter-linked challenges still need to be faced by the region to fully realize STI benefits.

Lack of financial support to undertake research activities and commercialization of developed technologies. Besides low budget allocation for research activities in the region, there is low incentive offered/ provided to researchers that would attract them to conduct researches that are responsive to local issues and needs. However, ironically, there is also lack of support provided in the commercialization of developed technologies that can be adopted to improve local productivity.

Low adoption and application of technology to advance the MSME,

agriculture and fisheries sector. One of the major factors hindering the success of the STI is the resistance of the intended beneficiaries/applicators. In the region, while there are available technologies in the market, adoption/application is still low due to several factors such as lack of right information, financial constraints, uncertainty of the results on the application of the technology, lack of technical know-how, among others.

Low absorptive capacity of institutions. Most research institutions at the regional level also have low absorptive capacity resulting to low research and innovation productivity. This can be attributed to the lack of capable human resource and lack of needed facilities and equipment that can be used to undertake the research. Some problems are also related to lack of historical/baseline data and issues which are beyond researchers control (e.g., weather, stakeholders cooperation, etc.).

Weak Public-Private-People Partnership and technology transfer. There is weak partnership between the generators and adopters of the technology which affect the utility of the available research and technologies. Most often, research agenda are found to be unresponsive to the needs of the local industry which make it difficult to commercialize and adopt.

Need to harmonize RDE efforts of agencies/institutions Existing efforts of all government funding agencies and R&D institutions should be harmonized to avoid duplication of efforts instead complementation of activities to better serve the needs of the local industry.

Inadequate infrastructure support. The level of Information Communication Technology (ICT) in the region, which is recognized as tool in driving STI ecosystem is also far at par with other regions and thus more work needs to be done in this area.

Strategic Framework

The region being the focal point for the planning and implementation of S&T programs and projects consistent with the national S&T plan, plays an important role in achieving the desired outcomes of the STI sector on: (a) promoting and accelerating technology adoption; and (b) stimulating innovation.

Targets

For the six-year period, the region aims to achieve the targets presented in the Table 14.1.

Table 14.1 Plan Targets to Leverage Science, Technology, and Innovation by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Chapter Outcome 1: Technology adoption promoted and accelerated			
No. of technology interventions under SETUP increased	2016	50	210
No. of new MSMEs enrolled in SETUP increased	2016	30	100
No. of households empowered thru CEST increased	2016	50	120
No of Innovation Hubs established increased	2016	1 (EMC - Isabela)	6
Chapter Outcome 2: Innovation stimulated			
No. S&T Promotion Activities conducted (S&T Fairs, Caravan, Centrum, Fora etc.) increased	2016	50	350
No. of R&D conducted thru consortia increased	2016	5	30
No. of Balik Scientists deployed increased	2016	-	5
No. of emerging technologies adopted (ICT, biotech, nanotech etc.) increased	2016	1	1
No. of products uploaded thru OneSStore increased	2016	50	350

Source: DOST 02

Strategies

The goal of increasing potential growth of the region will be pursued by promoting and accelerating technology adoption and stimulating innovation as shown in Figure 14.1. To achieve the chapter and sub-chapter outcomes outlined, the following are the strategies that will be pursued:

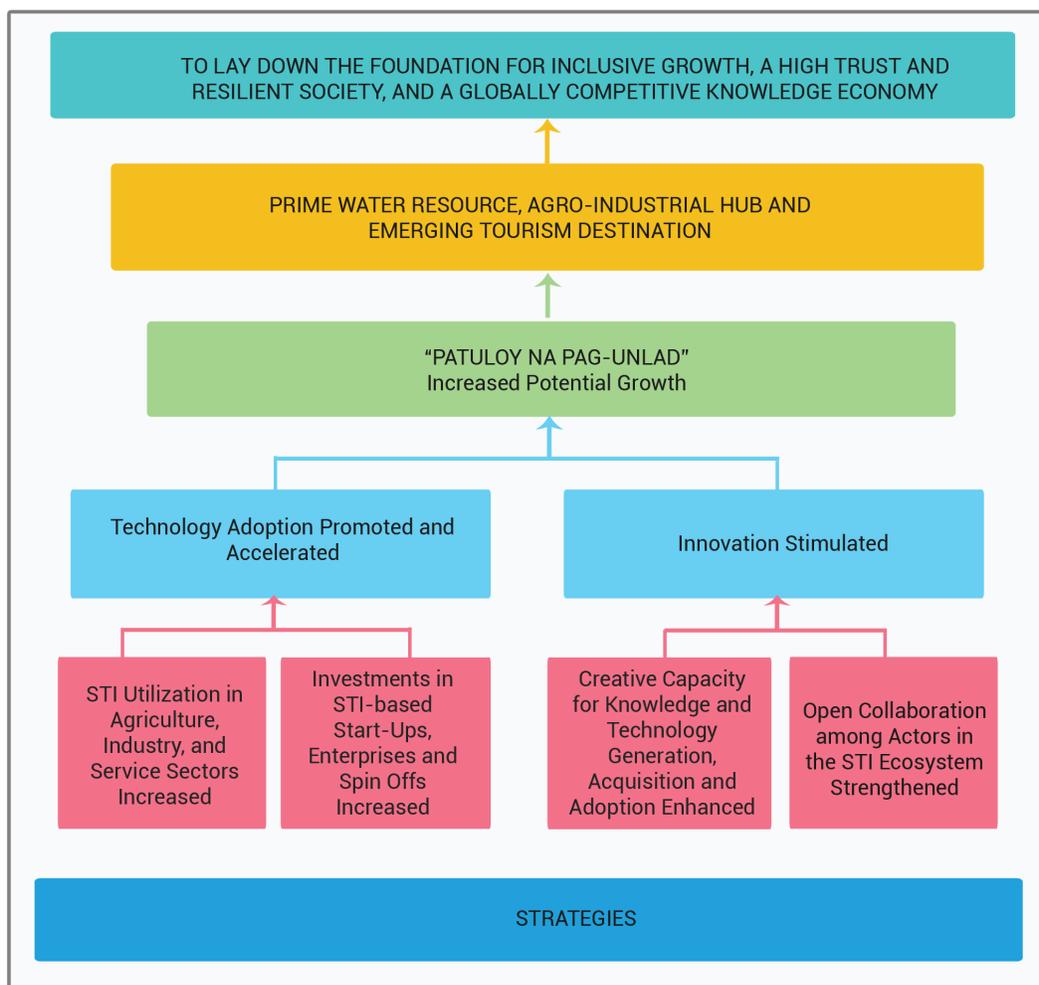
Chapter Outcome A: Technology adoption promoted and accelerated

Under this outcome, two intermediate outcomes will be attained: (1) STI utilization in agriculture, industry, and services sectors increased; and (2) investments in STI-based start-ups, enterprises and spin-offs increased.

Intermediate Outcome 1: STI utilization in agriculture, industry, and services sectors increased

Improve mechanism for technological transfer, commercialization, and utilization by proactively involving all

Figure 14.1 Strategic Framework to Leverage Science, Technology, and Innovation, Region 02



government funding agencies (e.g., DOLE, DTI) and R&D institutes. Public-private partnership will also be strengthened to encourage investors that will facilitate technology diffusion. Specialized financial schemes should be tapped to attract more technology adopters.

Ensure alignment of research works with the RRDA. All research efforts of the different HEIs (i.e., SUCs and private) and agencies will be consistent with the RRDA. Complementation of researches will be encouraged to maximize resources and benefits.

Foster STI culture through education; and capacity and awareness building activities to enrich human resource, ensure deeper appreciation, and heighten application of S&T to daily activities especially in the execution of expected outputs of the key development agencies.

Intermediate Outcome 2: Investments in STI-based start-ups, enterprises and spin-offs increased

Establish innovation/incubation hubs that will serve as platform for sharing and

showcasing effective technologies. These should be strategically located to allow easy access to users.

Provide support mechanisms for start-ups and MSMEs by providing available technologies and technical assistance.

Chapter Outcome B: Innovation stimulated

The second desired outcome on stimulated innovation has two intermediate results that need to be prioritized: (a) strengthened open collaboration among actors in the STI system; and (b) enhanced creative capacity for technology acquisition and adoption with global standard.

Intermediate Outcome 1: Open collaboration among actors in the STI ecosystem strengthened

Intensify linkages and engagements between the generators and adopters of technology to ensure that the regional research agenda is responsive to the needs of the local industry. Appropriate incentives and simplified procedures will be established to ensure smooth conduct of R&D activities.

Establish a database of researches in the region that will serve as reference to generators and adopters of technology. This will also ensure complementation and possible collaboration of research efforts.

Intermediate Outcome 2: Creative capacity for technology acquisition and adoption with global standard enhanced

Provide and improve STI infrastructure. R&D infrastructures necessary for the conduct of research and innovation will be upgraded to cope with the global standards and increase competitiveness of products and services.

Provide S&T scholarships (secondary, undergraduate and graduate). This will encourage and develop new researchers, scientists and engineers that will support creation of new products and processes for a vibrant STI ecosystem. The LGUs are also encouraged to provide support to undergraduate students' research activities.

Expand S&T services offered such as OneLab, One Expert, OneStore. Intensified awareness and capacity-building will be pursued to increase adoption and innovation for better appreciation and sustainability of technology application.

Focus and support R&D agenda. This will help the region catch up with the rapid global technological advancements. The RRDA will be regularly updated to consider national R&D priorities especially technologies that have high impact to the lives of local community. For instance, in support to the development of the eco-tourism industry, studies on carrying capacity is very essential in determining the maximum tourist arrivals that can be accommodated in the tourism sites in order to balance between economic and environmental aspects.

Legislative Agenda

The region is supportive to the priority legislative agenda identified in the same chapter of the Philippine Development Plan (PDP). The list and description of legislative agenda to support advancement and adoption in STI is presented in Table ___.

Table 14.2 Supported Legislative Agenda on Vigorously Advancing Science, Technology and Innovation, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
An Act Establishing the Science for Change Program	Achieve a higher standard of S&T, by prescribing the basic policy requirements for the promotion of S&T and comprehensively and systematically promoting policies for the progress of S&T.
An Act Strengthening the National Measurement Infrastructure System amending RA 9236, also known as the National Metrology Act of 2003 and for Other Purposes	Establish a National Metrology Institute under the DOST; provide capacity building programs through competency training to strengthen local metrology authorities; and set up a metrology training program to undertake proficiency testing, advocacy education and training on metrology.
An Act Adopting Innovation as a Vital Component of the Country's Development Policies to Drive Inclusive Development, Promote the Growth and National Competitiveness of MSMEs, and for other Purposes	Generate and scale up action in education, training, research, and development to promote the innovation and internationalization activities of MSMEs as a driver of sustainable and inclusive growth.
An Act Strengthening the Balik Scientist Program and Appropriating Funds Thereof	Strengthen the scientific and technological human resources of the academe, public institutions, and domestic corporations, through the promotion of knowledge sharing and accelerate the flow of new technologies into the country.
An Act Creating the Philippine Space Agency	Legislate a Philippine Space Development and Utilization Policy and create a Philippine Space Agency tasked with providing the country's space technology-related needs, from weather imaging to telecommunications.
An Act Providing for a Comprehensive Nuclear Regulation, Creating for the Purpose the Philippine Nuclear Regulatory Commission (PNRC), and Appropriating Funds Therefore	Legislate an independent regulatory framework that will decide on issues affecting public health and safety, protection of the environment and nuclear security and safeguards, beyond the reach of entities with self-motivated interests. The resolution of issues within an autonomous regulatory structure will generate a higher level of trust and confidence in the application of nuclear technologies. The PNRC shall exercise authority over all aspects of safety, security involving nuclear materials and other radioactive materials, facilities and radiation generating equipment.

Source: Chapter 14 of the PDP 2017-2022

PART V

**ENABLING AND
SUPPORTIVE
ECONOMIC
ENVIRONMENT**



15

Ensuring Sound
Macroeconomic
Policy

Ensuring Sound Macroeconomic Policy

The region shall endeavor to support national government's effort to build a stable, sound and supportive macroeconomic environment that is essential in fostering sustained growth and economic expansion. On the fiscal front, national and local governments shall work together to achieve a sustainable fiscal position through efficient management of revenues, and strategic allocation and management of expenditures. Public spending shall be geared towards a strong human capital formation and an environment favorable for private investments. To contribute to country's thrust on price stability, Region 02 shall optimize its production in agriculture ensuring sufficiency of food supply, and shall strengthen its monitoring and market surveillance efforts in managing inflation. The financial sector shall work towards service inclusion across all sectors with particular attention to women, marginalized and communities that are vulnerable to disasters. Finally, Cagayan Valley shall strive for agro-industrial transformation through product innovation and development that are potential for global markets while tapping MSMEs to generate quality jobs for its population.

Assessment and Challenges

Real Sector

The region's economy expanded more than a third of its size from PhP 99.84 billion in 2010 to PhP 133.86 billion in 2015. Notwithstanding, Region 02 still remains as one of the lowest contributors to the national economy among all regions across the country, capturing only 1.8 percent share of the total GDP in 2010 and 2015. Furthermore, growth in domestic production was not consistent. While the GRDP's 5.6 percent growth rate in 2010 is higher than the GDP's 3.6 percent, the region's 3.7 percent growth in 2015 is lower than the national's 5.9 percent.

On the supply side, Services sector has become the biggest contributor to regional GDP. Both Industry and Services

sectors continue to expand their share to total regional economy. Although limited in production base, share of Industry increased from 12.7 percent in 2013 to 13.2 percent in 2015. The Services sector, which constitutes half of the economy, grew from 48.5 percent to 50.2 percent during the same period. Agriculture's share declined from 38.8 percent in 2013 to 36.6 percent in 2015.

Growth is limited within a narrow range of sectors. Among the sub-sectors with the highest growth rate achieved in 2015 are Construction, Trade and RERBA, which grew at 18.1, 9.1 and 8.1 percent in 2015, respectively. Mining and quarrying fell at 18.1 percent in 2015 following a 30.6 percent increase in 2014. Manufacturing grew 13.8 and 2.4 percent, respectively, in the same years. Meanwhile, both Agriculture and Fishing suffered a contraction in 2015

posting a -0.1 percent and -6.1 percent decline, respectively, from its positive growth in 2014.

On the demand side, the region's economy was driven largely by strong household consumption. Expenditures incurred by households for goods and services account for the bulk of the GRDE, which is consistent with the national trend at 69.3 percent in 2015. This sector, however, posted a modest growth of 3.8 percent and 4.4 percent in 2014 and 2015 compared to government expenditures and gross capital formation. Despite having relatively small shares to the economy, Government Final Consumption Expenditure grew at 7.6 and 10.0 percent in 2014 and 2015, respectively. Gross Capital Formation, on the other hand, posted the fastest expansion at 21.4 and 14.0 percent in the same period, outpacing government consumption in terms of share in 2015. Contributing the biggest share in private capital spending is construction activities that saw an increase of 18.2 percent in 2015.

Fiscal Sector

On revenue generation management, national government collection posted high increases with Bureau of Internal Revenue (BIR) increasing at 10.9 and 16.7 percent in 2014 and 2015, respectively. In addition, with the upsurge of the regional transportation industry, the Land Transportation Office (LTO) posted huge collection increases at 19.9 and 22.8 percent in the same years. Meanwhile, with limited collection base, the Bureau of Customs (BOC) increased its collection mainly from vehicle importation fees in the Port of Aparri.

Overall collection efficiency of LGUs from their own local sources of revenues improved from 80.0 percent in 2013 to 87.0 percent in 2015. Real property tax collection recorded the lowest effort among all local revenue sources, which posted a significant

decline from 66.0 percent in 2013 to 58.0 percent in 2015. Other revenue sources such as Business Tax and Other Fees and Charges showed a progressive trend, with Business Enterprises exhibiting a remarkable feat in 2014 from lackluster a performance in the previous years.

Most LGUs are more than 80.0 percent Internal Revenue Allotment (IRA) dependent. Despite improvements in collection efficiency, only the Provinces of Nueva Vizcaya and Quirino and the Cities of Cauayan and Tuguegarao managed to breach the benchmark in terms of share of local revenues to total LGU revenues in 2014. Similarly, only Tuguegarao and Nueva Vizcaya's share of Annual Regular Income to Total Revenue outpaced the benchmark set for all LGUs. While the rest of the local governments have an IRA dependency ration of more that 80 percent, only the Cities of Tuguegarao and Cauayan performed better at 59.0 and 73.0 percent, respectively.

On national expenditure allocation, the share of Cagayan Valley to the national budget fell at 2.2, 2.1 and 1.9 percent in 2013, 2014 and 2015, respectively. While the level of allocation to Cagayan Valley in the General Appropriations Act (GAA) for the Fiscal Years 2014 and 2015 grew at 7.3 and 0.9 percent, this is lower than the rate of increase of the total national budget, which rose at 13.1 and 14.9 percent, respectively in the same years.

On local expenditure management, only Tuguegarao City fared better than the benchmark in social services spending among all City and Provincial LGUs. The Cities of Cauayan, Ilagan and Santiago posted a lower expenditure ratio in 2014 while the rest registered a ratio at par with the set target. Similarly, only Cagayan performed above standard on economic services spending in the same year. Being at the forefront of services,

LGUs are encouraged to use their resources strategically to meet financial requirements for the economic and social services sectors.

Nueva Vizcaya and Santiago City were rated GOOD in overall expenditure management performance. Taking into account others factors such as debt management and operations expenditure, the province of Nueva Vizcaya and Santiago City were the only LGUs rated favorably by the Bureau of Local Government Finance (BLGF) on expenditure management among all provinces and cities in the region.

Monetary and Financial Sector

Cagayan Valley posted a lower inflation rate than the national average, which is well within Bangko Sentral ng Pilipinas (BSP) target of 2.0 to 4.0 percent. In achieving inflation targets, the region has supported national government through regular price monitoring and market surveillance particularly in times of disasters and other economic shocks. While the maintenance of price stability is within the purview of the central monetary authority, the region's role on food and agricultural supply chain is important in inflation management being a top producer of vital crops in the country.

On financial services, the banking industry remains strong with a total of PhP 106.8B and PhP43.6B savings and loans portfolio, respectively. This is further manifested by the continuous growth of gross value added of financial intermediation and its allied services in the past three years. The region has a total of 325 branches ranging from all types of banks, higher than the 93 number of municipal LGUs in the region. Of the total number of bank branches, 131 are classified as Rural and Cooperative Banks catering to borrowing and saving needs of the countryside.

External Trade Sector

The region's potential for external trade has not been fully optimized despite having a existing port facility and an international airport. Regions share to national exports recorded a measly 0.06, 0.11 and 0.02 percent in 2012, 2013 and 2014. This is lower than the share of imports during the same period except in 2013 owing to the limited product markets for exports as well as imports of goods. Moreover, the region has the potential to draw on service exports given its talented and educated labor force and with Tuguegarao City identified as one of second wave cities capable of hosting the growing IT-BPO industry.

In order to maximize productive capacity of the region and achieve inclusive growth, the real sector shall contend with the following challenges:

- **Growth of agricultural output expects uncertainty in the coming years;** hence, there is a need to continuously manage risks associated from disasters to preserve the region's stronghold in agriculture production. However, only a limited number of crops drive productivity and growth in the agriculture sector. Cushioning the risk of overreliance to traditional crops as main growth driver will also have to be addressed through diversification.
- **The region's growth prospect is constrained by its weak forward and backward economic linkages** because of its relatively limited industrial base. The region must therefore come up with a strategy to tap its agricultural and mineral resources in spurring manufacturing activities and building-up its industrial niche. Transforming these products through value-adding activities shall accelerate region's potential to grow rapidly and sustainably.

- **Private sector participation to the regional economy remains elusive,** thus, the limited capital formation to unleash the potential of the economy. While market for consumer goods and services will remain robust in the coming years, the region must also be bent on making the economy more investment-driven. Improving competitiveness through infrastructure development and appropriate incentives within its limited resources will pose a challenge.

By and large, the challenge of revenue management is to keep government funds at pace with its expenditure requirements. In particular, the sector shall expect the following challenges:

- **Need to address deficiencies in the taxation system.** The growing economy is expected to continue. Hence, the expansion of revenue base for the government should therefore be matched with corollary efforts in intensifying revenue generation. The use of information and communication technology to replace old system shall have to be in place. In addition, how to tap other sources of trade revenues that will include both inbound and outbound fees and charges needs to be explored.
- **Persistent dependency of LGUs on IRA.** For LGUs, more efforts to veer away from dependence to IRA allocation need to be done. Generating more locally sourced revenues to minimize reliance of LGUs from the national government transfers in financing local services and operations shall be promoted. While progress has been made in the past, sustaining and maximizing the benefits of revenue management reforms in the cities and provinces within the region have yet to be optimized.

Cagayan Valley shall be steadfast in securing required funds to finance development efforts for the region. The following constraints post risks in achieving expenditure objectives over the planning period:

- **Competition among priorities across sectors and demands from other regions.** This poses a serious threat in efforts to increase regional allocation from the national budget given limited government resources. Should ideal allocation be realized, however, regional line agencies must enhance their institutional capacities in program and project administration to effectively and efficiently deliver social and economic services.
- **Narrow fiscal space for LGUs.** Much room for creativity and advancement is needed on the part of LGUs to expand their fiscal space to fund social and economic services for human capital formation and favorable investment climate. Investments must focus on health, education, life-long training, social protection, and infrastructures. Strategic use of resources and deliberate efforts in reducing leakages attributed corruption and implementation inefficiency has to be intensified.

The supportive role of the region in managing inflation and expanding financial inclusivity is greatly affected by both external and internal environmental factors. Specifically, these include the following:

- **Sustaining the stability of food supply.** Assurance in crop production is highly at risk with natural disasters wrought about by extreme weather disturbances. This threatens production of rice and other vital crops that pushes price levels of food higher. Similarly, with crude oil prices exhibiting volatility in the global

market, prices of other commodities will be greatly affected as inputs and other costs of production are expected to rise.

- **Making the financial system inclusive.** While the banking and financial industry has gained positive ground, financial inclusivity remains to be felt especially among the vulnerable sectors. The industry must demonstrate efforts in providing more products and services to the unserved and underserved sectors and areas of the region. These sectors include women, farmers and fisherfolks, disaster-prone communities who are mostly affected in times of economic

crises.

- **Breaking into international markets.** Over the years, the region's capacity to maximize benefits from trade openness remains challenging primarily because of the lack of product goods and services in the region ready for global markets. To address this, there is a need to establish support services and improve infrastructures to attract investments in transforming its agriculture and mineral resources into a global market base, and in developing its key cities to take part in the growing IT-BPO industry to benefit its young and educated population.

Strategic Framework

The Region shall stay firm in its commitment in expanding opportunities to reduce inequality and in increasing growth potential towards realizing the country's long term goal of inclusive growth, high society and competitive knowledge economy. Its supporting role to strengthening the macroeconomic environment shall provide a strong foundation for the regional economy to attain inclusive and sustainable development path. This shall be realized through four strategic intermediate outcomes: (a) production in

the real economy optimized; (b) strategic and enabling government finance achieved; (c) stable inflation and inclusive financial services achieved; and (d) foundations for external trade established.

Targets

For 2017-2022, indicators have been identified and targets have been set to monitor the attainment of the sub-sector outcomes. These are outlined as follows:

Table 15.1 Plan Targets to Sustain a Sound, Stable, and Supportive Macroeconomic Environment by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
GRDP share to GDP increased (%)	2015	1.8	>1.8
Agriculture GVA growth target achieved (%)	2015	-0.4	4.5-5.5
Share of Industry GVA to Total GRDP increasing (%)	2015	13.2	>13.2
Share of Gross Capital Formation Expenditure to GRDE increasing (%)	2015	-	-
Revenue collections by national collecting agency sustained			
BIR	2016	8.92 B	22.5B

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
BOC (Port of Aparri)	2014	904.3M	TBD
LTO	2016	784.9M	TBD
Revenue collection efficiency by sources improved			
Total Regional Collection (%)	2015	87	TBD
Number of Provinces and Cities with above 80 percent IRA-Dependency Ratio reduced	2014	3 of 9 LGUs	TBD
Level of regional allocation from GAA increasing	2015	48.5B	TBD
Level of economic services share to regional allocation of expenditure program increasing	2015	9.2B	TBD
Level of social services share to regional allocation of expenditures program increasing	2015	19.1B	TBD
Overall expenditure performance ratio of LGUs marked as GOOD	2014	2 of 9 LGUs	TBD
Low and stable inflation rate achieved	2015	1.80	2.00-4.00
Financial system's total savings portfolio increased	Sept 2016	106.8 B	>106.8 B
Financial system's total loans portfolio increased	Sept 2016	43.6 B	>43.6 B
Number of access points within the region increased	Sept 2016	325	>325
Merchandise exports increased (US\$ B)	2016	-	-
Services exports increased (US\$ B)	2016	-	-
Number of products exported	2016	-	-
Number of exporters assisted	2016	-	-
Number of manpower in IT-BPO	2016	-	-

Source: BIR 02, BLGF 02, LTO 02, BOC 02

Strategies

Intermediate Outcome 1: Productive regional economy optimized

The real sector envisions a productive economic system that will provide employment and income for the population. Quality jobs for the labor force and higher income for families shall sustain robust household consumption that is necessary for attracting private sector participation in the economy. All these will work towards expanding the region's economic base, thus, enabling the government to widen its sources of tax and non-tax revenues that will finance efforts to improve regional competitiveness, alleviate poverty and raise living standards. In order to optimize the productive systems of the region, the following strategies shall be employed:

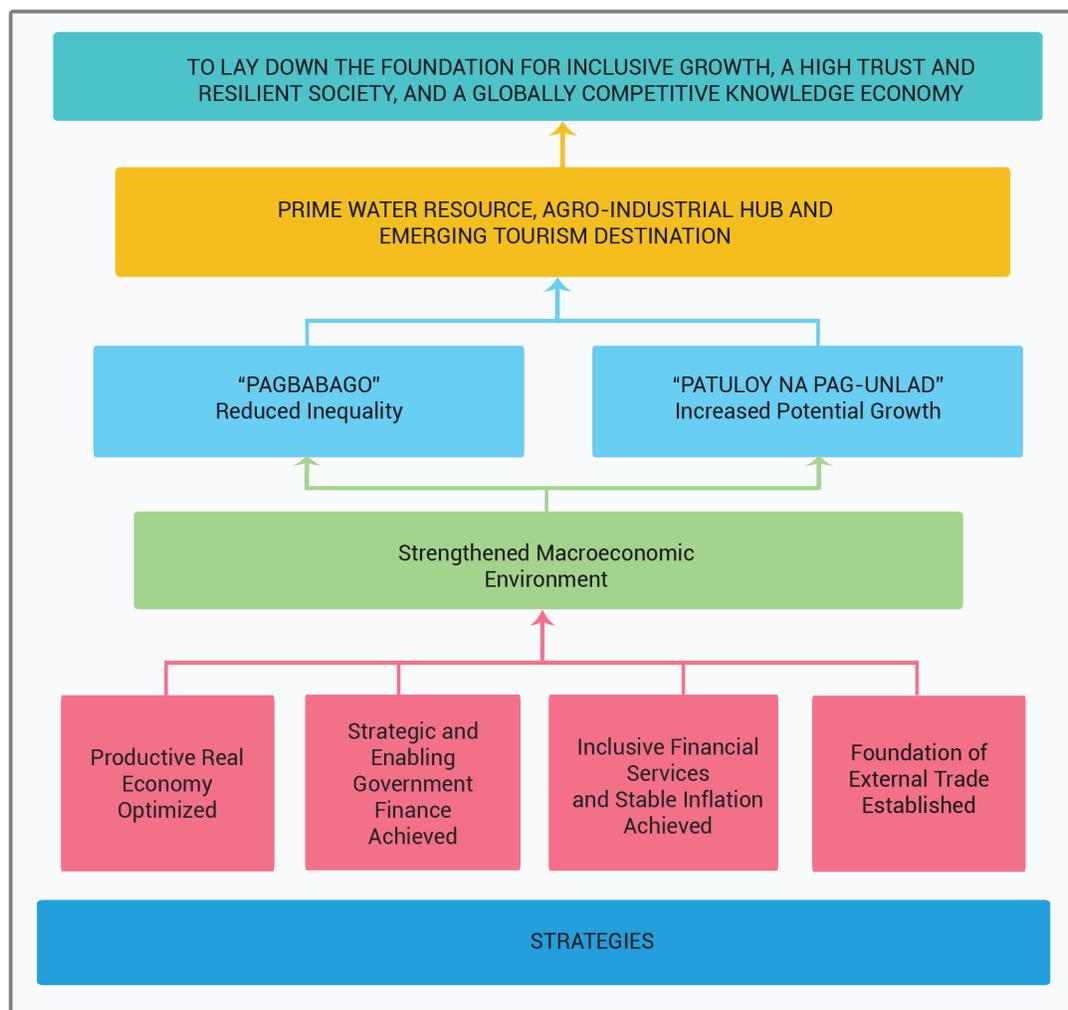
Manage risks in agriculture production

- Strengthen LGU capacity and sustain efforts on disaster risk management; and
- Develop potential growth driver through diversification of crops and other commodity products through research and innovation in the agriculture and fisheries sector.

Strengthen forward and backward linkages

- Promote non-farm economic activities and agri-business enterprises; and
- Support agro-industrial transformation through agriculture, aquaculture, and mineral processing

Figure 15.1 Strategic Framework to Ensure Sound Macroeconomic Policy, Region 02



ventures.

Encourage private sector participation

- Accelerate infrastructure development to facilitate intra and interregional mobility;
- Provide fiscal and non-fiscal incentives; and
- Address bureaucratic red tape and promote ease of doing business.

Intermediate Outcome 2: Strategic and enabling government finance achieved

Fiscal policy covers government efforts in the region (through efficient revenue management by national collecting agencies) and local government units. LGUs’ own-sourced revenues shall be enhanced to lessen dependence on national government transfers. On expenditure management, the region shall continue to push for greater allocation for its line agencies to provide quality social and economic services complementing nation’s thrust on building strong human capital and creating an

environment conducive for business. The following are the major strategies:

Expand and intensify revenue-generating efforts

- Continuous LGU capacity building to generate local revenues;
- Digitize revenue collection and compliance monitoring; and
- Maximize revenues from port operations.

Upscale existing LGU revenue management reforms

- Professionalize of local treasurers through the Standardized Examination and Assessment for Local Treasury Service Program;
- Update key local finance manuals to take into account developments in local finance; and
- Intensify LGU fiscal monitoring and performance evaluation.

Advocate increase in regional share to national budget allocation

- Proactive participation in budget preparation and legislation; and
- Enhance institutional capacity to eliminate budget leakages due to corruption and implementation inefficiency.

Complement national thrust on social and economic services

- Align public spending to focus more on human capital formation and improving investment climate; and
- Strengthen regional economic governance through effective planning and investment programming.

Intermediate Outcome 3: Inclusive financial services and stable inflation achieved

Region's support to macroeconomic monetary policy shall hinge on the region's role on food security. As a top provider of rice and corn products of the country, the region's role in ensuring the adequacy of food supply is crucial in achieving price stabilization policy outcomes not only in the region but the whole country as well. The following are the major strategies:

Proactive support role in managing inflation and price stability

- Sustain growth and expand productivity in agriculture and fisheries; and
- Institutionalize the strengthening of regional network on price monitoring and market surveillance.

Promote financial products and services to the unserved and underserved sectors

- Expand financial literacy to widen access to services by vulnerable sectors; and
- Monitor bank compliance on mandatory service provisions.

Intermediate Outcome 4: Foundations for external trade established

The region shall take advantage of its natural and human resources to exploit opportunities of trade in the ASEAN region and Northeast Asian Economies (China, South Korea, Japan, Taiwan and Hong Kong). To build a strong foundation of a gainful international trade, public and private sectors shall play an active role to spur investments that will cater to the global markets.

Develop product goods and services in the region ready for global markets

- Promote and support innovation and development of agriculture and merchandise products for export market;
- Strengthen regional digital infrastructure necessary to support IT-BPO industry in key cities in the region; and
- Forge strong partnership with SUCs and SMEs for product development and skills training.

Legislative Agenda

The region is supportive to the priority legislative agenda identified in the same chapter of the Philippine Development Plan (PDP):

Table 15.2 Supported Legislative Agenda on Sustaining a Sound, Stable and Supportive Macroeconomic Environment, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Tax Reform Program	Amend certain sections of the National Internal Revenue Code of 1997 to achieve a simpler, fairer, and efficient tax system.
Amend certain sections of the National Internal Revenue Code of 1997 to achieve a simpler, fairer, and efficient tax system.	Improve the transparency in revenue payments and sharing in the mining, oil and gas industries.
Unified Pension Reform Bil	Arrest the large and unsustainable fiscal impact of the ballooning pension requirements of the military and uniformed personnel.
Government Rightsizing Bill	Promote effectiveness and efficiency in government operations to ensure the quality of public service that is responsive to the changing needs of the population.
Budget Reform Bill	Institutionalize good PFM practices which include: a) shift to cash-based budgeting from the current obligation basis; b) reducing the validity of appropriations to one year from the current two years, etc.
Real Property Valuation and Assessment Reform Act	Institute reforms in real property valuation and assessment in the Philippines.
LGU Income Classification Bill	Institutes the income classification of provinces, cities and municipalities, and for other Purposes.
LGU Property Insurance Bill	Amends RA 656 (Property Insurance Law) to make it mandatory for all LGUs to insure its properties (e.g., buildings, roads, bridges, plants, machineries and equipment)
Amendments of the Local Government Code of 1991	Amend (a) expenditure assignment, (b) revenue assignment and LGU taxing powers, (c) inter-governmental fiscal transfer, (d) credit financing for LGUs, (e) inter-LGU cooperation through alliances, (f) creation of new LGUs, and (g) local fiscal administration
Proposed amendments to the BSP Charter	Expand and improve the operations of Bangko Sentral ng Pilipinas.
Enactment of the Payment Systems Act	Promote the digitization and interoperability among payment systems including the supervisory oversight of the BSP
Amendments to the Anti-Money Laundering Act	Expand its organizations and transactions coverage, including granting additional powers.

LEGISLATIVE AGENDA	RATIONALE
Amendment to the provisions of RA 1405 (Law on Secrecy of Bank Deposits) and RA 6426 (Foreign Currency Deposit Act)	Exempt government officials and employees, whether elected or appointed, from the coverage of the Bank Secrecy Law.
Filipino Identification System Act	Pursue a national identification system for effective delivery of government services.
Secured Transactions Bill	Establish a comprehensive legal framework on lending transactions involving personal property as collateral.
Enactment of the Collective Investment Schemes Law	Anticipate participation of middle- to low-income individuals in CIS opportunities.
External Trade Sector Key legislative measures that will promote and support the sector will be supported including those proposing the streamlining of export and import procedures and reduction of import and licensing fees, as well as related legislation listed in Chapter 9.	

Source: Chapter 15 of the PDP 2017-2022

16

Support to the
National Competition
Policy

Support to the National Competition Policy

The Competition Policy (CP) is an element of micro-economic reform that has had an impact on all sectors of the economy and community. The CP deals with restrictive business practice through the prohibition of monopolies and any combinations that can restrain trade or commerce or destroy or injure industries by unfair competition. Competition is an essential element in the efficient working of markets. It brings important benefits to the consumer by: encouraging enterprise development, innovation, efficiency and a widening of choice; enabling consumers to buy the goods and services they want at the best possible price; and contributing to our national competitiveness.

The enactment of Republic Act (RA) No. 10667 or the Philippine Competition Act (PCA) on July 21, 2015 reinforces the efforts of the government to sustain inclusive economic growth. The PCA provides for the formulation of a National Competition Policy (NCP) which aims to steer regulations and administrative procedures of government agencies toward promoting competition, as well as strengthen the enforcement of anti-trust laws and effectively ensure competitive neutrality. The PCA specifically provides for the creation of the Philippine Competition Commission (PCC) which will conduct inquiries, investigate, hear, and decide on cases involving anticompetitive agreements, abuse of dominant position, and anti-competitive mergers and acquisitions (M&As).

In formulating the NCP, the other equally essential components, such as policies relating to competitive neutrality, consumer protection, ensuring government regulations do not impede competition, and removal of structural barriers are established, and that an effective institutional mechanism to coordinate and oversee the implementation these inter-related components is put in place.

Assessment and Challenges

Competition encourages market players to perform better and promotes inclusive economic growth which means benefits redound to the consumers. The region is definitely weak in this area based on its economic standing as reflected in the GRDP. The previous chapters on agriculture, industry and macroeconomy show the relative standing of the region

based on its agricultural productivity, number and quality of existing business enterprises and per capita contribution to the regional economy. The data is an evidence of poor competition going on which is ironic considering the potential for growth. The basic sector could not reduce costs or innovate. The industry sector is not growing with only 15 percent share

in the total economy thereby limiting the range of opportunities for job creation and the availability of locally produced goods and services that can be made available to consumers. There is a limited support for small entrepreneurs and firms with the too many requirements for credit availment with only the larger players having the chances to grow.

While there were changes in the past ten years as shown in the steady decline in the percentage and actual number of the poor households, still the region has to raise its productivity, expand economic opportunities, increase people's real incomes, and improve overall welfare. Competition especially benefits the poor through job creation made possible by the entry, growth, and expansion of efficient firms and through lower prices that result from greater variety and higher quality of goods and services on offer.

The region is struggling along market performances and the promotion of inclusive economic growth through commerce and trade. It has yet to achieve considerable level of free market regime for potential entrepreneurs and firms under the services and industry sectors. The trend in the increase in the share of the services sector in the past three years is a welcome development but this is not the trend that the region intends to embrace as the manufacturing sub-sector is considered the critical forward link of the agriculture sector. With the foregoing, the region can only boast of comparative edge or competitive advantage if its full potential is explored.

Given the said assessment, the following are among the identified challenges that should be addressed in support to the competition policy:

Struggles in the agriculture sector. The agriculture sector provides for the income and livelihood to about 50 percent of the

population. But its vulnerability to natural phenomena poses great risks and manifests volatility. Nonetheless, the region has to deal with the sector as it gradually shifts to industrialization. The region still supports its agriculture in the context that it provides food and vital raw materials, provides a significant market for the products of the non-agricultural economy, as buyer of farm inputs as well as consumer goods and services produced in the non-agricultural economy, and as the sector grows and modernizes in the face of limited supplies of agricultural land, it releases surplus labor to the industry and services sectors.

While agricultural productivity is still a problem with the region failing to breach the 5 mt/ha average production for rice and corn, the adverse competition practices are contributory to said situation. The cost of production for rice and corn is twice compared to other rice and corn producing countries. This has been compounded by fragmented farm landholdings which contribute to the difficulty towards full farm mechanization. However, there are farmer-entrepreneurs that innovate farm management and reported 9 mt/ha which indicates that productivity can be increased more than twice. However, another issue is marginal farming households who are dependent on local traders providing loans and credit for farm inputs in exchange for the farmer's produce. Farmers are caught in the middle of commercial operation which they buy from and sell to local traders. The buying price is dictated by the local traders compromising the price and eliminating the chance of the farmers for greater profit or control of trading their own produce. In the long run, it is the middlemen that maximize the profit for both the price of inputs and buying price. The practice restricts the ability of farmers to participate in the free market environment where they can explore their own potentials. The practice was somehow tapered by the creation of cooperatives but marginal farmers representing the poorest

of the poor have limited participation in cooperatives.

At a higher level, the common view that companies or corporations of agricultural inputs (fertilizers, pesticides and seed) have the direct control over the farmers can be partly correct but the middlemen have the most influence in the pricing. Nonetheless, the local governments which is the closest level of government and visible to the people have no regulatory mechanism in the regulation of pricing. While pricing of commodities is part of the dynamics of open market economy, there is no competition policy set in place at the community level that should benefit farmer-consumers for the cost of agricultural inputs.

Highlighting the role of LGUs. The region and most LGUs have lots of potentials but the accessibility concern has been one of the factors that deter its ability to compete and foster effective market competition internally and externally. Potential investors also deal with the dilemma of LGUs unwilling to support, tedious process in the business application, red tape or high cost of doing business.

In a wider context, there has been low appreciation of anti-trust policies at the local level with some local governments competing with the private sector instead of enhancing its role as an enabler for free market competition. The LGUs are expected to generate more business taxes with an open market arrangement instead of engaging or competing with the private sector. The LGUs are expected to increase its annual revenues from taxes and fees not thru direct participation in the competition but by fostering business-friendly environment with clear regulatory mechanism petition. LGUs should act as enablers and should initiate an open economy to benefit consumers within its jurisdiction particularly for 3rd to 5th class municipalities where investment opportunities is relatively

low.

The LGUs whether municipal, city or province are not very much aware of or unwilling to share anti-trust policies along with the need to embrace or understand international trade policies which have impact to local competitiveness. The different local chambers of commerce and industries are rarely provided with support. To some officials of government, the unwillingness to widen their perspective or sharing information and knowledge in the context of market competition leads to information asymmetry. To some extent the withholding of information is intentional as they tend to benefit only a chosen few. This leads to market failures which are counter-productive to development. Effective regulatory regime is rarely being practiced due to the twisted view of policy governance in the local level. Their participation in the controlled economy discourages existing investors to expand, innovate and increase their productivity. It also discourages potential investors including entrepreneurs of capital infusion reducing potential opportunities for additional employment and income.

Public procurement. Public procurement is another important area where competition law enforcement benefits consumers (see also Chapter 5). Public procurement represents, on average, between 13 and 20 percent of gross domestic product (GDP) and is therefore significant in terms of allocation and use of public funds, i.e. taxpayers' money. Competition policy may help to ensure that public procurement is conducted in a transparent and competitive manner. The Government Procurement Act, claimed that it would put an end to collusion in public bidding, bid rigging, bid fixing, and other anomalies associated with bidding for government contracts for goods, services and consultantcies. While the RA 9184 provided the procedures for government procurement, there are

still gaps and loopholes that need to be addressed. Government procurement is perceived as a major source of corruption in the bureaucracy. It was estimated that at least 20 percent of government contracts go to commissions or kickbacks. Twenty percent may even be a very conservative estimate. Bid-rigging increases the prices that the government pays to goods and services providers and competition law enforcement is crucial in detecting and preventing bid-rigging in public tenders. Problems about lack or absence of transparency, the existence of cartels among bidders, and collusion between government procurement officers and private contractors and suppliers continue to hound almost every contract involving public money. The law has failed to encourage competition, eliminate collusion and reduce political interference that causes delays in the procurement process.

The existence of cartels. Cartels cause harm to consumers by fixing prices, limiting output or allocating markets. Cartels can also increase prices significantly. The median average long-run overcharge for all types of cartels over all time periods is 23 percent. Effective enforcement against cartels sometimes has direct visible effects in terms of reduced prices in the market. The region faces problems on petroleum products, rice cartels, communication services, electric cooperatives and to some extent services of private hospitals which excessively higher than government hospitals.

On petroleum products, there is absolute absence of competition highlighted by price collusion. There may have been difference among gasoline stations but it is not very significant which is even aggravated by the increase in the transport cost. It is one of the factors that make the region lose its competitive advantage.

Rice cartels create temporary rice shortage which influences local pricing. It is ironic that price of rice in the region is at almost

the same with that of Manila as local rice traders have the absolute control of the supply and price.

There is less competition along communication as PLDT has continued to be the dominant fixed-line and mobile provider. While it can be attributed to the momentum in the country's telecom market and challenged by Globe Telecom, the communication services provided were far from the ideal. Duopoly in the communication industry is still affecting the quality and range of services offered.

Electric cooperatives are no different considering the criticality of the services offered but consumers (not cooperative members) are considered close market. The electric cooperatives dictate the fees and charges including the burden of system losses which is in double digits.

Market failure is also noted in the health sub-sector mainly due to the inability of government to improve the health facilities and services. The PhilHealth as the main health service provider needs to address or come up with regulation to reduce cost for health services through the years. While there had been efforts to correct the gaps, still there were issues that remain unresolved. There is evidence of private health facilities making excessive charges for professional fees of doctors, room accommodation, drugs and medical supplies mainly by abuse due to the lack of choice of admitted patients. This market failure could be remedied by a general regulation covering all health-care providers and targeting the decrease of choice of patients once admitted and the lack of regulatory authority to check on the different fees and charges which the health facilities claim from Phihealth or its patients. This case demonstrates the complementary nature of competition and consumer policies and the role of cooperation between relevant authorities in identifying appropriate remedies to address

market failures in favor of patients.

Abuse of market power. The different sub-sectors discussed above are dominant in their operation which abuses their market power through collusion and exploitation, refusal to/restriction of supply, tying and/or bundling, capacity dumping and predatory or excessive pricing.

In the case of LGUs that control the entry of investors or growth of entrepreneurs thru excessive demands and unreasonable regulations, there is a greater likelihood

that choices and alternatives for consumers and the general public is restricted. It has been demonstrated that the removal of entry restrictions for large-scale retail stores benefited consumers in terms of service quality and lower prices and for the local competitors to improve on their services. This has been noted in urban areas (Santiago and Cauayan) where service centers were introduced. It also created ripple effect to some local industries to innovate and improve productivity.

Strategic Framework

Targets

To support the priority thrust of the government to improve the country's

competitiveness for the six-year period, the region aims to achieve the targets presented in the Table 16.1.

Table 16.1 Plan Targets to Support the National Competition Policy by 2022, Region 02

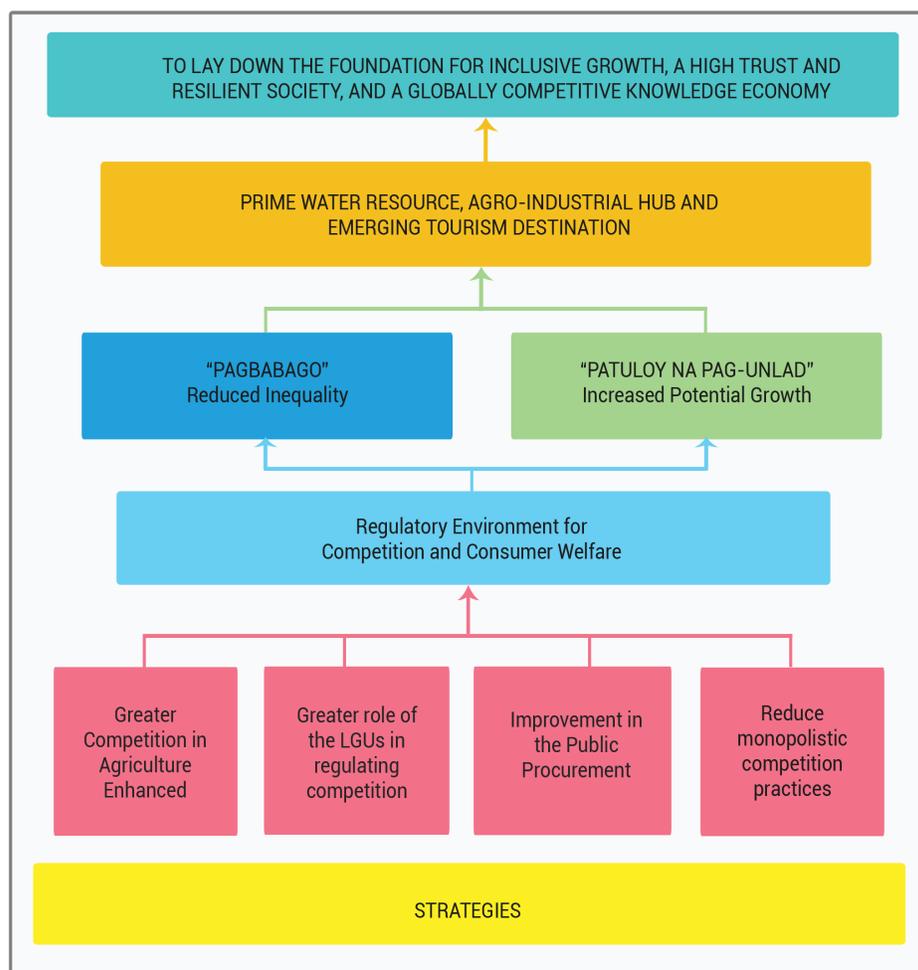
INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Competitiveness Index of Provinces Improved			
Batanes	2016	72	Improved ranking in the competitiveness index
Cagayan	2016	46	
Isabela	2016	22	
Nueva Vizcaya	2016	65	
Quirino	2016	54	

Strategies

In support to the national competition policy, the region has to engage itself in the process that will impact on all sectors of the economy and community. It must be able to deal with restrictive business practice that restrain trade or commerce or destroy

or injure industries by unfair competition. The strategies must be able to derive more benefits for the consumers through enterprise development, innovation, efficiency and a widening of choice for goods and services at the best possible price. The following are the strategies for the identified intermediate outcome:

Figure 16.1 Strategic Framework to Support the National Competition Policy, Region 02



Intermediate Outcome 1. Greater competition in the agriculture sector enhanced

- Develop access to farmers to reasonable price of farm inputs;
- Strengthen organization of farmer cooperatives;
- Promote innovation in farm management for greater productivity;
- Develop real-time price monitoring systems for agricultural inputs and outputs; and
- Ensure farmer protection from abusive trading practices

Intermediate Outcome 2. Greater role of LGUs in regulating competition

- Strengthen the role of LGUs as enablers of free market economy;
- Strengthen regulatory function of LGUs in market competition and reduce barriers to entry of potential entrepreneurs and investors;
- Develop sub-regional institutional mechanisms in addressing uncompetitive practices; and
- Reinforce knowledge sharing among LGUs to address market distortions and failures

Intermediate Outcome 3. Improvement in the public procurement

- Immediate review on the gaps of the procurement law;
- Provide greater penalties and stiffer criminal liability for government officials and private contractors; and
- Develop mechanism to watch the watchdogs.

Intermediate Outcome 4. Reduce monopolistic competition practices

- Strengthen laws to protect consumers against deceptive and unfair practices
- Capacitate consumers to be discerning, engaging and vigilant

Legislative Agenda

In support to the national competition policy, the region supports the following:

Table 16.2 Supported Legislative Agenda on Supporting the National Competition Policy, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Tax Reform Program	Amend certain sections of the National Internal Revenue Code of 1997 to achieve a simpler, fairer, and efficient tax system.
Amend certain sections of the National Internal Revenue Code of 1997 to achieve a simpler, fairer, and efficient tax system.	Improve the transparency in revenue payments and sharing in the mining, oil and gas industries.
Unified Pension Reform Bill	Arrest the large and unsustainable fiscal impact of the ballooning pension requirements of the military and uniformed personnel.
Government Rightsizing Bill	Promote effectiveness and efficiency in government operations to ensure the quality of public service that is responsive to the changing needs of the population.
Budget Reform Bill	Institutionalize good PFM practices which include: a) shift to cash-based budgeting from the current obligation basis; b) reducing the validity of appropriations to one year from the current two years, etc.

Source: Chapter 16 of the PDP 2017-2022

PART VI

FOUNDATIONS FOR SUSTAINABLE DEVELOPMENT



17 Attaining Just and Lasting Peace

Attaining Just and Lasting Peace

Peace and development are among the essential foundations of a progressive development. Re-building the peace and order in conflict-affected communities as well as the rehabilitation of conflict-vulnerable areas along with the upholding of territorial integrity provides for the attainment of a lasting peace and sustainable development in the community.

Assessment and Challenges

Internal Security Threats Minimized.

Heightened operations were pursued to achieve a more secured and peaceful situation in the region. Since 2012, intensive internal security efforts were conducted by the Armed Forces of the Philippines 502nd Infantry Brigade to eradicate NPA remnants in the rural communities. The continued dialogue with the barangays especially the youth also led to peaceful resolution of issues and dissuaded youths from the recruitments of the left-leaning. According to the AFP, the remaining barangays under the influence of the NPA were already recommended to the higher headquarters as cleared barangays as of 2016. Aside from battling insurgencies in the region, the Philippine Army also pursued improvement of its services through the Army Transformation Roadmap (ATR) 2028 introduced in 2014. This is the 14-year strategic plan of the AFP towards good governance and performance excellence.

Unabated illegal unreported and unregulated fishing (IUUF) activities in the northern waters. One of the most controversial sea-borne monitoring activities of Bureau of Fisheries and Aquatic Resources (BFAR) 02 which gained

international attention was the shooting incident in 2013 off the disputed waters north of Batanes. The patrol was a joint undertaking by the fishery law enforcers from BFAR and Philippine Coast Guard (PCG) aimed to monitor and survey the vicinity of Balintang Channel en route to Batanes. The government contends this action as self-defense during their duty at the time. The incident also paved the way for the national government and the general public to be aware of the unabated problem of poaching and the constraints faced by the fishery law enforcers in terms of inadequate patrol facilities and vessels and personnel. Nonetheless, the increasing trend on the number of illegal entrants apprehended and cases filed demonstrates BFAR's continuous reinforcement of its campaigns and programs against IUUF activities in Region 02.

Similarly, the region's marine water resources were safeguarded by the PCG through its Coast Guard District North Eastern Luzon and BFAR 02. This is to ensure the sovereignty and territorial integrity within the coastal and island waters, and preserve the maritime environment and safety of all maritime activities.

From 2013 to 2015, a combined total of 494 seaborne and 11,269 coastal patrols were conducted. Despite of limited personnel and facilities, both the PCG and BFAR were able to increase its patrol operations every year achieving beyond what were expected.

In terms of ensuring that all ships comply with maritime laws and safety standards under RA 9993 or the PCG Law of 2009, the PCG strictly inspected every local and foreign vessels sailing into the region's territorial waters. From the number of safety issuances by the PCG, only the Port State Control (PSC) showed a decreasing trend from 150 activities in 2013 to only 12 activities in 2015. According to PCG, the target on PSC was dependent on the number of foreign vessels sailing in the area. For 2014-2015, the region experienced fewer encroachment activities within PCG's Area of Responsibility (AOR) because of the weather condition. Four strong typhoons swept the region in 2015.

For the medium-term plan, the following are the challenges that need to be addressed:

Dissuasion of the left-leaning's recruitment. While the threat of terrorist and communist rebels lessened over the previous years, there is a need to watch over the youth especially on the vulnerable communities against the left-leaning's recruitment.

Re-building and re-integration of the vulnerable areas and communities. The

government should also continue its efforts to persuade the return of the remaining rebels in the region to the government. Re-integration efforts to the rebel returnees and the vulnerable populace should be prioritized.

Inadequate maritime manpower and resources. To achieve peace and stable security at the long-term, continuous support to the army and other law enforcers must be provided, this include addressing the inadequate manpower, equipment and other logistical support in their respective offices to carry out intensive operations in the entire region. On protecting maritime waters, constraints were very apparent during the operations of fishery law enforcers against the 'modernized' vessels and facilities of perpetrators from neighboring countries. Inadequate resources hinder the capability of law enforcers to ensure maritime security and expand its patrol operations (i.e., ratio of number of patrol vessels to number of operations, modernization of facilities and equipment, and number of skilled personnel to conduct various operations).

Weak institutional support and lack of public awareness and cooperation. On maritime security, the awareness and strong support of both the public and the national government remains a challenge to improve maritime safety operations, facilitate and increase sea operations against the growing territorial rivals in the neighboring countries.

Strategic Framework

In order to create the desired environment of a just and lasting peace, strengthened initiatives on peace and development must be pursued. The following discusses the medium-term plan to attain a lasting peace in Region 02 and contribute to the peace-efforts at the national level.

Targets

The following targets will be monitored over the Plan period in order to ensure the progress towards a just and lasting peace in the Region.

Table 17.1 Plan Targets to Attain Just and Lasting Peace by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Number of barangays under the influence of CPP NPA decreased	-	-	TBD
Number of barangays in Geographically Isolated and Disadvantaged Areas (GIDAs) and in Conflict Affected Areas (ConAAs) provided with Community Service Program (CSP)	2017	-	Increasing
Number of ITDS secured Brgys	2017	-	Increasing
Number of maritime security activities increased			
Seaborne Patrol	2016	96	increasing
Coastal Patrol	2016	3,504	increasing
Number of poaching cases filed and resolved	2015	2	-

Source: AFP, PCG Northeastern Luzon, BFAR 02

Strategies

To further strengthen the effectiveness and efficiency of governance and bring back and build a higher foundation of public

trust, the medium-term plan will focus on assuring equitable access to justice for and by the people.

Figure 17.1 Strategic Framework to Attain Just and Lasting Peace, Region 02



Intermediate Outcome 1: Internal Security Ensured

The region's fight against insurgencies will be one of the top priorities in the next six years particularly on the resolute attempt of the government to end conflict and negotiate with the rebels at the national. Specifically, the commitment to the Sustainable Development Goals (SDGs) on the peace sector includes significant reduction in all forms of violence and related deaths. While peace negotiations and agreements are discussed and executed at the national level, the region shall simultaneously strive to achieve peace and diplomatic negotiations with the conflict armed groups in the region especially in barangays under the influence of the CPP/NPA.

Intensify internal peace security efforts. Internal security efforts will be enhanced to prevent insurgencies and ensure a safer environment for the populace and assure a positive business-climate for the region. Interventions initially identified include increasing police visibility, strengthening of the Barangay Peace Keeping Action Teams, and installation of checkpoints and chokepoints.

Empowerment of the communities especially in conflict areas necessitates continuing dialogue between and among the peace stakeholders, local peace councils and organized groups along with the broad-based participation of the whole community.

Rehabilitation of conflict-affected and conflict-vulnerable areas. Peace-building is one of the main concerns of the government considering that there are still barangays under the influence of the CPP/NPA. The conflict-affected/ vulnerable areas should be rehabilitated including the re-integration of the rebel returnees into the community by creating economic activities for them. This will also establish a high public trust among them. Monitoring the

delivery of socio-economic programs and other interventions for the conflict-affected areas must be undertaken to ensure that the government is responsive to the needs of these communities.

Intermediate Outcome 2: Army Transformation Roadmap 2028 Institutionalized

Continuous implementation of the current defense programs especially the Philippine Defense Reform Program, the Defense System of Management, the AFP Modernization Program, the AFP Capability Upgrade Program and the ATR 2028. The ATR 2028 anticipates that by 2022, the AFP shall be a modern and respected army in Asia.

Capacitate the Philippine Army (PA). The armed forces' transformation to a more capable and reliable protector of the region is very essential in assuring internal security. This effort will be continuously sustained in order for the army to effectively perform its duties and responsibilities in character and competence as well as improvement of the organization as a whole.

Modernization of PA equipment and facilities. The availability and modernization of the PA's equipment and facilities will also be supported by the government in order to conduct AFP missions successfully.

Intermediate Outcome 3: Territorial Integrity Assured

Expand and strengthen patrol operations. Given the the recorded incidences and reports on the foreign intrusion in the region's maritime waters and territorial lines, the continuous conduct of patrol and seaborne operations shall be strengthened and expanded to appropriately and effectively protect the region's waters and sovereignty on natural endowments.

Modernize maritime patrol equipment and facilities. The upgrading of maritime patrol equipment and facilities will be prioritized to effectively and efficiently protect and uphold the territorial waters of the region.

Provide adequate and well-trained personnel. Capability-enhancements will be provided to further enhance and improve the competency and capabilities of the coastguard and fishery law enforcers to address the unabated foreign intrusions in the coastal waters of the region.

Legislative Agenda

The region is supportive of the following legislative actions identified in the PDP 2017-2022:

Table 17.2 Supported Legislative Agenda on Attaining Just and Lasting Peace, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Amnesty proclamation for the release of all alleged political offenders	Amnesty and pardon are part of the confidence-building measures that will be undertaken in the peace tables with the armed rebel groups

Source: Chapter 17 of the PDP 2017-2022

18

Ensuring Security,
Public Order, and
Security

Ensuring Security, Public Order and Safety

Security, public order and safety are among the primary concerns of a progressive development. The presence of peace and order in an area promotes greater socio-economic activities and development endeavors of both public and private sectors, hence, social welfare of the community is attained equitably and poverty is reduced to a minimum, if not zero.

This chapter covers an assessment on the performance of the peace and security sector for the period 2013-2015. This include the efforts of the government in eradicating external and internal security threats, crime incidence and drug substance abuse, and upholding of sovereignty and territorial integrity in the region.

Assessment and Challenges

Preservation of peace and order was very evident. Regional crime incidence dropped at the end of 2015. The crime volume of 20,132 was reduced by 23.53 percent in particular with both index and non-index crimes registering low incidences. Such figures were a result of heightened operations and solid cooperation and partnership of the community in curbing criminality in the region. Crime Solution Efficiency (CSE) was at a high of 60.82 percent at the end of 2015, almost at par with the national level.

Notable strategies undertaken by the Philippine National Police (PNP) to effectively employ its mandate and enforce the Rule of Law include sustained deployment of the police force and the strict implementation of the Valley Cops on Patrol ng Pulis, resulting to increased police visibility in the community and lower crime rates. Public information and advocacy activities and citizen empowerment also led to a more participative community, ensuring

that police operators and community members become pro-active volunteers and partners in solving crimes and other peace-related problems.

Proliferation of drug substance abuse remains a security concern. Anti-drug campaigns and operations manifested an increasing number of persons arrested from 2013 to 2015 at 350 persons on the average per year while drug cases filed was at an average of 268 cases per year. Through Philippine Drug Enforcement Agency (PDEA) and PNP, intensified anti-drug operations were conducted resulting to a series of arrests of pushers, users and possessors, confiscation of dangerous drugs, and raiding of drug dens.

While the resolute fight against drug substance abuse is shown throughout the Plan period, this problem remains a top concern in attaining public order and security.

Disposition of cases against law enforcers was slow. Based from the reports of National Police Commission (NAPOLCOM), more than half of the cases received within the year were carried over in the succeeding year, hence, an indication that the resolution of cases was slow or delayed at the national level. The data also show occurrences of abuse of power among the police force given the number of cases for summary dismissal in a given year. Based from the 2015 data, almost 90 percent of the offenses registered involved grave misconduct.

Police force capability improved. The police force conducted a massive recruitment program in 2014 for both uniformed and non-uniformed personnel. Alongside recruitment was the implementation of mandatory schooling (Individual Training Program and Development), specialized training programs and foreign schooling all year-round. Another noteworthy and essential training to uphold the police integrity is the strengthening of the Filipino culture, values and ideals of PNP personnel through its Moral Recovery Program. These activities are in line with the PNP Integrated Transformation Program launched in 2015 which served as a roadmap to bring a more responsive and transformed PNP personnel.

With the ultimate realization of crime-free and drug-free Philippines as among the top priority of the government for the next six years, the police force and other law enforcement agencies are faced with following challenges that calls for commitment and action from the national and local government:

High crime rate and abuse of prohibited drug-substance. Despite the registered reduction in the previous years, the high incidence of crime registered during the three-year period is still alarming at an average of 17,894 crimes per year. Particularly in index crimes, physical

injuries resulting from vehicular accidents remained the highest incident recorded in the three-year period. Drug substance abuse is also a major concern given the increasing number of drug users and pushers being reported every year.

Need to solidify citizen's trust on the police force. Given the importance of building the citizen's trust to the police force, there is a continuing need to uphold the execution of PNP laws, rules and regulations and related-international laws, strict monitoring on the adherence of every uniformed and non-uniformed personnel to such laws and standards, and stern execution of punishments against abusive armed personnel. The speedy resolution of cases also remains as a challenge in restoring the citizen's confidence that justice will be rightly served.

Increasing need for new skills and intelligence to ensure public safety. The role of law enforcers in enforcing the rule of law is vital, thus, the improvement of their capability to effectively govern the security sector is pivotal given the continuous demand for new skills and intelligence. With this regard, the PNP as the mandated agency to ensure public safety, should sustain its efforts on the development and capacitation of law enforcers to enhance their police skills, promote work ethics and moral values, and effectively discharge their duties and responsibilities at all times.

Limited manpower and resources of law enforcers. Support to the police force and other law enforcers must be provided throughout the Plan period as the Administration declared war on crimes and drugs. The government should address issues such as limited manpower, equipment and other logistical support in law enforcement agencies. For example, the wide area of operation among law enforcers resulted to the spreading of resources region-wide while the lack of mobility,

manpower and funding experienced by the PDEA hindered conduct of big time drug operations.

Inadequate institutional support and lack of public awareness and cooperation.

Government, particularly the local government units, should champion efforts

to attain a crime-free and drug-free Cagayan Valley Region. Continuous cooperation, partnership and empowerment of the whole community and all levels in the local government is very essential in attaining crime and drug free communities region-wide.

Strategic Framework

To achieve the foundations of a sustainable regional development for the next six years, a stable security, public order and safety must be met. This is to allow feasible environment towards *Pagbabago at Patuloy na Pag-unlad*. The heightened efforts of the peace sector also aims to ensure Malasakit to all, hence, laying the foundations for a high trust society.

Targets

The following table shows the indicators and targets for the plan period 2017-2022 in order to ensure security, public order and safety in the region.

Table 18.1 Plan Targets to Ensure Security, Public Order, and Safety by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Total crime volume reduced	2016	17,576	decreasing
Crime clearance efficiency improved	2016	75.51	87.51
Crime solution efficiency improved	2016	63.73	75.73
Number of barangays declared "drug free or cleared" increased	2016	TBD	all barangays are drug-free (1,666 affected baranagay)
Fire incidents decreased	2016	TBD	TBD
Police to Citizen Ratio improved	2016	1:616	1:500
Proportion of police trained	2016	93.58	2% increase annually
Number of law enforcers trained on human rights increased	2016	2,476	15,906
Proportion of participants (AFP/PNP) who passed the post training tests (%)	2016	85	85
Number of human rights violation cases against law enforcers expeditiously investigated increased (given intensive efforts)	2016	20	130
Number of cases and complaints for summary dismissal against law enforcers expeditiously heard/decided increased	2016	27	increasing

Source: PNP 02, PDEA 02, CHR 02, BFP 02

Strategies

The following strategies will be pursued to improve security and order in the region.

Intermediate Outcome 1: Safe and Secure Communities for All

Intensify security, public order and safety efforts. The region's external security threats will be one of the top priorities for the medium-term to ensure a safer environment for the populace and assure a positive business-climate for the region. Interventions initially identified include increasing police visibility, strengthening of the Barangay Peace-Keeping Action Teams, and installation of checkpoints and chokepoints. All forms of violence and related deaths are expected to be significantly reduced over the period.

Public safety of all will also be pursued in various emergencies (i.e., disasters, fires, etc.). Fire protection services will be tightened while humanitarian assistance and disaster responses will be improved.

Strengthen anti-drug operations. The President's tall order for his term is to achieve a drug-free nation, hence, the police force and other law enforcement agencies will intensify their anti-drug operations to include expand and increase buy-bust operations, prevention of drug use abuse through anti-drugs advocacy campaigns, implementation of OPLAN TOKHANG, and conduct of barangay drug-clearing operations. Strengthened partnership and cooperation between and among the law enforcement agencies will be reinforced in order to ensure arrest of suspects and violators, increased successful rate of anti-drug operations and maximize mobility of peace actors in the region in addressing crime and drug violations.

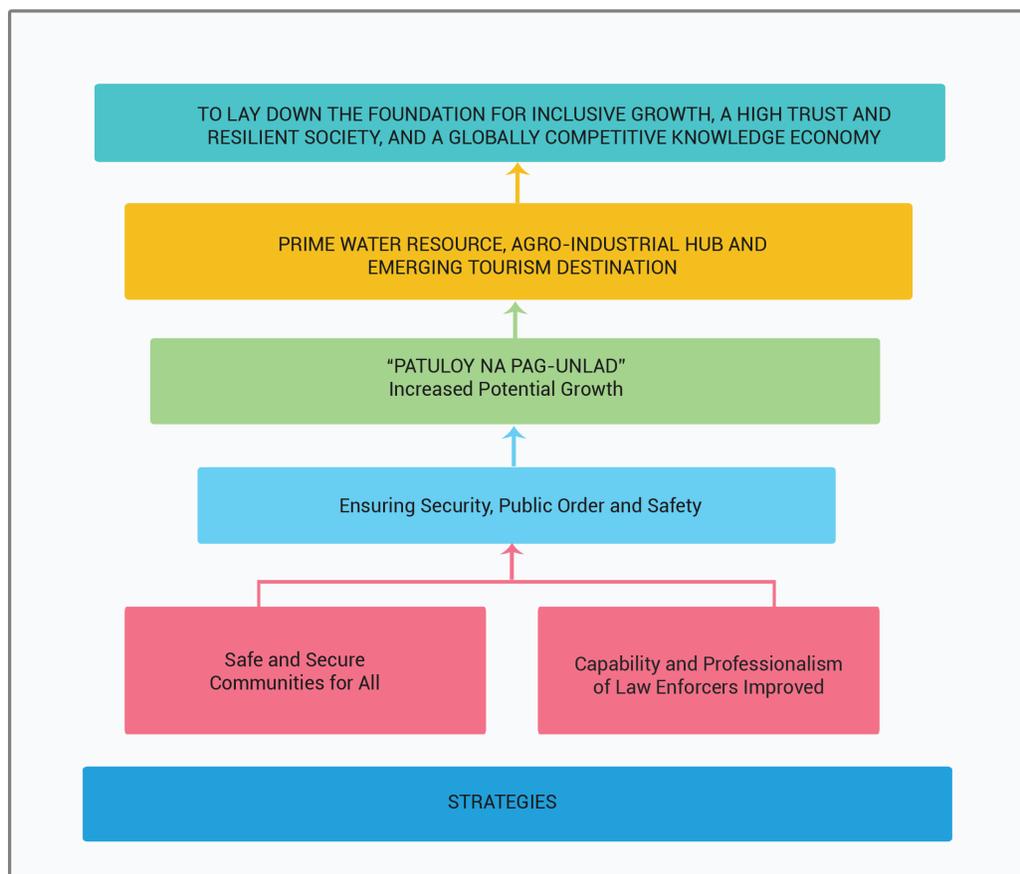
Conduct drug demand reduction activities. The strategy will focus on creating a positive community dedicated to encourage youth participation to community and school activities, conduct of drug abuse education, prevention and awareness and other alternative preventive programs. Increasing drug treatment services, provision of rehabilitation and care centers for drug users will also be prioritized.

Deepen community and stakeholders' partnership and engagement to all peace efforts. The community's voluntary involvement as peace partners of law enforcers is very vital in attaining security and public order. Continuous community outreach and dialogues and strengthening of the Barangay Anti-Drug Abuse Council will be sustained to build a high public trust and cooperation between and among said stakeholders. One of the programs of DILG to increase community cooperation in the peace process is the 'Mamamayan Ayaw sa Anomalya - Mamamayan Ayaw sa Illegal na Droga' (MASA-MASID) and Kilusang Pagbabago where the start of public order and security is attained at the grassroots level through the empowerment and active involvement of the barangays.

Intermediate Outcome 2: Capability and Professionalism of Law Enforcers Improved

Enhance capability of the security sector. Protecting the community and maintaining public order are an arduous tasks which require continuous improvement of capability including intelligence and physical agility among the law enforcers. Interventions will focus on the continuing growth of the police force and to ensure that they comply with the requirements set by the international human rights standards.

Figure 18.1 Strategic Framework to Ensure Security, Public Order and Safety, Region 02



Adherence to human rights will ensure public trust on the police force, and likewise ensures that erring public servants and human rights violators are appropriately punished by law. The public’s trust on uniformed personnel is a very significant factor in fulfilling the duties of an officer as well as in strengthening the PNP and community partnership.

Upgrading and modernization capabilities. The government’s support and commitment to upgrade and modernize security systems and equipment as well as the non-traditional approach and practices in the security sector will be strong-willed

to improve timeliness and capability of law enforcers to effectively respond to crimes and emergencies.

Provision of adequate manpower complement. Intensified police visibility within the region will improve responsiveness to ensure the safety of the citizenry, increased humanitarian assistance and disaster response, and stepped up conduct of law enforcement and military operations. This will be achieved through a sustained recruitment and training programs for law enforcement agencies.

Legislative Agenda

The region is supportive of the following legislative actions identified in the PDP 2017-2022:

Table 18.2 Supported Legislative Agenda to Ensure Security, Public Order and Safety, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Passage of PNP Reorganization and Modernization Act	Further improve its system capability in providing better police services for crime prevention, suppression, and investigation
Amendment of the Comprehensive Dangerous Act of 2002.	Enhance certain provisions to address the present drug situation in the country, particularly in the enforcement of the law, the functions of concerned government agencies, and the organization of PDEA. The amendments will support and complement the active and holistic approach being implemented in addressing the drug problem in the country.
Mandatory Reserve Officers' Training Corps (ROTC)	Based on the Constitutional provisions empowering the Government to call upon its citizens to defend the state and render personal military service and recognizing the vital role of the youth in nation-building, this will inculcate patriotism and nationalism, and encourage youth involvement in public and civic affairs. The DND envisions to create a pool of trained reservists by making the ROTC mandatory again in order to generate the needed human resources in times of war, calamities and disasters, and in support of the government's enhanced anti-crime strategy.
Amendments of Disaster Risk Reduction Management Act	Establish an independent Disaster Risk Reduction Authority with sufficiently high level of authority to lead the coordination, monitoring, oversight and implementation of disaster risk reduction and management. The authority will be equipped with the necessary competency and resources to engage new actors, particularly in the field of risk transfer and insurance, and built with the necessary structure to manage broader governance arrangements.

Source: Chapter 18 of the PDP 2017-2022

19 Accelerating Infrastructure Development

Accelerating Infrastructure Development

Access and connectivity serve as the most crucial factors in development. The efficiency and reliability of public infrastructures are translated into reduced travel time, transaction costs and production losses. The infrastructure support of the region is highlighted directly by the transportation, communication, irrigation and power sub-sectors. The indirect impact of infrastructure as a support sector is translated into increased productivity and improved public service delivery for the other sectors. Infrastructure development plays a pivotal role towards the goal of the region to shift to an industry-oriented economy with the proper infrastructure intervention.

Assessment and Challenges

Transportation

Land Transportation. Connectivity to and from the region relies mainly on land transportation. The increasing volume of vehicles, evidenced by the increasing demand for mobility and the volume of goods shipped in and out of the region contributes to the current condition of road network. The road condition of the region is far from ideal with the constant focus on rehabilitation. Road widening of major roads had also been given focus in the past two years to accommodate the increasing volume of vehicles. Relatedly, preventive maintenance was deprioritized due to the emphasis on road widening.

Rehabilitation, reconstruction and upgrading of roads improved for the past three years for a cumulative road length of 209.14 kilometers as of end of 2015. The rehabilitation and upgrading program was covered under the CYs 2013 to 2015 Infrastructure Program but there were also noted delays particularly on the acquisition

of the road right of way, inclement weather and the difficulty of transportation of construction materials especially in the province of Batanes.

While the road rehabilitation activities contributed to traffic congestions along the major roads in 2015, the roads widened have increased to 161.47 kilometers, an accomplishment rate of 72.6 percent as of December 31, 2015. The two-pronged strategy on road widening and rehabilitation is expected to reduce travel time in the long run.

The budget for maintenance, reconstruction and rehabilitation of roads should have been higher in 2015 but there were several factors that contributed to the decrease in the allocation during the year. One factor is the declaration of the Disbursement Acceleration Program (DAP) as unconstitutional which has bearing on some of the committed pipelined projects for the past two years. Nonetheless, there were still several projects that were sustained under the operative-fact doctrine in consideration

of its erstwhile impact to the region's development. This was further aggravated by the increasing demand of the business sector which resulted into competition for the services of private construction firms/contractors, thereby deprioritizing focus on public infrastructure. The region relied mainly on the services of local contractors which may not have the necessary equipment, facilities and capital to fast-track construction of public infrastructure.

Complementing the on-going rehabilitation of roads is the drainage and protection works project that were also carried out along national roads and bridges. This reduces the vulnerability of national roads from surface scouring, subgrade failure, deposition of soil and rock materials due to erosion and landslide. It is also a response to the climate and disaster-proofing of roads to increase its serviceability for the flow of people, goods and services to and from the region.

As of December 2015, the total length of classified national roads in the region was recorded at 1,910.47 kilometers which increased by 3.04 percent based from the 2012 baseline data. The increase involves additional 56.47 kilometers of national road for the 3-year stretch (2012 to 2015). From this total national road length, about 15.67 percent remains unpaved (gravel, earth or other surface classification) mostly in the province of Cagayan. Under the paved road classification with a total length of 1,760.74 kilometers, about 1,293 kilometers are classified as concrete and 467.72 kilometers were classified as asphalt road surface (generated from the Department of Public Works and Highways website). However, based on the report of the DPWH RO2, cumulative performance was 39.34 kilometers short of the target of 1,761.6 kilometers (the same with the 2015 RM Commitment). The paved national road represents only 5.95 percent of the national total. Being the third among regions in terms

of land area, road density is still relatively low. As of March 05 2016, the international roughness index of road in the region is 4.88 (described as fair condition), lower than the national average of 4.62 IRI. The test of IRI was made along the major national road in the region (Maharlika and Manila North Road), where the condition classification across district offices indicates that 163.89 kilometers were considered good, 319.38 kilometers as fair, 312 kilometers as poor and 118.77 kilometers as bad (generated from DPWH website). It is for the same reason that road rehabilitation was prioritized instead of preventive maintenance due to the deteriorating condition of the main national road network.

The aggregate funding support for the land transportation sub-sector in three years amounted to PhP21.99 Billion exceeding the investment target by 14.87 percent but the amount includes the implementation of projects that were not included in the Regional Development Investment Program (RDIP). While these were not included in the priorities of the region most of the projects involves rehabilitation and reconstruction of national roads with slips, slope collapse and landslides, off carriageway improvement and widening of permanent bridges for a total of PhP6.9 Billion. For the past three years, 6 bridges were translated into permanent bridges, 20 bridges were rehabilitated, 14 bridges were maintained and 15 were new constructions along national roads or in key locations needing access.

Meanwhile, in terms of motor vehicle transport operations, vehicle registration increased by 45.82 percent from 2010 with 447,186 motor vehicles registered in 2015. Driver license issuances also increased by 29.5 percent compared to 2010 or a total of 186,172 licenses issued. The difference in the percentage increase was due to the frequency of vehicle registration which is done annually as compared to licenses

which is renewed every three years. The increase in the vehicle registration is also an indicator of improved income among income classes and affordability of vehicles, particularly motorcycles which contributed to significant increase in vehicle registration. Vehicle apprehension was also on the downtrend compared to the past 3 years primarily due to the increasing IEC on safety driving and increase in fees for violations effective 2015.

The region is fourth among regions in terms of number trailers with NCR accounting for the bulk or around 47 percent of the total trailers. The increasing trend for renewal and new registrations for trailers will have impact on the road condition of the region which has been identified as one of the causes for road deterioration due to overloading and delay when figured in road accidents.

The improvement in the performance of the motor vehicle transport operations was attributed to the efficient implementation of national motor vehicle transport operations development programs of the Department on Transportation (DOTr)-Land Transportation Office (LTO) (e.g., Motor Vehicle User's Law, Seatbelt Law, Anti Overloading Law, Clean Air Act, Motorcycle Helmet Law and Computerization of Motor Vehicle Registration).

Water Transportation. For the past 3 years, the existing ports of the region have limited operations catering mainly to the needs of Batanes, Babuyan Group of Islands and the coastal municipalities of Isabela. The Basco Port of Batanes is the major transport mode for goods and products in and out of the province mostly directly from ports in Manila, Sta. Ana and Curimao. While there has been significant capital investment for Port Irene, the use of the port has also slowed down in the past three years partly due to the moratorium on the black sand mining which has been the major export

product of the province of Cagayan and the TRO on the importation of second hand cars. The utilization of Aparri Port has not been maximized with the need to rehabilitate the structure itself and the need to dredge sediments along the pier. There are other ports in the region but these are classified as municipal or fish landing ports which caters only to small fishing vessels.

The existing ports in the region have not been designed to accommodate large or commercial vessels aside from the limited protection facilities during disasters and/or support facilities for cargo handling and storage. The rough seas in the eastern seaboard are perilous to small vessels, the main reason for avoiding the said route. Nonetheless, the potential of these ports especially Port Irene in Sta. Ana as a transshipment, export and import hub is still seen to boost the region's economy towards agro-industrialization. There are other ports along coastal and island municipalities but cannot accommodate commercial vessels for both passenger and cargo handling. Yet, the existing ports are expected to provide an effective alternative to the movement of goods and services in case other modes of transport are not available.

Air Transportation. Air transportation is made possible with the operation of three airports in the region, namely: Tuguegarao, Cauayan and Basco. These airports, complemented by local aircraft carriers, provide faster alternative means to mobilize people and goods in and out of the region. To date, the Cagayan North International Airport infrastructure support component was completed in 2015, is already partially operational. However, it is currently catering to chartered flights only due to its "Limited Aerodome Registration" category. It is likewise limited to daytime operation based on visual meteorological conditions and cater mainly on global express aircraft category and below, under code 3C. This category issued by CAAP is

due to the need for additional equipment, including, but not limited to, air traffic control navigational aids, terminal building facilities, additional fire truck and more rescue and fire fighting services equipment. There are operational feeder airports but caters mainly to the local population's alternative transportation needs. Air transportation system is seen as one of the best way to boost the tourism industry in the region. All of the existing airports in the region are not equipped with an all-weather navigation system and below the standards to accommodate international flights.

In terms of passenger movement, there was an increasing trend in the past 3 years with 271,304 in 2015 or an increase by 5 percent from 2014. The total number of passengers annually was still dependent on the availability of flights which may be affected (delayed or cancelled) by inclement weather. There had been an increase in the frequency of flights for Tuguegarao, Cauayan and Basco airports owing to the increase in passenger demand. Nonetheless, these airports have yet to be upgraded (runway, navigation system and passenger terminals) so it can further cater to the increasing demand for air transport in the region.

Power

All barangays in the region were already reported energized, this as a result of a significant increase in the household coverage which went up by 92 percent of potential connections for a total of 711,072 as of 2015. The Isabela II Electric Cooperative has the lowest percentage connections due to its difficulty in linking the four coastal municipalities to the regular power grid. There are also households in the coastal areas and the lone island municipality of Cagayan which are not yet energized. Nonetheless, missionary areas or off-grid areas were provided with power using diesel-powered generators.

The commitment of electric cooperatives is to provide efficient and reliable electric service and offer affordable and reasonable rates to member-consumers. The upgrading and continuous maintenance of distribution lines is very vital to the operations of the electric cooperatives (ECs).

The widely-held view that “electricity is an input to production” contributes directly to the well-being of the household. Households lacking electricity were much poorer and less educated than households without electricity. While there may have been concerns like the affordability and sustainability of power, the cost-benefit analysis shows that the benefits far outweighed the additional costs. There was a stronger clamor for sustainability rather than affordability for businesses but households are pushing for affordability.

The cost of power in the region remains high, although it hosts the Magat Hydro Power Plant and the Isabela Biomass Energy Corporation. The region also experiences deficiency in transmission lines that need to be upgraded from its current 69 kV to 230 kV. These negative factors contributing to energy instability discourage investment in the manufacturing sector. Nonetheless, the region is expecting more investors towards biomass energy production which should provide additional power requirement in the region.

Communication

There has been marked improvement in mobile data and voice communication in the past three years with additional investments poured by mobile telecommunication companies into major and support infrastructure and facilities. There were only few deadspots already for voice call and messaging with the increase in the number of cell sites to 707 by 2015. Consequently, there was also an increase in the number of

channel allocation by 8.54 percent among mobile service providers improving data transfer and accommodating the volume of users. The distribution of Cellular Mobile Telecommunications Systems (CMTS) or Cell-Sites in the region is provided by three companies, namely Smart Communications, Globe Telecom, Inc., and Digitel Mobile Philippines, Inc. (Sun Cellular).

Some of the mobile telecommunication companies are also providing an internet service which is an upgrade and part of the data transfer technology. This was meant to address concerns for areas unreachable by cabled internet service providers which mostly are concentrated in urban areas. To date, there is only one major ISP provider, that of PLDT, which also bought Digitel, providing internet connections to the region. There are also independent players (local cable stations) providing alternative internet connections, but the bulk of cabled connections is controlled by PLDT-Digitel.

Connection is crucial to the region but the communication services provided is still far from current ASEAN standard and remains more expensive compared to other countries in Asia. Reliable and effective communication can compensate for the limitations in the physical access to the region. Other means of communication (i.e., TV, radio and print) are still relatively strong through local cable companies, broadcasting companies, and local printing companies operating in the region.

Irrigation

Generally, the performance of the irrigation development activities in 2015 was relatively low at 60.21 percent with a total firm-up service area of 275,085.76 hectares. About 55 percent of the firm-up service area were covered under National Irrigation System (NIS), 21 percent under Community Irrigation System (CIS), 17 percent under Private Irrigation System and 8 percent for

other agency-assisted irrigation system. There are still 181,812 hectares of potential irrigable area as of December 2015. Still, the region remains the second highest among regions in terms of irrigation development. About 75,279 hectares of farmlands were rehabilitated (84% of the target); 3,237 hectares of irrigation service area were restored (49% of the target); and only 1,563 hectares of new irrigation service areas were generated (24% of the target). The low accomplishment was due to the frequent unfavorable weather conditions in the project areas and the timing of construction activities within planting and harvesting seasons.

Rehabilitation works include de-silting of main irrigation canals and sub-laterals, repair of dam canals, and repair of typhoon-damaged structures while restoration works for the full operation of the NISs/CISs include construction/rectification of damaged facilities, tapping and development of new streams of irrigation water sources, concreting of irrigation line canals, and re-use of drainage water in irrigation. Part of the newly generated service areas, on the other hand, came from the construction of Communal Irrigation Projects (CIPs)/Small Irrigation Projects (SIPs), establishment of ground water irrigation projects and extension of service areas of the NISs and CISs.

Social Infrastructure

The region has yet to achieve standard ratios in education, health and housing facilities. The increase in population contributes to several backlogs in social infrastructure. There are still insufficient classrooms, inaccessible health facilities, limited access to clean and safe water, housing backlogs, among others. There are existing social infrastructures that have deteriorated beyond repair or outlived its life span and due for replacement (e.g. gabaldon type school buildings, health facilities that were

constructed in the 80's and 90's). Further, most of the public social infrastructure that were constructed prior to Typhoon Ferdie and Lawin have not incorporated building structural design that could withstand 280 km/hour or higher wind strength.

While this concern needs complementary social reforms and policies (e.g. reproductive health vis-à-vis demographic dividend), there is still the need for immediate and long-term interventions for infrastructure support to the sub-sectors. The concerned agencies in the delivery of aforementioned services recognize the need for the infrastructure support. However, some of these functions were devolved to LGUs but due to insufficient funds, these have not trickled down to the poorest of the poor. Government has not been visible in communities of lower income class municipalities or hard-to-reach communities due to lack of support to social infrastructure.

There were notable funding interventions for construction of hospitals and school facilities in the past 3 years, but the increase in the population had also increased the demand for services that these social infrastructures can offer. Improvements in public buildings along the Regional Government Center (RGC) with 48 agency-locators. Re-location of buildings within the RGC has been necessary to consolidate and improve the delivery of needed social services. The RGC serves as the physical representation of the national government in the region.

Disaster Risk Reduction and Management

Region 02 is still the 2nd top producer of agricultural crops in the country despite the fact that huge losses in agriculture have become an annual dilemma due to weather disturbances that give rise to

disaster situations. Its agricultural economy largely depends on weather conditions and patterns that affect soil stability and fertility, river conditions, water quality, and meteorological hazards, thus, vulnerability in large areas of the region.

The bulk of infrastructure is concentrated in the valley floor mainly critical infrastructure connectivity. The natural characteristics of the region contribute to its vulnerability to flooding and landslide and strong winds brought about by typhoons. The massive deforestation in the region's watershed and siltation of river beds of the Cagayan River and its major tributaries aggravate flooding.

The Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) recorded an average of 8-9 typhoons hitting North Luzon per year. There were six devastating typhoons in the past seven years that struck the region (i.e., Juan in 2010, Pedring and Quiel in 2011, Lando in 2015, Ferdie and Lawin in 2016) to which the region has not yet fully recovered. The last typhoons in 2016 set the "new normal" which is an indication of greater intensity and destruction in the future. There is however a stark improvement in the life preservation measures during disaster s as more people are getting responsive and knowledgeable in mitigating the impact of typhoons.

While there had been significant improvement in disaster management with the awards and recognition accorded to LGUs (Isabela province and Cauayan City) in DRRM initiatives, the region as a whole have yet to institutionalize the principle of "build-back-better" and safer for its public infrastructure. The region through the Regional Disaster Risk Reduction Management Council (RDRRMC) 02 aims to further strengthen all the phases of disaster risk management through a better understanding of the concerned public and private officials on the processes and the

concepts involved in disaster management and more holistic approach to mitigation, preparedness, response, recovery and rehabilitation.

The occurrence of typhoons in the past contributed to flooding occurrences which has been a reminder of the vulnerability of the region's resources to natural hazards and warrants revisit of the structural and non-structural measures being implemented. Without flood control along key bends of the Cagayan River, soil erosion in the upstream and deposition and siltation in the downstream of the river network pose as risks to agriculture and infrastructure as well as the displacement of people. To help address these concerns, eight flood control projects were implemented under the FMMR and FMSD of the DPWH.

For the 3-year period, the flood management projects with GAA-funding support amounted to PhP2.1 Billion which is 42.14 percent below the investment target reflected in the RDIP. However, additional flood mitigation projects not included in the original list in RDIP were still implemented for the period 2014-2016 amounting to PhP2.7B.

Still, the different flood control projects implemented during the year were not enough to cushion the impact of annual flooding occurrence to the region's flood plain. Most flood control project sites were intended to protect people and current infrastructure. Most agricultural production areas along the Cagayan River were still exposed to annual losses in land area due to river erosion. There is the need to come up with non-structural measures to complement current and future effort in protecting the region's current resources from damage and loss. The on-going National Greening Program and natural regeneration measures in the current forest stock of the region (see also Chapter 21) are some of the critical non-structural

interventions to reduce the exposure to more destructive flood occurrences.

Given the following assessment, the following are the identified challenges that poses to the sub-sectors under infrastructure development:

Unreliable land transport system in the region. The rehabilitation and widening of the national roads contributed to the increase in travel time by 50 percent causing traffic choke points, aside from other factors like increase in the volume of vehicles. The road widening projects are meant to ease traffic conditions but whole stretch of the critical national road like the Maharlika have yet to be completed. Even the Santiago-Enrile Road which serves as alternate route is also having similar concerns making land travel unpredictable and translates to economic losses. Overloading concerns further contributed to reduce travel time aggravated by road deterioration. The reliability of the roads is vital to the growth of the regional economy and in establishing and maintaining important socioeconomic and cultural linkages with neighboring regions and with the rest of the country.

Vulnerability to landslide and groundshaking for major entry and exit points. With its geographical location and its proximity to the Northeast Luzon fault-line, Digdig fault, and its vulnerability to typhoons and floods, the region still faces the challenge of sustaining its accessibility with other regions vis-a-vis its physical characteristics. The region's land transportation entry and exit points in Sta. Fe, Nueva Vizcaya and Sta. Prexedes, Cagayan are most often subjected to regular landslide with the occurrence of rain. Most critical is that of Sta. Fe and its neighboring municipality of Carranglan, Nueva Ecija which cater about 95 percent of the volume of vehicles coming in and out of the region. Delay in the delivery and movement of goods, services and people translate again

to economic losses and discourage potential investment inflow.

Inadequate funding for rehabilitation of disaster-damage portions. While there has been a spike in public infrastructure spending, development has been modest. Interventions have always been inadequate and aggravated by changes in national priorities and natural interventions. The biggest threat are damages caused by natural disasters to include Typhoon Juan in 2010, and Typhoons Mina, Pedring and Quiel that occurred in rapid succession in 2011, Typhoon Lando in 2015 and Typhoons Ferdie and Lawin in 2016. Rehabilitation of damage infrastructures has been slow and further aggravated by the issue on substandard public infrastructures due to corruption.

Absence of an alternative land transport system. The region relies mainly on the region's road network for the movement of people, goods and services but there are no better alternatives like river transport for inter-regional or train or by sea for external linkages. The increase in the population in the next six years will put pressure into the land transport system with the expected increase in demand for both cargo and people movement. Currently, there are no alternative land transport systems that can serve as redundant access to and from the region.

Deficient or poor road safety signages
The placement of signages has not been visible along national roads or even absent in provincial or municipal road network. National roads should also be equipped with road markings including thermo plastic pavement markings, pavement studs, rumble strips, pedestrian lanes and curbs for added road safety and reduce the occurrence of untoward vehicular accidents. Low reliability of roads has been noted due to overloading concerns further contributing to traffic or reduce travel time

aggravated by stalled trailers or figuring into vehicular accidents along key portions of the national road or the rapid road deterioration.

Weak regulation and enforcement of transport system at the local level. The common mode of public transport for inter-town or inter-city operation is tricycle and for inter and intra provincial operation is the use of public utility vehicles (jeeps, vans and mini buses). For inter city operations tricycle is the common mode to navigate narrow streets. However, there had been notable increase in the number of tricycles using stretches of the national roads causing traffic and most often vehicular accidents. Relatedly, there is the lack of discipline or awareness on the use of a four-lane road with slow moving vehicles expected to use the outer lanes, or local regulation that ensures that outer lanes are free from any form of obstruction but rarely been observed. Most local public transport are also insensitive to the needs of the vulnerable groups of the society especially people with disabilities, women, children, senior citizens, among others.

Underutilized and deteriorating seaports. The deterioration of the ports is due to under utilization where important repairs and rehabilitation were not seen as necessity. Most port facilities are underutilized for reasons of the lack of support facilities (e.g. docking, breakwater, storage, handling, among others). Likewise, most ports could only accommodate limited size of seacrafts or ships or volume of cargo.

Unpredictable and adverse weather condition. One of the factors in the underdeveloped water transport in the region is the unpredictable weather condition. The eastern seaboard of the region is most often rough starting the rainy or typhoon season and during onset of cold front. The most viable route to and from Manila is through the West Philippine Sea

where the sea is calmer compared to Pacific seaboard. There are only several months in a year that can be used as a window for the operational movement of people and goods in consideration of the ships'/boats' design and size that ply the sea travel routes. In addition, the region's existing ports were not equipped with effective breakwaters for all-weather condition that safeguards investment on water transport.

Limited investments for large scale/commercial shipping operations. There are only a few investors engaged in commercial shipping operation in the region, whether for fishing, cargo or people. Investment in water transport was not seen as a profitable venture due to the lack of all-weather ship shelter port.

Undersized runways. The current airport runways are still way below the standards for larger aircraft. It is for the same reason that existing airports in the region could only accommodate limited aircraft type. There is the need to lengthen the runways especially Tuguegarao and Cauayan airports to accommodate larger aircraft as additional runway serves as a safety mechanism for landing.

Lack of an all-weather airport. The three major operational airports in the region experience delay or cancellation of flights due to inclement weather. As a major alternative transport for people, these airports should be equipped with advanced navigational systems and upgraded features (e.g. visual flight routes) for all-weather and night landing.

Inadequate airport terminals and support facilities. Along with the upgrading of the airport capability is also the need to improve existing terminals and support facilities to ensure the passenger, personnel and aircraft safety and convenience.

Difficulty in finding the cheapest and the best equipment. Upgrading of equipment also means upgrading of the registration of airports. However, finding the most economical and yet the best equipment and within the standards of the CAAP is the main reason for the delay in the procurement of equipment.

Limited power supply leading to frequent power interruptions. Power demand spike during summer months leading to extensive power interruptions. The growth in the services sector particularly retail business (operations of malls in key urban areas) contributed to the increase in the demand for power. This indicates that the energy allocation of the region is not enough to cater to its current and future needs.

Vulnerability of power utilities to disasters. The power sector remains dependent on power towers and electric post for power distribution to consumers. These structures are highly vulnerable to typhoons which have impact on the sustainability of power services provided after the occurrence of disasters. Power outages are usually experienced from one week to two months. Power failure has significant impact on the delivery of services both for the private and public sector.

High Cost of Power. Ironic to the region's role as the source of generated power, the cost of electricity is still higher than the national average. The country's power rate is also the highest among Asian countries. This is one of the factors that discourage potential external investors to relocate to the region. Affordability issue has hounded the power sector with considerable system losses.

Low bandwidth. The country's internet speed is lagging behind in Asia. The region's bandwidth allocation is even below the current average national average. The region needs a faster bandwidth to participate

in the expansion of knowledge economy especially in the identified regional centers.

Limited coverage of internet connectivity. Effective data transfer through internet is only possible in urban areas with cabled internet connection as the most reliable. The rural areas of the region have low internet connectivity due to the limitation of services provided through wireless cellular network. Mobile telecommunication companies have yet to expand internet connectivity through the upgrading of cell sites' capabilities.

High cost of internet fees. Internet fee in the country is excessive compared to the rates of other ASEAN countries. Current fees should be reduced along with the improvement of bandwidth allocation to ensure affordability of services and be more competitive in the ASEAN Region.

Vulnerability of communication facilities to disasters. Communication is considered as human need being practical and necessary to establish social connectivity. Wireless communication has expanded to cover almost the whole region servicing greater percentage of the population. While communication cost has significantly been reduced and is now more convenient compared ten years ago, services are most often interrupted due to disasters. Along with public infrastructure damages after a disaster, communication facilities are equally vulnerable to natural occurrences and even with deliberate man-made disasters.

High cost of rehabilitation of irrigation canals and facilities. The cost of the maintenance of old communal and national irrigation systems in the region has become prohibitive with the fast-rising cost of labor and construction materials. Instead of rehabilitation NIA prioritized the construction of new irrigation systems in its irrigation development program to widen the irrigation service areas in the region.

Underutilized irrigation water. Wastage of irrigation water is most often experienced due to the lack of mechanism to divert extra water for other uses or recycle used irrigation water. The practice of unsynchronized farming contributes to surpluses that could have been re-utilized for industrial or manufacturing activities. Used water will again flow back through the river drainage system only for sole purpose of irrigation.

Limited structural and non-structural measures for run-off water storage. The region is subjected to extreme weather conditions such that during rainy/monsoon season there is too much unwanted water and water scarcity during prolonged dry spell or drought. The region has no system to maximize water retention for the extra water during rainy which can be tapped for irrigation or domestic use during the summer or dry months or in the future. The current impounding dams/water storages are not enough to reduce wastage of rain water. Relatedly, non-structural measures like reforestation are carried out in some areas of the region but not enough to absorb rain water due to the higher rate of deforestation or environmental destruction.

Insufficient social infrastructure. There is still a need for additional classrooms, health facilities, and housing to address population needs including professional services in order to improve the social service delivery. The increasing population requires an improvement in infrastructure and utilities along education, health and social welfare. The region may have one of the lowest population growth rate and one of the least populated regions but remains insufficient in terms of social infrastructure. This situation has impact on the quality of services offered to the population. Also, the current conditions of social infrastructure are reflection of the effectiveness of social services provided which are further translated in terms of the quality of

graduates, ability to address health issues or addressing housing backlog especially among the poorest of the poor (see also Chapter 11 & 12).

Sub-standard building structures. The most vulnerable to damages brought about by disasters are social infrastructures like schools, hospitals and other public buildings. Some public structures most often serve as evacuation centers in a worst case disaster scenario but the experience in the past ten years showed considerable damages to public infrastructure due to strong winds brought about by typhoons. This only indicates that the structural designs of these social infrastructure could no longer withstand winds exceeding 250 km/hr. There were no reinforcements or rehabilitation efforts made for old buildings or structures to reduce its vulnerability to

damages.

The build-back-better principle has not been incorporated in the building permit applications. The National Building Code should already consider “new normal” for geologic and climatic conditions in the preparation of building plan and structural designs.

Disaster is a major factor that slow down development momentum or can simply render public and private investment to waste in an instant. This has been the case for the region for there had been a lot of investments or interventions poured into the different sectors but ended up with reduced or no value after the occurrence of a disaster. Disaster is expected but reduction of its impact has never been managed.

Strategic Framework

Infrastructure development supports all three pillars and intermediate goals of the plan, as it is vital to enhancing the social fabric, reducing inequality, and increasing growth potential. To this end, the overarching objective for the infrastructure sector in the medium-term is to accelerate infrastructure development and ensure that

operations of infrastructure systems and facilities will be sustained. This will ensure improved connectivity and coming up disaster resilient infrastructure that further increase growth of the different sectors of the regional economy. The targets and strategic framework are presented below:

Targets

Table 19.1 Plan Targets to Accelerate Infrastructure Development by 2022, Region 02

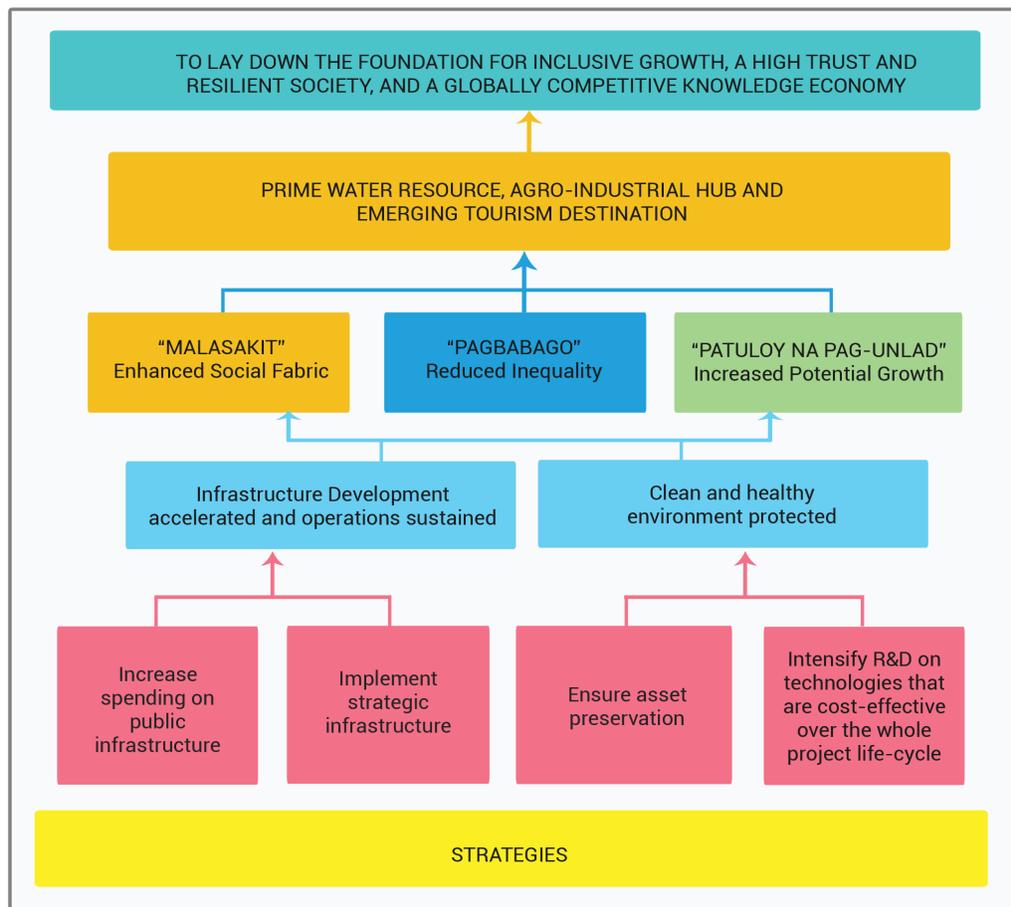
INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Public infrastructure spending increased, in % gross domestic product (GRDP)	2016	3.86	TBD
International Road Roughness Index achieved	2015	4.88	TBD
Percent of Primary primary roads meeting an IRI of not more than 3	2015	TBD	TBD
Length of bridges made permanent increased (in %)	2015	98.79	TBD
Air passenger traffic increased, in number of passengers	2015	271,304	TBD
Proportion of energized potential households expanded (% of total HHs)	2015	93	96
Average system loss reduced (in %)	2016	11.46	TBD

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Irrigation areas rehabilitated increased (ha.)	2015	TBD	TBD
Area restored increased (ha.)	2015	TBD	TBD
CMTS service performance improved	TBD	TBD	TBD
Cellular Mobile Telephone Service (CMTS) coverage increased	TBD	TBD	TBD
Broadband coverage increased	TBD	TBD	TBD
Classroom to pupil ratio improved	TBD	TBD	TBD
Number of barangays with BHS	2016	26,048	42,038
Socialized housing increased	TBD	TBD	TBD

Source: DPWH, NIA, DICT, CAAP, PSA, DepEd

Strategies

Figure 19.1 Strategic Framework to Accelerate Infrastructure Development, Region 02



Intermediate Outcome 1: Spending on public infrastructure increased

Enhance the linkage of the planning, programming, and budgeting processes of the government. The development planning exercise allows different levels of government and the concerned agencies to align all efforts towards the development goal of the region (see Chapter 5). The local government units (provinces, cities and municipalities) will have to align their infrastructure development programs to the regional, notwithstanding the initiatives of LGUs to take extra-ordinary efforts to spur development in their respective locality. It is important for LGUs to revisit their physical/land use and development plans to ensure consistency with that of the regional development priorities. Investment programming is the direct translation of the regional and provincial plans through the RDIP and local Annual Investment Programs (AIPs). In the identification of potential funding source consideration for optimal mix of financing shall be explored to include national government, official development assistance, and private investment for its implementation.

Budgeting becomes effective if properly referred to existing plans and investment programs creating a firm link between the budget and effective service delivery requirements in order to account for every peso that government spends. The harmonization of the 3 processes increase the stake of the people for every project implemented. Infrastructure projects account for a significant share in the government budget for the next six years with the current thrust to spur infrastructure development. Possible implementation bottlenecks must be identified and simulated in order to reduce or avoid delay in project implementation. This will address the problems of under-spending, expenditure re-alignments and cost overruns.

Encourage private sector participation.

The region will also have to explore and increase the viability for private sector involvement in the project development and implementation of critical public infrastructure projects consistent with the principle of efficiency, quality and innovativeness. This reduces pressure on various regional and sub-regional government implementing entities from the lengthy process of project development and the delays in the project implementation.

Alignment with master plans and roadmaps.

The region came up with the DRR-CCA-enhanced Cagayan River Basin Master Plan which incorporates both structural and non-structural interventions for the management of the built and the natural environments. It serves as the only master plan of the region which incorporates several infrastructure development projects cutting across several sectoral concerns. The region will likewise align its priorities to the national plans and roadmaps for specific sectoral concerns ensuring complementation in the long run but will pursue project development initiatives within the medium term. All LGU-led initiatives for infrastructure development should also be aligned with the thrust of the region.

Improve government administrative systems and procedures on project implementation.

With the intended increase in spending for infrastructure, the capacities of implementing agencies will also be increased with respect to project development and preparation. This will ensure quality-at-entry of proposals at appraisal and approval stage. Government administrative systems and procedures will also be improved to ensure the timely release of funds for project implementation. However, the guidelines on contractors' performance and compliance with the Contractor's License Law will be strictly enforced to ensure the quality of public

infrastructure and safety of clients/users.

Intermediate Outcome 2: Strategic infrastructure implemented

Transport. *The efficiency of the transport sector will be enhanced to sustain economic growth and increase competitiveness by providing adequate, accessible, reliable, and safe access for people, goods and services within and outside of the region for connectivity complementation.*

The region supports the enactment of a National Transport Policy which will paved the way for the creation of independent regulatory bodies for the railways, airports and seaports, among others, to establish a more streamlined transport sector that is able to efficiently and effectively carry out the identified development strategies. With emphasis on improved connectivity and enhanced mobility, the maximum convenience for passengers, and faster cargo movement will be achieved.

To ensure that the transport sector is able to support economic development, the physical state of existing infrastructure will have to be significantly improved for the optimal economic outcomes while the transport network is being expanded. Projects that are implemented, especially those identified as flagship projects, will be closely monitored to ensure the quality and timely delivery of output.

Roadmaps and evidenced-based studies should guide the rational development of an intermodal transport infrastructure network, taking into consideration compatibility, economic feasibility, comparative advantages, and linkages of desired transportation modes. The consolidation of baseline data and information relative to the national transport network is deemed critical in this plan of action.

Construction and rehabilitation of roads and bridges that would link production areas to the market centers will be accorded priority. Special attention will be given to the rehabilitation of damaged pavements along arterial and secondary national roads especially those directly benefitting vulnerable segment of the population. The adoption of the DPWH Design Guidelines, Criteria and Standards 2015, which incorporates resilient design, will be maximized to address the impact of climate change on all transport infrastructure. Also, the Green Building Code, which will help protect the environment, will be strictly followed by promoting resource use efficiency and environmentally friendly designs and technologies.

Transport agencies will continue to forge convergence programs with concerned agencies to ensure that economic sectors are provided with adequate transport infrastructure support and services. A convergence program with the industry and trade sector in underdeveloped rural areas will be rolled out. Agricultural areas will continue to be supported through the provision of farm-to-market and farm-to-mill roads, according to the standards set for both design and construction.

It is important to secure broad-based support for the infrastructure program. There should be general recognition that infrastructure support is a crucial input to achieving the RDP targets, but that there is bound to be some public inconvenience while projects are being implemented. Efficient coordination mechanisms among the different transport agencies and those representing the interests of other economic sectors, as well as stakeholders and the general public, will be put in place. For instance, concerning road projects, there will be greater coordination among DPWH, telecommunications companies, water districts, electric cooperatives or distribution companies on projects, particularly on

road widening that requires the transfer of affected utility lines. Such coordination will extend to all LGUs to ensure that local plans and programs are aligned with the national agenda. LGUs and metropolitan agencies will also need to take on more responsibility and accountability for traffic and public transport outcomes. Access and other support facilities for marginalized sectors (senior citizens, persons with disabilities, women, etc.) will be integrated in the design of transport infrastructure projects.

In the short term, road-based transport will be improved by addressing traffic congestion through “engineering, enforcement, and education”; while working on the road network upgrading and expansion to its highest quality standards.

Appropriate traffic management measures will be enforced and updated to remain responsive to prevailing situations especially along the region’s major entry and exit points in order to reduce vehicular accidents, traffic bottlenecks and travel time. Where necessary and appropriate, bypasses, diversion roads, fly-overs, and underpasses will be programmed or constructed and existing roads will be improved and widened. Dilapidated road signages and safety structures in required sections of roads, particularly, along accident-prone areas such as round about areas and dangerous curves will be restored sustained. Anti-overloading measures including penalties and putting up additional weighbridges and portable weighing devices should be strictly enforced and strengthened to prevent the rapid deterioration of roads and bridges.

Strict enforcement of Department of the Interior and Local Government (DILG) banning tricycles and pedicabs to operate along national highways which are utilized by four-wheel vehicles greater than four tons and where normal speed exceeds 40 kilometers per hour. To ensure compliance with international standards on vehicle

safety and environmental impact, the Motor Vehicle Type Approval System and Motor Vehicle Inspection System will be implemented.

For a more efficient use of road infrastructure, the movement of people and goods using public transport will be prioritized over private vehicles. High quality public transport modes will be pursued so that commuters will prefer public over private vehicles. Non-motorized transport (e.g. bicycle and pedestrian infrastructure) will also be explored and pilot-tested in urban areas to provide alternatives for mobility, accessibility and safety.

The region will support the national thrust for the gradual shift towards public transport, with emphasis on mass transport, ensuring the accessibility, availability, affordability, adequacy, convenience, and reliability. The rail network development will be pursued in the region to provide alternative and cheaper access and mobility. Development planning for the rail sector will take into consideration the plans for road-based transport infrastructure, especially in cases where projects will utilize the same right-of-way. Consistent with the objective of moving more people and cargo rather than vehicles, priority on the right-of-way will be accorded to rail-based transport over road-based transport.

The government will exhaust all possible means to improve the operational efficiency of airports and to address constraints to optimal capacity utilization. To serve the increasing passenger demand, the ongoing and planned improvements of Tuguegarao, Cauayan and Basco airports will be fast-tracked. The two major airports will be installed with night landing facilities to increase the viability of more flights to the region.

To improve the efficiency of airports, procedural measures which involve airspace

management and adopting collaborative decision making among the air traffic control, airlines, and ground handlers will be implemented. Runway capacity will be optimized by cutting aircrafts' occupancy times. Available airspace will be maximized by reducing restrictions and making procedural improvements to tighten intervals between aircraft movements. Unimpeded traffic flow of passengers and freight will be ensured through adequate and conducive access to all airports. All these will be undertaken through the procurement of the state-of-the-art technology and services such as ground radar movement and collaborative decision making software.

Port facilities will be improved to ensure connectivity with island and coastal areas for better movement of people and cargo. Protection facilities will be developed as well rehabilitation and upgrading of the region's existing ports will be pursued to prevent ports from further deterioration and optimize its use. The upgrading of the ports will be given priority thru project proposals for possible implementation in the latter part of the plan period. Part of the upgrading is the inclusion of cargo handling and storage facilities. The region will also explore long-term viability of utilizing Cagayan River for water transport. These initiatives will provide alternative transport system for the region translating to potential economic gains through reduced transport cost, increased lifespan of products, and more profits and job opportunities.

Safety and security of the public transport system will be improved by adopting a security structure that is universally accepted to eradicate activities that may cause injury, death, loss, or damage to property. The region will adhere to traffic and safety standards and measures that will reduce accidents and improve transport safety.

The region will also pursue stronger collaboration for PNP Maritime and PCG, to ensure presence and control over the regions maritime domain in order to address poaching of marine resources, timber poaching into the coastal areas along the eastern seaboard or any form of illegal activities inimical to the economic welfare of the region.

Water Resources. *The primary strategy for the water resources sector is to address its fragmented structure through the creation of an apex body and the formulation of masterplans that will foster coordinated efforts across the country.* Such apex body will institutionalize a science-based river basin approach that integrates the principles of integrated water resource management.

The region supports stronger collaboration among the national agencies that will pursue the creation of the APEX body for a more efficient and sustainable management and water resources and improved access. The government will enhance the capacities of concerned entities in developing and managing water-related projects with the direct involvement of local or regional agents for its regulation and monitoring.

Surface water source development for water-critical areas will be prioritized and protected to ensure sustainability of supply. Groundwater recharge system in the development of the surface water source for critical areas will be incorporated wherever possible in accordance with prescribed standards. Use of eco-efficient water infrastructure to address water demand and supply mismatch will continue to be promoted. Measures to promote efficient water utilization will be explored.

Institutional reforms will be pursued to encourage and guide investments in water services. The creation of an independent economic regulatory body for the Water Supply and Sanitation (WSS) sub-sector

will be pursued for a more transparent and consistent regulation. A unified financing framework with a definite scope and streamlined process will be established to consolidate and make more accessible all available financial resources to support the WSS projects of all water service providers. The government will assist Water Districts in expanding the coverage of reliable water service at affordable rates and reducing non-revenue water (NRW) while ensuring economically-viable operations.

An irrigation master plan to set the direction for irrigation development and a framework for capital and operations and maintenance (O&M) financing of irrigation projects will be formulated. The overall plan and framework will aim to: (a) institutionalize a policy providing government subsidy for capital investment and O&M of irrigation facilities; (b) strengthen the capacity of personnel; (c) strengthen the implementation of the Irrigation Management Transfer Program; (d) review and rationalize irrigation service fees; (e) establish and rehabilitate small-scale and community-based irrigation projects in areas not served by national irrigation systems (f) prioritize small over large irrigation projects and rehabilitation over construction of facilities; and (g) conduct complete technical work and site validation in the project planning stage to eliminate the causes of delays in project implementation.

Flood management initiatives will continue to be undertaken. While awaiting for the creation of the Apex Body for Water Resource Management, the Cagayan River Basin Management Council shall provide direction for the flood management initiatives in the region. The DRR/CCA-enhanced Cagayan River Master Plan serves as the major reference for the upgrading of engineering standards for the design and O&M of flood control works; the establishment of a database on river information and updating of baseline data on delineation of flood-prone areas; and

strengthening of the flood management capabilities of and coordination among concerned agencies (e.g., DPWH, LGUs).

Energy. *The region supports the required massive investments and fast track the implementation of infrastructure projects to improve power generation.* An optimal energy mix will be studied based on appropriate allocation of capacities (i.e., baseload, intermediate, peaking) and technologies (i.e., renewable energy, nuclear, coal, oil, gas, etc.). Power optimal mix will also be explored to address the challenge of securing greater system stability and security of supply to meet increasing power demand. The region will pursue and support renewable energy market and renewable portfolio standards to further encourage the development of alternative energy source. Promote energy independence through the use of indigenous energy sources such as wind, solar and hydro power to serve off-grid and remote communities.

The region with the support of the national government will ensure that the needed transmission facilities are implemented on time to efficiently transmit electricity to various load centers and interconnect the entire grid. The region will push for the improvement of transmission network to support power generation capacity and distribution efficiency. Interconnection with other grids will be prioritized to increase the reliability of power systems and enable capacity sharing of reserves and exchange or delivery of energy during periods of shortfall or surplus in power supply between grids.

The government will prioritize the provision of electricity services to the remaining off-grid areas, island, remote, communities to achieve total household electrification. To achieve universal access to electricity, the region will enter explore arrangements for missionary electrification, complementation/ collaboration programs among electric

cooperatives, LGUs and National Electrification Administration (NEA). To ensure affordability of power, the region supports competitive selection process in securing bilateral power supply contracts, the removal of VAT on system loss charge, the review of the pricing methodology and the promotion of fair competition in the implementation of the retail competition and open access.

To improve energy efficiency, the region will continue supporting the implementation of the Energy Efficiency Conservation (EEC) program that is aimed to support economic growth and environment protection. To achieve this, there is the need to support the enactment of the EEC bill to promote demand-side management and incentivize energy efficiency projects or documented energy-conservation practices, the imposition of minimum energy consumption standards. Strengthen energy efficiency programs to lower the cost of electricity by reducing systems loss and implementation of energy conservation programs. Adopt green energy utilization in government operations.

ICT Infrastructure. With the stronger recognition of ICT as a vital tool for nation-building and good governance, the government will ensure that the country's ICT infrastructure and services are available, accessible, reliable, trusted and affordable. The government will be guided by the following priority strategies:

Expand the deployment of ICT infrastructure and address the gaps in digital connectivity. To create economic opportunities, the region will facilitate for faster and the strategic roll-out of ICT infrastructure in order to meet the growing demand for structures improved facilities and services, particularly in underserved areas. Consistent with the promotion for the development of a knowledge-based economy, the region supports the provision of fast, reliable

and affordable telecommunications infrastructure and services accessible to all. Collaboration with the LGUs to streamline and harmonize government requirements and processes on permits, clearances, and fees issuances will be strengthened. This will be done by establishing a one-stop shop offline and online facilities that will encourage infrastructure investments and facilitate faster roll-out. Facilitate and encourage infrastructure sharing and co-use by leveraging existing government infrastructure assets and forging partnerships with utility operators, and hence, potentially reducing associated costs in infrastructure deployment. Provide communication services during disasters the Leverage the use of emerging technologies capable of establishing connection to the countryside and isolated islands.

Continue to enhance the e-government systems for good governance. Effectively utilize ICT for good governance and secure public trust (see also Chapter 5). All frontline transactions/services will transition from semi to automated systems to optimize use of resources, encourage information and resource-sharing and database-building, ensure the development and protection of an integrated government infrastructure and networks and promote transparency.

Education. The effective implementation of social infrastructure projects will improve and encourage access to basic social services necessary for human capital development and ensure safety within the context of build-back-better. The infrastructure deficit in the education sector will be addressed complemented through other social programs that will meet education standards. The Basic Education Facilities Funds (BEFF) will be expanded, especially in areas where they are most needed. School buildings will be provided with complementary facilities such as power, ICT, water and sanitation facilities. An open and comprehensive database of education infrastructure system

will be developed and updated regularly by DepEd to aid in monitoring and evaluation of education infrastructure and utilities for purposes of planning, programming, and budgeting.

Health-related. LGUs will be provided assistance in complying with the requirements under the Ecological Solid Waste Management Act (ESWMA). There will also be public awareness programs to promote proper waste management; investments in relevant technologies will be undertaken to improve solid waste management at the local level. The DENR-Environmental Management Bureau (EMB) in coordination with National Solid Waste Management Commission and relevant stakeholders, will implement strategies in support of RA 9003. Where necessary, the region will promote for the clustering of LGUs for Common Solid Waste Management (SWM) facilities and services to take advantage of economies of scale, creation of SWM units and appointment of environment and natural resource persons in each LGU, provide an incentive mechanism to local recycling industries to encourage their continued participation in the local SWM system, adopt alternative technologies, including waste-to-energy, as SWM solution, considering institutional, legal, and technical limits, intensify the promotion of segregation-at-source by engaging local communities to participate in “learning by doing” programs, information and education campaigns and social marketing programs on SWM and operationalize SWM fund and assess the re-institutionalization of the NG- LGU cost sharing scheme for SWM. Enhance the capacities of relevant agencies in order to better monitor and manage health care and hazardous wastes. The region will promote information exchange on available low-cost technologies for health care and hazardous waste management and expand and accelerate assessment of chemical risks

Housing. Secure tenure in affordable, safe and disaster-resilient housing will be provided to underprivileged and homeless families. The following strategies will be pursued by the Housing and Urban Development Coordinating Council (HUDCC), together with LGUs, to ensure the timely provision of decent shelter to the underserved. The region will promote housing and building technology that is affordable and disaster resilient to address housing backlogs in the region. It will look into innovative and cost-efficient means including exploring indigenous technology or practices that have been proven effective for particular areas like the province of Batanes. Current innovations in green technology will be considered in the structural design of housing units. The different LGUs should fast-track the identification of re-location/resettlement sites for populations vulnerable to hazards or urban blight proposed infrastructure projects. The LGUs will have to adhere to a national resettlement policy framework that will be adopted to serve as basis of resettlement action plans for proposed infrastructure projects. The identification of resettlement sites should be in accordance to critical factors like access to economic opportunities and social services (e.g., livelihood, schools, hospitals, etc.). The region in collaboration with the LGUs concerned will pursue adherence or recognition of cultural practices, and gender-responsiveness and the needs of vulnerable groups (i.e., elderly- and persons with disabilities, women, children) in the identification, development and implementation of housing programs.

Intermediate Outcome 3: Asset preservation ensured

Infrastructure investment, sustainability, safety, and resilience are components of an integrated response to the improved performance of the infrastructure sector. The government will continue to strengthen

its role in coordinating infrastructure management and place greater emphasis on sustainability, safety, and resilience. In particular, this plan highlights a range of specific measures that the government will undertake to achieve better outcomes:

Increase technical and financial capabilities for operations. Improved infrastructure relies on having effective public policies, institutions, legislations and standards. Within the objective of improved governance and strengthening of finances of authorities, the government will: strengthen the technical, management and financial capabilities of government agencies and LGUs; rationalize national and local level planning; and improve accounting, compliance mechanisms, monitoring and reporting systems.

To maintain the emphasis on technical, management, and financial capacity building as an integral part of development assistance projects, government will strengthen regulatory oversight and personnel capacities in various departments for infrastructure planning, management, and operation. Value engineering and value analysis principles at various stages of project development will be mainstreamed to optimize the use of funds allocated for infrastructure development. To region supports initiatives at the national level that will further reduce the occurrence of cost overruns in project implementation.

The region will also push for efforts to improve the allocation of infrastructure budget and the rational spatial location of infrastructure projects for optimal economic returns. Various infrastructure information databases will also be developed both at the national and local levels to ensure complementation and aid government entities in formulating, updating, and implementing infrastructure plans and programs.

Incorporate climate change adaptation and disaster resilience measures. Considering that the Philippines is highly vulnerable to disasters and effects of climate variability, the operational life of infrastructure will be secured. Disaster risk reduction and climate change adaptation strategies will be considered to ensure resilient infrastructure facilities. For instance, disaster-resilient safety network of feeder ports that will safeguard secured and smooth logistics in times of disaster will be established on top of its rehabilitation and improvement. Moreover, the regional line agencies in coordination with LGUs will recommend for the implementation of flood and drainage projects and other critical infrastructures and facilities identified in the DRR/CCA-enhanced Cagayan River Basin Master Plan. Ensure the security of infrastructure facilities. In response to risks that threaten essential infrastructure services, the region will enhance the security of its infrastructure through proactive and coordinated efforts among government agencies, LGUs, and communities. Specifically, the region will push for the following:

- Establish engineering standards and design flood control, drainage, slope protection and other public infra to be more disaster-resilient and responsive.
- Develop database and information system for proper and efficient asset management and flood and landslide management.
- Pursue completion of mitigation and preparedness plans of LGUs .
- Construct or rehabilitate vital infrastructures such as roads, bridges, evacuation centers (gender sensitive), and schools to be resistant to or to withstand extreme weather conditions.
- Ensure the immediate restoration of government facilities (roads and bridges, buildings, etc.) and lifelines (light and water) after disasters.
- Provide access to potable water, sanitation and hygiene facilities for the

prevention of diseases in evacuation centers and maintain healthy living conditions of affected families.

- Fast-track the implementation of flood control projects identified in the Cagayan Valley Flood Mitigation Master Plan and upgrade the drainage facilities in disaster prone areas.

Intermediate Outcome 4: Intensify infrastructure-related research and development (R&D) intensified

To improve the infrastructure sector, it is imperative that R&D expertise is

institutionalized. The region supports the efforts of the national government in the pursuit of programs to develop R&D along, renewable energy and technologies to meet the growing need for clean and affordable energy; cost-efficient technologies for wastewater and solid, hazardous, and health care wastes management for the protection of public health and the environment; new transportation technologies; climate change- and disaster resilient infrastructure designs; emerging ICT applications or platforms; and new methodologies for gathering and managing science-based data. In addition, establishment of R&D facilities will be supported.

Legislative Agenda

Table 19.2 Supported Legislative Agenda on Accelerating Infrastructure Development, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Amendments to the Build-Operate-Transfer Law and its IRR	Introduce reforms to address bottlenecks in PPP project implementation, further encourage private sector participation, and keep the policies attuned to the changing business environment.
Enactment of a National Transport Policy	Aims to help achieve a safe, secure, efficient, competitive, dependable, integrated, environmentally sustainable and people-oriented Philippine transportation system by setting forth policies that will serve as boundary conditions to guide all entities involved in the transportation sector in the exercise of their functions. This policy will provide the parameters for planning at the agency level, e.g., the formulation of the "Philippine Transport System Master Plan".
Enactment of a Law Creating Independent Regulatory Bodies for Railway and Maritime Transport Sectors	Addresses the weak and fragmented institutional setup of concerned transport agencies by creating respective independent regulatory bodies for the railway sector and maritime transport sector, consistent with the National Transport Policy. The existing dual roles of some agencies acting as both operator and regulator of transport facilities will be effectively eliminated.
Enactment of a Law Creating an Independent Body for Transport Safety and Security	Places all transport safety and security matters under a single independent body that will, among others, investigate transport accidents and provide transport safety recommendations, thereby eliminating conflicting and overlapping functions of existing agencies or entities.
Enactment of a Law Creating an Apex Body for the Water Resources Subsector	Aims to address the weak and fragmented institutional setup of the water resources sub-sector with the creation of an Apex Body that will act as the single lead agency to oversee/coordinate overall policy and project/program implementation.
Enactment of a Law Creating an Independent Economic or Financial Regulator for Water Supply and Sanitation	Harmonizes the regulatory practices, processes, fees and standards on water supply and sanitation while addressing the overlapping functions or jurisdictions of existing regulatory entities.

LEGISLATIVE AGENDA	RATIONALE
Amendments to RA 9136, the Electric Power Industry Reform Act	Improve the implementation of the law's provisions and enhances its effectiveness to address high cost of electricity, alleged market collusion, and insufficient power supply.
Enactment of an Enabling Law for the Natural Gas Industry	Provides an enabling legal and regulatory framework for the natural gas industry to guide investments in the sector.
Enactment of a Law Declaring Energy Projects as Projects of National Significance	Expedites the timely completion of energy projects to help cushion the impact of high power rates
Enactment of a Law on Energy Efficiency and Conservation	Promotes demand-side management and incentivizes energy efficiency projects.
Enactment of an Enabling Law to Utilize Malampaya Funds, otherwise known as the Energy Resource Funds	Provides an enabling legal and regulatory framework to expand the utilization of Malampaya funds to cover universal charges for stranded contract cost/stranded debt, and rehabilitation of government energy infrastructure
Amendments to the Public Telecommunications Policy Act of the Philippines	Makes the law more responsive to technology advancements and changes in the market landscape, considering convergence of technologies; and also strengthens the roles of DICT and NTC in fostering and upholding competition in the market
Amendments to RA 9003, the Ecological Solid Waste Management Act	Addresses the weak administrative, organizational and institutional dynamics of LGUs in implementing SWM programs or projects. The proposed amendments may include, among others, the mandatory creation of a local Environment and Natural Resources offices and identification of dedicated focal SWM units with corresponding organization structure, powers and function

Source: Chapter 19 of PDP 2017-2022

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Ensuring
Ecological Integrity,
Clean and Healthy
Environment

Ensuring Ecological Integrity, Clean and Healthy Environment

Environment and natural resource services play a very critical role in improving economic condition of the region most particularly along agriculture, urban development and other sectors. Natural resources provide water and other domestic demands in the lowland areas. Any alteration therefore to the natural environment would have a significant impact on the economy of the region, hence, should be sustainably managed and protected.

This CVRDP 2017-2022 includes strategies to protect remaining natural resources and further improve condition of the environment. This is in support to the present administration's goal towards achieving sustainable development particularly on enhancing resiliency against impact of climate change and other natural hazards.

Assessment and Challenges

Forest Resources Management targets were exceeded. The region's performance in forest management has been impressive as all PPA targets were met or even exceeded during the plan implementation period. The implementation of the National Greening Program (NGP); Forest Monitoring and Protection; and Mineral Resources Management complemented the national government strategies on sustainable development, biodiversity conservation, and climate change mitigation and adaptation.

The NGP has been the banner program in restoring its denuded forestlands since 2011 maintaining a cumulative area of 65,801.51 hectares. The NGP has been found effective in restoring the lost natural resources of Region 02, through convergence efforts and initiatives of government and non-government partners including the local government units (LGUs). Moreover, the region further enforced the implementation

of forest protection efforts through the Regional Anti-Illegal Logging Task Force (RALTF) and the Regional Multi-stakeholders Forest Protection Committee (RMFPC) as manifested by the abrupt decline of confiscated illegally cut forest products with a volume of 372.68 cubic meters with an estimated value of PhP4.038 M in 2015 as against the volume of confiscations of 722.97 cubic meters in 2014 with an estimated value of PhP8.364M.

Other than that, the active involvement of women organizations in the implementation of the NGP and provision of alternative livelihood options had provided them an alternative source of income. Such active support and participation of all stakeholders has led to the neutralization of illegal logging activities, declaring Region 02 as zero hotspot on illegal logging.

Issuance of land patents facilitated. The issuance of land patents remained on track exceeding its yearly targets. Through the land patents, open access land resources are made available to marginalized farmers and public land applicant. For three years, the region was able to issue 20,142 patents to residential, agricultural and commercial lands using the Residential Free Patent Act of 2010 and the Comprehensive Agrarian Reform Program dubbed as “*Handog Titulo*” Program, surpassing its cumulative target of 13,423 hectares. Regular land disposition surpassed its cumulative targets for 2013-2015 by 33.35 percent or a 150.05 percent accomplishment.

Mineral Resource Management. Mineral production showed a 43.12 percent decrease in 2013 compared to 2012 because there were no Exploration Permits and Mineral Production Sharing Agreements issued in 2013. Only two Mineral Processing Permits were issued in 2015 due to the cancellation order issued for black sand mining in some municipalities in the province of Cagayan.

To ensure the proper implementation of mining activities in the region, regular on-site monitoring based on the work programs of mining permittees were undertaken per year. The sustainable development and management of the region’s mineral resources were fully supported in terms of funding from 2011-2016 per Regional Development Investment Plan (RDIP) assessment.

Management of protected areas, coastal resource and biodiversity zones sustained. On biodiversity conservation, the region continuously monitored and supervised 15 established Protected Areas (PAs) from 2013-2015 with a total aggregate area of 1,011,466.46 hectares. Two of these PAs traverse two regions namely the Cordillera Administrative Region (CAR) for Mt. Pulag Natural Park (MPNP) and Region 3 for Casecnan Protected Landscape (CPL).

These areas were effectively managed and protected in accordance with their corresponding Protected Area Management Plan (PAMP) and Protected Area Management Board (PAMB) Operations Manual.

On the other hand, through the combination of initiatives from the regional, provincial and local level, the coastal resources management particularly on coral reef ecosystem management was able to address concerns on low biodiversity and low coastal protection in Protected Areas (PAs). For 2014, a total of 5,121.64 hectares of coral reef areas were assessed and delineated which surpassed the total target of 3,991 hectares, obtaining an accomplishment rate of 128 percent. In 2015, a total of 3,079 hectares of coral reef areas were assessed and delineated which surpassed the total target of 2,500 hectares, obtaining an accomplishment rate of 123 percent, though it declined from the 2014 accomplishment due to the LGUs’ lack of resources and capacity to fully undertake integrated coastal resource management.

Environmental quality slightly dipped but still within established standards. The region’s performance on air quality management has not been impressive for the three-year period. Partisol equipment for monitoring the level of concentration for air pollutant has been damaged, hence, no analysis conducted for PM 10 in 2013 and PM 2.5 from 2013-2015. However, in 2014, PM 10 has increased from 29.06 microgram per nano-centimeter ($\mu\text{g}/\text{Nm}^3$) in 2014 to 34.72 $\mu\text{g}/\text{Nm}^3$ (1st Quarter only) in 2015. The geometric mean of 29.06 $\mu\text{g}/\text{Nm}^3$ reveals that the ambient air quality of Tuguegarao City generally falls within “GOOD” level per the national ambient air quality guidelines.

On water quality, increasing result of Biochemical oxygen demand (BOD) from 2013-2015 is far below the standard value of 5 however, the quality of water is

still within the standard of Water Classes A, B, and C. On the other hand, the TSS average reading of 288.4µg/Nm³ in 2015 is attributed to very high solids concentration in the mid stream. However, per EMB standards, the water quality of Cagayan River is still safe for swimming/bathing especially at the upper stream and other recreation purposes; production of fish and other aquatic resources; agriculture and livestock production; and in some parts of the whole stretch, can be a source of water supply system for the community but with the necessary complete treatment process.

On management of wastes, the compliance of Municipal LGUs on various components of Ecological Solid Waste Management (ESWM) has been closely monitored by the Environmental Management Bureau (EMB 02). As of 2015, 80 LGUs or 86 percent were able to comply with the deadline out of the 93 LGUs within the region. There are 13 LGUs whose ten-year ESWM Plans are already approved by the National Solid Waste Management Commission (NSWMC). Others are still lined up for review of the NSWMC and EMB 02.

Climate Change Adaptation and Disaster Risk Reduction and Management. To achieve the region's goal on progressive, secured and climate change-adaptive environment, the Regional Disaster Risk Reduction and Management Council (RDRRMC) 02 formulated and adopted the Cagayan Valley Regional Disaster Risk Reduction and Management Plan (DRRM Plan 2013-2019) on August 23, 2013. Per DRRM Plan, the region is highly susceptible to hydro-meteorological hazards specifically rain-induced flood and landslide which if not properly addressed, may result to several potential effects to the population, most especially along the river basin and low lying communities.

As such, the region has initiated several programs and activities to strengthen

capacities of the local communities in order to achieve the region's long-term vision which is a disaster-resilient citizenry in a climate change adaptive environment such as the conduct of capacity building for institutions involved in different phases of disaster risk management, i.e. pre-disaster, disaster response, and post-disaster activities; skills training programs for local responders and conducted earthquake drills, tsunami drills, Storm Surge Preparedness, fire drills, and other disaster simulation drills and exercises.

More LGUs provided with geological hazard maps. Hazard mapping in the region is being conducted as part of the advocacy on disaster risk reduction. Identified vulnerable municipalities to geological hazards are surveyed and mapped to provide reference to LGUs in their land use planning. In the region, 58 municipalities were surveyed and mapped-out from 2013-2015. The accomplishments reflected a 100 percent accomplishments rate as against the targets set in every year. The scale of 1:10,000 provides a more specific location of hazard-prone areas in a municipality which enable the LGU for a site-specific disaster risk management efforts.

Despite positive gains and achievements, gaps and challenges still persist as follows:

Enforcement of forest and environmental laws and policies is weak and inadequate. Though there has been several initiatives on forest protection and monitoring through the RALTF and RMFPC, full implementation of forest and environmental laws, programs and policies continues to be a challenge. While the NGP continues and was even expanded for another 12 years until 2028, cutting of trees and upland resource exploitation are being observed. The implementation and enforcement of laws are constrained by conflicting priorities and weak institutional linkages at the local level compounded by inadequacy

of resources for hiring of forest guards and provision of needed logistics support.

Monitoring and assessment of mining industries' compliance to government-prescribed environmental safeguards. Uncontrolled illegal small scale mining practices likewise cause alteration of natural scenery, pollution and hazards from mining wastes. There is a need therefore to rationalize the use of resources particularly on the identification of sites for mining and quarrying. Likewise, mining permittees should adhere to guidelines on responsible and sustainable mining.

Climate change and vulnerability to natural hazards. The main threats to remaining forests come from timber poaching, migration in the uplands, forests fires, etc. Deforestation has made the region vulnerable to typhoons which had caused damages to agricultural crops, infrastructure and properties as a result of floods, landslides and erosion. For this, it is essential for the region to rationalize the utilization of natural resources and ensure the conservation and protection of the same, considering the region's vulnerability to typhoons, flooding, drought and other forms of natural hazards. Moreover, there is a need to increase the level of awareness and preparedness of the local governments even with constraints on resources and manpower.

Inadequate facilities for environmental quality assessment. With regard to air quality management, partisol equipment for monitoring the level of concentration for air pollutant has been damaged since 2012 and has not been restored to date. The present inventory of equipment that

the region employs in monitoring air and water quality needs to be upgraded. More measuring equipment are likewise needed in order to increase the number of sampling stations and observation sites for a more accurate and representative assessment of the region's state of environmental quality.

Poor compliance with the provisions of Ecological Solid Waste management Act of 2000. The problem on solid waste management is most serious in urban areas due to increasing population and industrialization. Majority of local governments have yet to fully comply with the provisions of RA 9003. The partial compliance to RA 9003 is attributed to some issues such as high investment requirement for the establishment of Sanitary Landfill; different priorities of Local Chief Executives (LCEs), and absence of MENRO units in some LGUs.

Efforts on disaster risk reduction (DRR) and climate change adaptation (CCA) remain inadequate. Measures to mitigate the impact of disasters and prepare for these events have come in various forms such as mainstreaming CCA and DRR into local planning; risk and vulnerability assessments; and strengthening continuing information, education and communication campaigns (IEC). However, not all LGUs have mainstreamed CCA and DRR measures in their Comprehensive Land Use and Development Plans (CLUP and CDP) due to limited financial and technical capability. There is also a lack of IEC campaigns to increase adaptive capacity of communities especially vulnerable groups (e.g. young and older persons, indigenous peoples, and persons with disabilities).

Strategic Framework

The environment and natural resources shall be protected, conserved and maintained in order to sustain ecological services through the following key strategies: (a) conservation, protection and rehabilitation on natural resources; (b) improvement of environmental quality; and (c) enhancement of natural system resiliency with improved capacities of communities.

Targets

Table below presents the medium-term targets corresponding to each of the major

outcomes under this chapter. To sustain functioning of ecosystem services, the forest cover will be increased and the quality of coastal and marine habitats will be improved. Improved environmental quality will be assessed using quality standards for air, water and soil, among others. For increased adaptive capacity and resilience of the ecosystem, major strategies, policies and actions along disaster risk reduction and management and climate change adaptation shall be given priority attention.

Table 20.1 Plan Targets to Ensure Ecological Integrity, Clean and Healthy Environment by 2022, Region 02

INDICATOR	BASELINE		END-OF-PLAN TARGET
	YEAR	VALUE	
Forest cover increased (million hectare/year)	2016	1.573 M	increasing
Protected Areas (PAs) sustained	2016	14	15
No. of issued land patents maintained (RFPA-RA10023)	2016	4,144	4,842
Areas mapped and assessed (hectares) – coral reefs, mangroves	2016	1,650	6,662
Eco-tourism sites developed	2016	2	6
PM 2.5 concentrations in the region and other major urban centers are within the Annual Total Suspended Particulates (TSP) Average Guideline value of 90 microgram per Normal cubic meter (µg/Ncm)	2016	Less than 90 microgram per Nano centimeter (µg/Ncm)	Less than 90 microgram per Nano-centimeter (µg/Ncm)
Water quality of priority river systems based on the Biochemical Oxygen Demand (BOD) water criteria improved	2016	Less than 5.0 mg/liter of water	Less than 5.0 mg/liter of water
No. of LGUs (Prov, Cities, Mun) compliant with proper Ecological Solid Waste Management System (ESWM)	2016	11	48
No. of LGUs (Prov, Cities, Mun. barangays) trained/capacitated on DRRM/CCA increased	2016	93	93
Number of LGUs with completed vulnerability assessments and climate and disaster risk assessment (CDRA)	2016	0	93
No. of approved CC/DRRM-enhanced Plans, LCCAP	2016	15	93

Source: DENR 02, EMB 02, MGB 02, OCD 02

Strategies

Intermediate Outcome 1: Conservation, protection and rehabilitation of natural resources improved

In order to improve the conservation, protection and rehabilitation of natural resources, this sector shall pursue the following strategies. Priority shall be given to the implementation of policies, programs and projects on forest and watershed restoration, biodiversity conservation and coastal resources management.

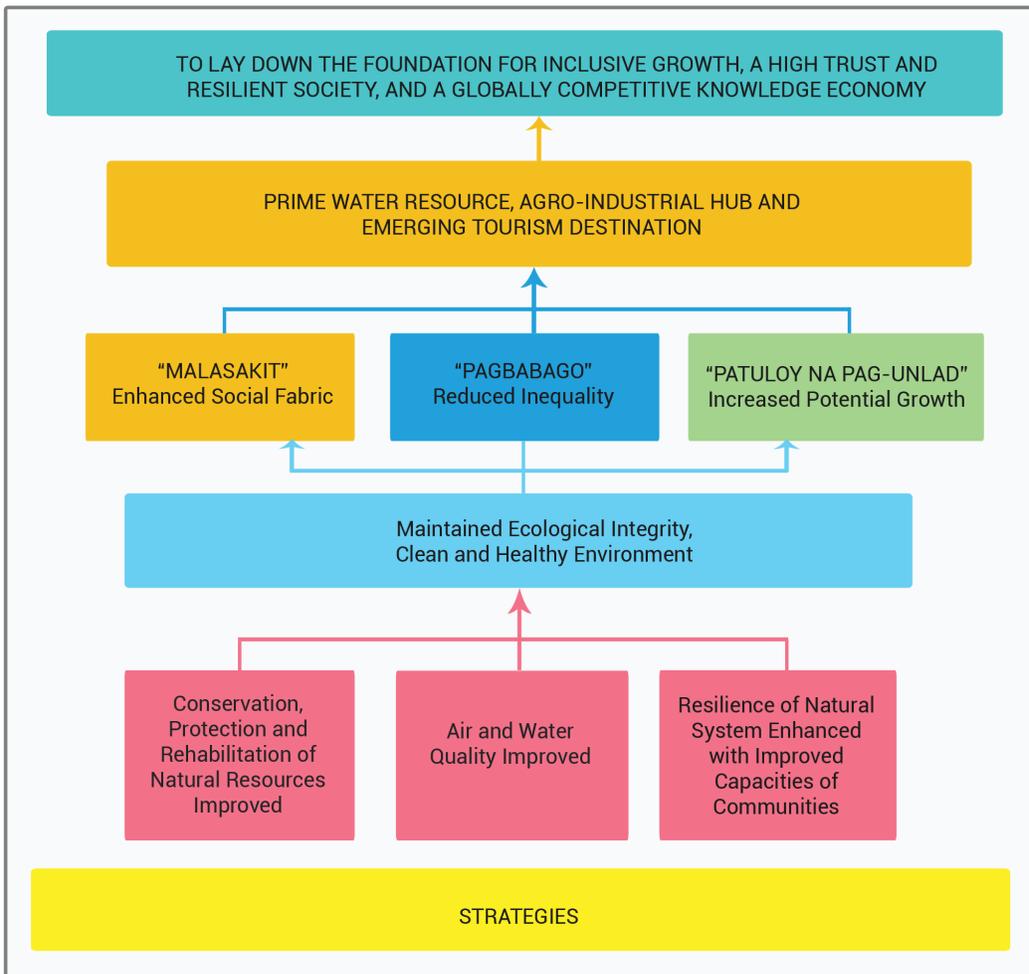
Intensify conservation, protection and sustainable management of forest, watersheds, coastal and marine resources.

The integrated area development and the ridge-to-reef management approach will be adopted to ensure interconnectivity of the different ecosystems from the mossy or forest ecosystem down to coastal/beach ecosystem. This approach aims to address key issues affecting the Sierra Madre Corridor as it is considered as highly rich biodiversity area. Also, it will ensure convergence effort among stakeholders in the management environment and natural resources.

- Strengthen protection of forests and rehabilitation of degraded forests and watersheds. Rehabilitation and reforestation on remaining forest areas, within denuded and degraded areas will be prioritized. This rehabilitation effort will be complemented with protection measures within previously established plantation. This will be strengthened with the collaborative efforts from the existing regional forest protection committee and the special task force against illegal logging.

- Support the implementation of programs and projects identified in the Cagayan River Basin Master Plan to sustainably manage and rehabilitate the Cagayan River Basin. The objective of the Cagayan River Basin Integrated Management and Development Master Plan is to “manage water and related resources of the Cagayan River Basin in an effective, sustainable and equitable manner” and “implement basin-wide Integrated Water Resource Management (IWRM) approaches in regional, local and related sector frameworks and development programs for sustainable and equitable development. The programs and projects identified in the Master Plan shall be prioritized.
- Complete delineation of forest limits including municipal waters. Delineation of forest lands limits including municipal waters shall be prioritized by the concerned agencies in collaboration with the LGUs to clearly delineate the proper boundaries of forest areas that need immediate protection and proper management.
- Improvement of land administration and management. Support to LGUs in the formulation of CLUPs and zoning ordinances shall be sustained and prioritized. Also, delineation of ancestral domains will be pursued in collaboration with DENR, NCIP, DAR and other relevant stakeholders. Deputation of indigenous people for forest/ marine protection activities within their ancestral domain in collaboration with LGUs and concerned agencies shall be pursued.
- Enhance collaboration between and among stakeholders in the effective management and proclamation of Protected Areas (PAs). The established PAs in the region shall be continuously

Figure 20.1 Strategic Framework to ensure Ecological Integrity, Clean and Healthy Environment, Region 02



monitored and supervised in accordance with their corresponding PAMP and PAMB Operations Manual. This will be done in collaboration between and among stakeholders. Further, addressing policy issues including institutional and technical capacities on effective management of PA will be prioritized. For proposed PAs, preparatory activities such as vulnerability and socio-economic assessment of the proposed areas will be crucial in the eventual proclamation of PAs.

- Strengthen enforcement of laws and management of coastal and marine areas. To further strengthen the protection and effective management of the region's coastal and marine resources, stiffer implementation and enforcement of national and local laws such as Fisheries Code, NIPAS Act, and other related policies and plans, shall be pursued. Strategies shall include strengthening the monitoring and control system in coordination with the local government units, Philippine Coast Guard and other stakeholders. To facilitate enforcement, procurement

of patrol boats and establishment of relevant monitoring databases for intensified patrolling against illegal activities shall be prioritized.

- Strengthen environmental and social safeguards for mineral resources development. Compliance of mining industry to existing laws, rules and regulations will be strictly enforced to safeguard the integrity of the environment and mining-affected communities. This will be done by strengthening the Environmental Impact Statement System and guaranteeing a just and equitable distribution of mining benefits. Also, the establishment of Minahang Bayan or People's Small-Scale Mining Areas shall be encouraged to ensure that small scale miners comply with the requirements of RA No. 7076. With the establishment of Minahang Bayan, programs on mine waste and pollution management, safety and health protection measures shall be implemented for the benefit of the small scale miners and their families as well as local communities.
- Institutionalize ecosystem valuation and natural resource monitoring system. Ecosystem service indicators will be included in forest, watershed, coastal and marine monitoring systems to help track the benefits of ecosystems, including the impacts of threats and drivers, such as CC, to these ecosystems.
- Develop policy for Payments for Ecosystem Services. A policy to institutionalize payment for ecosystem services to provide incentives in the management of ENR will be developed. This will also provide alternative source of income for the local communities.]

- Adoption of Indigenous Knowledge, Systems and Practices (IKSP) that support the sustainable management of natural resources.

- Support the creation of Provincial/ City/Municipal Environment and Natural Resources Offices of other LGUs in carrying out ENR functions to ensure improved protection and sustainable use of natural resources.

Expand areas for eco-tourism development and promotion.

To harness full potential of environment and natural resources, promotion and development of eco-tourism sites will be pursued, particularly along off-shore areas and ecological sites in the region, to wit:

- Promote and develop eco-tourism sites. Promotion and development of eco-tourism and cultural sites will be pursued, particularly in key upland and coastal destinations, including wetlands, and cave systems. Activities to be done include: (a) identification of eco-tourism and cultural tourism destinations; and (b) diversification of existing destinations and creation of new tourism areas.
- Encourage LGUs to develop tourism-related services and products using community-based eco-tourism approaches. Eco-tourism is an effective tool for sustainable development contributing to the conservation of biodiversity; thereby sustaining the well-being of local people. Eco-tourism enterprise which serves as alternative source of income for the community needs to be developed and prioritized while existing eco-tourism enterprises in the region need to be promoted.
- Enhance green spaces in urban areas. A policy promoting green spaces in cities as well as a monitoring metric

will be developed and tested.

Intermediate Outcome 2: Environmental Quality improved

In order to improve environmental quality, measures to reduce pollution and waste generation shall be pursued.

Ensure conformity of air and water quality per environmental standards.

- Establishment of required number of air and water quality monitoring stations and strengthening campaign against violators.
- Strengthen established Water Quality Management Areas (WQMAs) and establishment of new WQMAs.
- Prioritize urgent upgrading/repair of equipment for assessing ambient air quality and other equipment being used for environmental quality assessment in order to continuously monitor air quality.
- Promote waste recycling technologies to reduce green house gas (GHG) emissions (CO₂ and methane) and groundwater pollution in disposal sites.
- Promote incentives for eco-friendly government offices and establishments and promote regular GHG inventory and monitoring (e.g. CO₂, CH₄).
- Streamlining of procedures in the issuance of water permits/certificates to encourage applications of water users.

Strengthen enforcement of environmental laws. Enforcement and monitoring of compliance to existing environmental laws and regulations will be intensified to reduce pollution and waste generation. The

following strategies will be prioritized:

- Strict monitoring of compliance to policies and prescribed standards such as Clean Water Act, Revised Forestry Code, Solid Waste Management Law, Mining Act and other related environmental laws to ensure improved quality of environment and natural resources.
- Sustain continuing efforts for environmental education on other environmental laws through formal and non-formal channels maximizing the partnership between government, non-government, the media practitioners and other stakeholders.
- Strengthen inter-agency coordination among mandated agencies in terms of implementing policies, programs and projects and activities.
- Capacitating LGUs and other stakeholders on environmental governance to include the crafting and enforcement of local ordinances to implement provisions of environmental laws, and implementation of ENR programs and activities (emission inventory, proper solid waste management, land management, forest management, mining regulations).

Improve management of wastes (solid, toxic and hazardous wastes).

- Support policies to allocate additional funding support to facilitate LGU compliance in the establishment of waste management facilities (categorized sanitary landfills, materials recovery facilities).
- A review of the requirements for establishing sanitary landfills may be undertaken to facilitate compliance by

LGUs considering constraints of site identification and financial capacity. Clustering of Sanitary Landfills and solid waste management technologies may be encouraged to address large capital requirement.

- Strengthen implementation of IEC activities on environmental management.

Intermediate Outcome 3: Resilience of natural system enhanced with improved capacities of communities

The region is highly susceptible to hydro-meteorological hazards specifically rain-induced flood and landslide which if not properly addressed, may result to several potential effects to the population, most especially along the river basin and low lying communities. As natural disasters are expected to be aggravated by climate change, the region would be focusing its strategies towards strengthening initiatives on preparedness; prevention and mitigation; response; rehabilitation and recovery efforts.

Enhance the capacities of concerned agencies/LGUs in preparing for, coming up, mitigating and monitoring the effects of climate change events, including mainstreaming of climate change actions in development plans and PPAs; and improved coordination of pre- and post-disaster and response operations at the local level. Likewise, capacities of concerned agencies in the conduct of Rapid/ Post Disaster Needs Assessment (R/PDNA) shall be strengthened.

Priority attention for strategies, policies and actions along disaster risk reduction and management and climate change adaptation.

- Develop, maintain, and ensure accessibility of climate and geospatial information and services. This includes

the following activities: (a) completing coverage and ensuring access to small scale (1:10,000) probabilistic hazard maps; (b) developing risk estimation models to determine value of potential loss and damage for different scenarios; (c) improving loss and damage database to account disaggregated information on vulnerable and affected groups; and (d) standardizing definition and methodologies to measure DRRM and CC variables.

- Develop data protocol to facilitate access and sharing of available scientific researches/studies, geospatial information and climate projection. A clear policy on accessing and sharing CCAM and DRRM data will be formulated consistent with the provisions of Executive Order No. 02 on Freedom of Information.
- Promote climate-resilient structures and designs following established measures and standards. Retrofitting and construction of climate-smart and disaster-resilient infrastructures and facilities shall be pursued especially in hazard-prone areas and environmentally critical areas.
- Continue to mainstream CCAM and DRRM in national and local development plans and policies. Government at all levels will be informed of the latest CC projection and risk and vulnerability assessment to identify appropriate interventions and avoid mal-adaptation.
- Strengthen institutional response to disasters. Priority will be given to activities that will further improve the timely delivery of response, recovery, and rehabilitation efforts and contribute towards increasing level of resilience.

- Increase level of awareness and preparedness of all residents in the community on the impact of natural hazards, such as flooding, landslide, earthquake, storm surge, tsunami and liquefaction.
- Integrate CCA and DRRM in all education levels and in specialized technical training and research programs.
- Gender mainstreaming in all risk reduction processes (prevention, mitigation, preparedness, response and recovery and rehabilitation).
- Strengthen monitoring and evaluation of effectiveness of CC and DRRM actions.

Legislative Agenda

To strengthen the effectiveness of identified strategies, legislative action is needed in the following as identified in the PDP 2017-2022:

Table 20.2 Supported Legislative Agenda on Ensuring Ecological Integrity, Clean and Healthy Environment, 2017-2022

LEGISLATIVE AGENDA	RATIONALE
Delineation of the Specific Forest Limits	Provide a clear and solid basis on the limits of the forest line.
Supporting the Creation of Plantilla Position for ENR Enforcers	With the continuous degradation of forest and other natural resources, the LGUs should initiate steps in partnership with DENR and other stakeholders to stop forest resources degradation and implement activities to restore or rehabilitate degraded area through the creation of a Municipal Environment and Natural Resources Office. Likewise, continuing assistance to LGUs on the organization of permanent Local Disaster Risk Reduction and Management Officers (LDRRMOs), disaster operations centers, and emergency response teams.
Land Administration Reform Act	Streamline standards, processes and regulations for property rights, valuation and taxation.
Regulation on Mining	Supporting the passage of bills/policies by which mining regulation is properly implemented particularly on illegal small scale mining that is rampant in many parts of the county as it is considered one among the major causes of environmental degradation, health and safety for local communities.
Expanded National Integrated Protected Areas System Act	Finalize/hasten establishment of additional protected areas
National Land Use Act	Address the urgency to provide rationalized land use planning in the country, consolidate national laws on land uses and address long- standing land use conflicts.
Integrated Coastal Management Strategy	Institutionalize ICM as a strategy for the sustainable development of coastal and marine areas.
Amendment of Water Code	Provide a legal framework for the institutionalization and operationalization of Integrated Water Resources Management to respond to current trends and challenges such as climate variability affecting water supply and availability, as well as to address institutional gaps and weaknesses.

LEGISLATIVE AGENDA	RATIONALE
Amendment to RA 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act)	Address the emerging toxic and hazardous wastes which are not covered by the current provisions of the law.
Philippine Environmental Assessment	Ensure that possible environmental consequences of policies, plans and programs are fully-accounted at the earliest stage of decision- making consistent with economic and social considerations. This will also strengthen the use of Environmental Impact Statement System as a planning and monitoring tool.
Further strengthening the Philippine system and institutionalizing the Framework of DRRM Plan	Create a National Disaster Risk Reduction and Management Authority and integrate new policies on disaster preparedness, response, mitigation/prevention and rehabilitation/recovery to address existing implementing gaps and challenges.
People's Survival Fund (PSF)	Law to put up a fund that will finance adaptation programs and projects that are directly supportive of the objectives enumerated in the local climate change action plans (LCCAP) of LGUs and communities.

Source: Chapter 20 of the PDP 2017-2022

PART VII

**PLAN
IMPLEMENTATION
AND
MONITORING**

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21

Plan
Implementation
and Monitoring

Plan Implementation and Monitoring

Plan Implementation

The Regional Development Council 02 (RDC 2) serves as the primary institution that will ensure consistency of regional thrusts, priorities and initiatives to the Cagayan Valley Regional Development Plan (CVRDP) 2017-2022. To fulfill its mandate, the Council shall mobilize its Sectoral Committees e.g. Economic Development Committee (EDC), Social Development Committee (SDC), Committee on Development Administration and Communication (CODAC); Infrastructure Development Committee (IDC) and its support committees: the Regional Committee on Sustainable Development (RCSD) and the Regional Land Use Committee (RLUC) to ensure a more effective coordination in pursuing sector-specific concerns in the CVRDP.

The CVRDP 2017-2022 shall be translated into a Regional Development Investment Program (RDIP) consisting of viable priority sector programs, activities and projects (PAPs). It shall be the basis for preparing the annual budget proposals of regional line agencies (RLAs) and state universities and colleges (SUCs).

Pursuant to DILG-NEDA-DBM-DOF Joint Memorandum Circular No. 1, series of 2007 or “Guidelines on the Harmonization of Local Planning, Investment Programming, Revenue Administration, Budgeting and Expenditure Management” all local government units shall, to the extent possible, align/ harmonize their local plans with “national development goals taking into consideration their resource endowments, financial capability and distinct development needs.” As such, all LGUs are expected to align their development priorities to the CVRDP 2017-2022.

Identified to be one of the most crucial to the success of the plan’s implementation is the support of all concerned stakeholders including local government units. Proper networking with concerned agencies and the institutionalization of the linkages of plans and planning processes at all levels specifically at the provincial levels shall be sustained. The establishment of a strong harmonious inter-departmental and inter-agency cooperation at each level to ensure smooth and effective RDP implementation is most essential.

Plan Monitoring and Evaluation

A monitoring system is very important to provide a feedback mechanism in the implementation of the programs and projects identified in the plan. Monitoring and Evaluation (M&E) is designed to improve performance of programs and projects by providing timely and accurate information and outputs particularly whether the targets were met within the

prescribed period of time and within the resources allocated for it.

The focus of monitoring and evaluation shall be on outcome/impact levels. The following are the mechanisms to monitor and evaluate the implementation of the RDP, to wit:

Table 21.1 Coordination Mechanism for Each Sector, CVRDP 2017-2022

RDP Chapter	Sectoral Coordination Mechanism	NEDA Secretariat
Chapter 5. Ensuring People-Centered, Clean, and Efficient Governance	RDC 2-CODAC	NEDA 2-Project Development, Investment Programming and Budgeting Division (PDIPBD)
Chapter 6. Pursuing Swift and Fair Administration of Justice	RDC 2- CODAC	NEDA 2-PDIPBD
Chapter 7. Promoting Philippine Culture and Values	RDC 2- SDC	NEDA 2-Policy Formulation and Planning Division (PFPD)
Chapter 8. Expanding Economic Opportunities in Agriculture, Forestry and Fisheries	RDC2-EDC	NEDA 2-PDIPBD
Chapter 9. Expanding Economic Opportunities in Industry and Services through Trabaho at Negosyo	RDC2- EDC	NEDA 2-PDIPBD
Chapter 10. Accelerating Human Capital Development	RDC2- EDC	NEDA 2-PDIPBD
Chapter 11. Reducing Vulnerabilities of Individuals and Families	RDC2- SDC	NEDA 2-PFPD
Chapter 12. Building Resiliency for Individuals and Families	RDC2- SDC	NEDA 2-PFPD
Chapter 13. Reaching for the Demographic Dividend	RDC2- SDC	NEDA 2-PFPD
Chapter 14. Vigorously Advancing Science, Technology, and Innovation	RDC 2- EDC	NEDA 2-PDIPBD
Chapter 15. Ensuring Sound Macroeconomic Policy	RDC 2- EDC	NEDA 2-PDIPBD
Chapter 16. Support to the National Competition Policy	RDC 2- EDC	NEDA 2-PDIPBD
Chapter 17. Attaining Just and Lasting Peace	RDC 2- CODAC	NEDA 2-PDIPBD
Chapter 18. Ensuring Security, Public Order, and Safety	RDC 2- CODAC	NEDA 2-PDIPBD
Chapter 19. Accelerating Infrastructure development	RDC2-IDC	NEDA 2-Project Monitoring and Evaluation Division (PMED)
Chapter 20. Ensuring Ecological Integrity, Clean and Healthy Environment	RDC2-RCSD RDC 2 - RLUC	NEDA 2-PFPD

A. Results Matrix (RM)

The identification and validation of annual targets of each sector shall be done in a consultative manner to ensure integration of all various development policies and targets at the regional and local levels in order to get support from stakeholders e.g., RLAs, LGUs and the private sector. This process will ensure the harmonization of programs and projects of the different sectors and affirms its significance and authority.

The Chapter RMs contain the statements of objectives with corresponding indicators for the various levels of results (goal and outcomes) to be achieved under the RDP. Specifically, the indicator matrices contain: (a) Indicator statements; (b) Baseline information; (c) Annual Targets; and d) Government agencies responsible for delivering and tracking the progress of the RM target. This shall form part of the Annexes of the RDP.

B. Annual Regional Development Report (ARDR)

The region monitors the implementation of the RDP through the preparation of Annual Regional Development Report (ARDR). The ARDR is being prepared as a way presenting the socio-economic developments in the region in relation to the annual development objectives and targets as set forth in the CVRDP.

The ARDR presents the performance of key sectors of the regional economy through the implementation of a wide range of programs and projects by all development partners in the region. Moreover, it defines the major challenges, shortfalls as well as the measures and strategies needed to improve the region's overall performance.

The ARDR shall be reviewed by the Sectoral Committees of the RDC for validation. Members of each sectoral committee shall provide feedback and inputs for the enhancement of the ARDR prior to its adoption.

C. Regional Economic Situationer (RES)

Annual/Quarterly Regional Economic Situationer (ARES/QRES) shall be prepared as a way to monitor and assess the region's economic performance in terms of key indicators such as agricultural production, employment, inflation, investments, tourist arrivals and loan portfolio of banks. Also presented in the ARES/QRES are the identified factors and interventions which are expected to affect the growth and development of the region in the succeeding assessment period.

D. Regional Project Monitoring and Evaluation System (RPMES)

With the Regional Project Monitoring and Evaluation System (RPMES) in place at the regional level, monitoring and evaluation of programs and projects is facilitated. The RDC2 Regional Project Monitoring Committee (RPMC) takes charge of the operationalization of the RPMES. The RPMC monitors programs and projects implemented by the regional lines agencies and local government especially those that are considered as critical to the attainment of development goals and outcomes contained in the CVRDP 2017-2022. Under the RPMES, programs and projects shall be assessed not only for their physical outputs and financial accomplishments but also on the attainment of development impacts such as employment generation, poverty alleviation, among others.

Plan Advocacy

A Communication Plan will be prepared to guide the region communicating and advocating the CVRDP to various stakeholders within and outside the region. The communication plan shall build on the existing collaboration and partnership among government and private sectors and civil society organizations.

Other activities that shall be conducted to advocate the plan will include the preparation of a popularized version of the CVRDP, preparation of information materials and audio visual presentations, conduct of briefings and information caravan, establishment of social media network, and other related activities aimed at increasing the level of awareness and appreciation of the CVRDP by the public.

List of Acronyms

4Ps	Pantawid Pamilyang Pilipino Program
µg/Ncm	Microgram per Nano centimeter
AFF	Agriculture, Forestry and Fishing
AFMA	Agriculture and Fisheries Modernization Act
ARB	Agrarian Reform Beneficiaries
ARDR	Annual Regional Development Report
ARTA	Anti-Red Tape Act
ARMM	Autonomous Region in Muslim Mindanao
ASEAN	Association of Southeast Asian Nations
BFAR	Bureau of Fisheries and Aquatic Resources
BNR	Business Name Registration
BNS	Barangay Nutrition Scholar
BOD	Biochemical Oxygen Demand
BuB	Bottoms-up Budgeting
CAAP	Civil Aviation Authority of the Philippines
CADTs	Certificate of Ancestral Domains Title
CAR	Cordillera Administrative Region
CBMS	Community-based Monitoring System
CCVR	Concentration, Connectivity, and Vulnerability Reduction
CDP	Comprehensive Development Plan
CHR	Commission on Human Rights
CICL	Children-In-Conflict with the Law
CIS	Community Irrigation System
CLOA	Certificate of Landownership Award
CLUP	Comprehensive Land Use Plan
COA	Commission on Audit
CRB	Cagayan River Basin
CSC	Civil Service Commission
CSE	Crime Solution Efficiency
CSEZFP	Cagayan Special Economic Zone and Free Port
CSR	Corporate Social Responsibility
CVIAL	Cagayan Valley Integrated Agricultural Laboratory
DA	Department of Agriculture
DAR	Department of Agrarian Reform
DBM	Department of Budget Management
DENR	Department of Environment and Natural Resources
DILG	Department of Interior and Local Government
DPWH	Department of Public Works and Hi-ways

DRR/CCA	Disaster Risk Reduction/ Climate Change Adaptation
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
EAP	Edicational Assistance Program
EC	Electric Cooperatives
EEZ	Exclusive Economic Zone
EMB	Environmental Management Bureau
ESWM	Ecological Solid Waste Management
ETEEAP	Expanded Tertiary Education Equivalency and Accreditation Program
FDP	Full Disclosure Policy
FDPP	Full Disclosure Policy Portal
FIES	Family, Income and Expenditure Survey
GAD	Gender and Development
GDP	Gross Domestic Product
GIDAS	Geographically Isolated and Depressed Areas
GIS	Geographic Information System
GVA	Gross Value Added
HA	Hectares
HDI	Human Development Index
HEIs	Higher Education Institutions
I&S	Industry and Services
IAS	Internal Audit Service
ICT	Information and Communication Technology
IKSPs	Indigenous Knowledge System and Practices
IND	Industry
IP	Indigenous Peoples
IPRA	Indigenous Peoples Rights Act
IRA	Internal Revenue Allotment
ISO	International Standardization Organization
IUUF	Illegal Unreported and Unregulated Fishing
IWRM	Integrated Water Resources Management
kV	Kilovolt
GAA	General Appropriations Act
GHG	Greenhouse Gases
GOCCs	Government-Owned and Controlled Corporation
GPB	Grassroots Participatory Budgeting
GRDP	Gross Regional Domestic Product
HACCP	Hazard Analysis Critical Control
HRV	Human Rights Violation
LAD	Land Acquisition and Distribution
LCCAP	Local Climate Change Action Plan
LDC	Local Development Council

LEE	Local Economic Enterprise
LGC	Local Government Code
LGU	Local Government Unit
LMI	Labor Market Information
LSDF	Luzon Spatial Development Framework
LTV	Long Term Vision
MDG	Millenium Development Goals
MSMEs	Micro, Small and Medium Enterprises
MT	Metric Tons
NAPOLCOM	National Police Commission
NAT MPS	National Achievemnt Test Mean Percentage Score
NCIP	National Commission on Indigenous Peoples
NCR	National Capital Region
NEET	National Eligibility and Entrance Test
NGP	National Greening Program
NHDS	National Demographic and Health Survey
NHIP	National Health Insurance Program
NHTS	National Household Targeting System
NIS	National Irrigation System
NSS	National Spatial Strategy
NSWMC	National Solid Waste Management Commission
OF	Overseas Filipinos
OSH	Occupational Safety and Health
OWWA	Overseas Workers Welfare Administration
PA	Protected Areas
PAMB	Protected Area Management Board
PCF	Performance Challenge Fund
PCG	Philippine Coast Guard
PDEA	Philippine Drug Enforcement Agency
PDP	Philippine Development Plan
PDPFP	Provincial Development and Physical Framework Plan
PESO	Public Employment Service Offices
PFM	Public Financial Management
PHIC	Philippine Health Insurance Corporation
PNP	Philippine National Police
POPCEN	Census of Population
PPAs	Programs, Projects and Activities
PQF	Philippine Quality Framework
PRIME HRM	Program to Insitutionalize Meritocracy and Excellence in Human Resources Management
PSA	Philippine Statistics Authority

R&D	Research and Development
RDP	Regional Development Plan
RDIP	Regional Development Investment Program
RDRRMC	Regional Disaster Risk Reduction Management Council
RES	Regional Economic Situationer
RFPA-RA 10023	Residential Free Patent Act
RGC	Regional Government Center
RLAs	Regional Line Agencies
RM	Results Matrix
RMFPC	Regional Multi-stakeholders Forest Protection Committee
RMP	Resource Mobilization Plan
ROD/LRA	Registry of Deeds/ Land Registration Authority
RPMES	Regional Project Monitoring and Evaluation System
RPRH	Responsible Parenthood and Reproductive Health
RRDA	Regional Research and Development Agenda
SDA	Sustainable Development Agenda
SDG	Sustainable Development Goals
SER	Services
SET-UP	Small Enterprises Technology Upgrading Program
SGH	Seal of Good Housekeeping
SGLG	Seal of Good Local Governance
SIP	Small Irrigation Projects
SPMS	Strategic Performance Management System
SSF	Shared Service Facilities
STI	Science, Technology and Innovation
SUCs	State Universities and Colleges
TVET	Technical Vocational Education and Training
UniFast	Unified Student Financial Assistance System for Tertiary Education
WQMA	Water Quality Management Area

RDP 2017-2022

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Schedule of RDP 2017-2022 Workshops and Consultations

RDC 02 Executive Visioning Exercise	September 21, 2016
First Plan Secretariat Meeting	September 29, 2016
Second Plan Secretariat Meeting	November 8, 2016
First Planning Committees Sectoral Workshop	November 18, 2016
Second Planning Committees Sectoral Workshop	January 10, 2017
RDC 02 Adoption of RDP 2017-2022	January 26, 2017
RDP Conference among Regions	February 21-22, 2017
Plan Secretariat FGD	February 28, 2017
Third Planning Committees Sectoral Workshop	March 14, 2017

The Regional Development Council 02

(as of January 26, 2017)

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