



Ilocos Regional Development Plan 2017-2022



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Ilocos Regional Development Plan 2017-2022

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RDC-NEDA Building, Guerrero Road, San Fernando City, 2500, La Union

Tel: +63 72 888 2679 to 80; +63 72 888 5501

Email: region1neda@gmail.com

<http://ilocos.neda.gov.ph/nro>

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Table of Contents

Foreword	xiv
Preface	xv
Message of His Excellency President Rodrigo Roa Duterte	xvii
Message of Honorable Secretary Ernesto M. Pernia	xviii

Part I Introduction

Chapter 1	The Long View	5
Chapter 2	Global and Regional Trends and Prospects	11
Chapter 3	Overlay of Economic Growth, Demographic Trends, and Physical Characteristics	15
Chapter 4	Regional Development Plan 2017-2022 Overall Framework	31

Part II Enhancing the Social Fabric (“Malasakit”)

Chapter 5	Ensuring People-Centered, Clean, and Efficient Governance	41
Chapter 6	Pursing Swift and Fair Administration of Justice	53
Chapter 7	Promoting Philippine Culture and Values	59

Part III Inequality-Reducing Transformation (“Pagbabago”)

Chapter 8	Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries	69
Chapter 9	Expanding Economic Opportunities in Industry and Services through <i>Trabaho</i> at <i>Negosyo</i>	87
Chapter 10	Accelerating Human Capital Development	103
Chapter 11	Reducing Vulnerability of Individuals and Families	125
Chapter 12	Building Safe and Secure Communities	137

Part IV Increasing Growth Potential (“Patuloy na Pag-unlad”)

Chapter 13	Reaching for the Demographic Dividend	147
Chapter 14	Vigorously Advancing Science, Technology, and Innovation	157

Part V	Enabling and Supportive Economic Environment	
Chapter 15	Ensuring Sound Macroeconomic Policy	167
Chapter 16	Leveling the Playing Field through a National Competition Policy	185
Part VI	Foundations for Sustainable Development	
Chapter 17	Attaining Just and Lasting Peace	197
Chapter 18	Ensuring Security, Public Order, and Safety	203
Chapter 19	Accelerating Infrastructure Development	211
Chapter 20	Ensuring Ecological Integrity, Clean and Healthy Environment	229
Part VII	From Plan to Action	
Chapter 21	Plan Implementation and Monitoring	249
List of Acronyms		251
Glossary		260
References		275
RDP 2017-2022 Planning Committees		279
Schedule of RDP 2017-2022 Consultations		283
RDP 2017-2022 Secretariat		284

List of Tables and Figures

Chapter 3 Overlay of Economic Growth, Demographic Trends, and Physical Characteristics

Table 3.1	Population by Province and City, Ilocos Region, in Thousands (Census Years 1990, 1995, 2000, 2007, 2010 and 2015)	16
Table 3.2.a	Average Annual Population Growth Rate by Province and City, Ilocos Region, in Percent (Census Years 1990-2015)	16
Table 3.2.b	Average Annual Population Growth Rate by Province and City, Ilocos Region, in Percent (Census Years 1990-2015) (continuation)	17
Table 3.3	Status of Land Classification by Province (in Hectares), Ilocos Region (2015)	18
Table 3.4	Growth Centers in Region 1	20
Table 3.5	Provincial Centers and their Areas of Influence in Region 1	20
Table 3.6	Travel Time to Ilocos Region by Air and by Land	23
Table 3.7	Protected Areas in Ilocos Region	23
Figure 3.1	Network of Settlements in Ilocos Region	22
Figure 3.2	North-South Backbone/East-West Lateral/Strategic Road Development Framework	25
Figure 3.3	Map of Protected Areas in Region 1	26

Chapter 4 Regional Development Plan 2017-2022 Overall Framework

Table 4.1	Summary Assessment of Attainment of Development Outcomes in the RDP (2011-2016)	31
Figure 4.1	Overall Strategic Framework	33

Chapter 5 Ensuring People-Centered, Clean, and Efficient Governance

Table 5.1.a	Plan Targets to Ensure People-centered, Clean, Efficient, and Effective Governance in Region 1 (2017-2022)	45
-------------	--	----

Table 5.1.b	Plan Targets to Ensure People-centered, Clean, Efficient, and Effective Governance in Region 1 (2017-2022) (continuation)	46
Table 5.2.a	Legislative Agenda to Ensure People-centered, Clean and Efficient Governance in Region 1 (2017-2022)	48
Table 5.2.b	Legislative Agenda to Ensure People-centered, Clean and Efficient Governance in Region 1 (2017-2022) (continuation)	49
Figure 5.1	Revenue Collection Efficiency Rate, Region 1 (2011-2015)	43
Figure 5.2	Customs Collection Efficiency Rate, Region 1 (2011-2015)	43
Figure 5.3	Strategic Framework to Ensure People-Centered, Clean and Efficient Governance in Region 1 (2017-2022)	47
Chapter 6	Pursing Swift and Fair Administration of Justice	
Table 6.1.	Plan Targets to Pursue Swift and Fair Administration of Justice in Region 1 (2017-2022)	55
Figure 6.1	Strategic Framework to Pursue Swift and Fair Administration of Justice in Region 1 (2017-2022)	55
Chapter 7	Promoting Philippine Culture and Values	
Table 7.1	IP Mandatory Representation (March 2016)	61
Table 7.2	Plan Targets to Promote Philippine Culture and Values in Region 1 (2017-2022) (continuation)	62
Figure 7.1	Strategic Framework to Promote Philippine Culture and Values in Region 1 (2017-2022)	63
Chapter 8	Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries	
Table 8.1.a	Assessment of the Agriculture, Forestry and Fisheries (AFF) Sector Component of the RDP 2011-2016, Accomplishments versus Targets	70
Table 8.1.b	Assessment of the Agriculture, Forestry and Fisheries (AFF) Sector Component of the RDP 2011-2016, Accomplishments versus Targets (continuation)	71
Table 8.2.a	Plan Targets to Expand Economic Opportunities in Agriculture, Forestry and Fisheries (AFF) Sector (2017-2022)	75
Table 8.2.b	Plan Targets to Expand Economic Opportunities in	76

	Agriculture, Forestry and Fisheries (AFF) Sector (2017-2022) (continuation)	
Table 8.3.a	Insurance Products offered by the Philippine Crop Insurance Corporation (PCIC)	82
Table 8.3.b	Insurance Products offered by the Philippine Crop Insurance Corporation (PCIC) (continuation)	83
Table 8.4	National Composite Rates and Premium Sharing for Rice Crop Insurance in the Philippines, By Type of Farmer, By Insurance Cover, and By Classification of Risk, in Percentage (as of 2015)	83
Table 8.5	Legislative Agenda to Attain a Robust and Resilient Agriculture, Forestry and Fisheries (AFF) Sector, 2017-2022	84
Figure 8.1	Strategic Framework to Attain a Robust and Resilient Agriculture, Forestry and Fisheries (AFF) Sector, (2017-2022)	79

Chapter 9 Expanding Economic Opportunities in Industry and Services through *Trabaho at Negosyo*

Table 9.1.a	Assessment of the Industry and Services (I&S) Sector Component of the RDP 2011-2016 (2011-2015 Accomplishments versus 2016 Targets)	88
Table 9.1.b	Assessment of the Industry and Services (I&S) Sector Component of the RDP 2011-2016 (2011-2015 Accomplishments versus 2016 Targets) (continuation)	89
Table 9.2.a	Plan Targets to Expand Economic Opportunities in I&S Sector (2017-2022)	93
Table 9.2.b	Plan Targets to Expand Economic Opportunities in I&S Sector (2017-2022) (continuation)	94
Table 9.2.c	Plan Targets to Expand Economic Opportunities in I&S Sector (2017-2022) (continuation)	95
Figure 9.1	Strategic Framework to Expand Economic Opportunities in Industry and Services (2017-2022)	97

Chapter 10 Accelerating Human Capital Development

Table 10.1	Prevalence Rate of Underweight Children under 6 years of age by Province, Region 1 (2011 & 2015)	105
Table 10.2	Nutrition Situation in Region 1, by Age Bracket and Type of Malnutrition (2015)	105

Table 10.3	Rabies Deaths by Sex, Region 1 (2011-2015)	109
Table 10.4	Dengue Cases and Deaths by Sex, Region 1 (2011-2015)	110
Table 10.5	Tertiary Level Graduates by Course and Sex (Public & Private), Region 1 (SY 2014-2015)	111
Table 10.6	Enrollment in Higher Educational Institutions by Course and Sex (Public & Private), Region 1 (SY 2015-2016)	112
Table 10.7	Total Enrollment and Graduates in TESD, Region 1 (2011 & 2016)	113
Table 10.8	Total Assessed and Certified TESD Graduates/Workers, Region 1 (2011 & 2016)	113
Table 10.9	TESDA Scholarship Beneficiaries, Region 1 (2011 to 2016)	114
Table 10.10	Total TESD Graduates and Employed Graduates, Region 1 (2011 – 2016)	114
Table 10.11	Employment Figures, Region 1 (2013-2015)	111
Table 10.12.a	Plan Targets to Accelerate Human Development, Region 1, 2017-2022	117
Table 10.12.b	Plan Targets to Accelerate Human Development, Region 1, 2017-2022 (continuation)	118
Table 10.13	Legislative Agenda to Accelerate Human Development in Region 1 (2017-2022)	121
Figure 10.1	Prevalence Rate of Underweight Children under 6 years of age by Sex, Region 1 (2011-2015)	105
Figure 10.2	Maternal Mortality Rate in Region 1, per 100,000 live births (2010-2015)	107
Figure 10.3	Strategic Framework to Accelerate Human Development in Region 1 (2017-2022)	119

Chapter 11 Reducing Vulnerability of Individuals and Families

Table 11.1	Percentage of Poor Households Accessing Social Protection Programs/Projects/Services (2014-2016)	127
Table 11.2	Number of Beneficiaries of Other Social Protection Programs, Region 1 (2011-2016)	128
Table 11.3	Number of Clients Served in Residential and Community-based Services, Region 1 (2011-2016)	128
Table 11.4	Number of Registered Filipino Emigrants, Region 1 (2013-2016)	129
Table 11.5.a	Plan Targets to Reduce Vulnerability of Individuals and	131

	Families in Region 1 (2017-2022)	
Table 11.5.b	Plan Targets to Reduce Vulnerability of Individuals and Families in Region 1 (2017-2022) (continuation)	132
Table 11.6	Legislative Agenda to Reduce Vulnerability of Individuals and Families in Region 1 (2017-2022)	134
Figure 11.1	Number of <i>Pantawid Pamilyang Pilipino</i> Program Beneficiaries by Province, Region 1 (2011-2016)	127
Figure 11.2	Total Number of Clients Served through Residential and Community-based Services, Region 1 (2011-2016)	129
Figure 11.3	Strategic Framework to Reducing Vulnerability of Individuals and Families in Region 1 (2017-2022)	133
Chapter 12	Building Safe and Secure Communities	
Table 12.1	Total Housing Need (2011-2016)	138
Table 12.2	Plan Targets to Build Safe and Secure Communities in Region 1 (2017-2022)	139
Table 12.3	Legislative Agenda to Build Safe and Secure Communities in Region 1 (2017-2022)	141
Figure 12.1	Strategic Framework to Build Safe and Secure Communities in Region 1 (2017-2022)	140
Chapter 13	Reaching for the Demographic Dividend	
Table 13.1	Population, Land Area, Population Density, and Population Growth Rate of Philippines, Ilocos Region and its Provinces (2015)	149
Table 13.2	Plan Targets to Reach for Demographic Dividend in Region 1 (2017-2022)	153
Table 13.3	Legislative Agenda to Reach for Demographic Dividend in Region 1, (2017-2022)	154
Figure 13.1	Figure 13.1 Philippine Population Density Map, by Region (2015)	148
Figure 13.2	Ten Most Densely Populated Provinces (2015)	149
Figure 13.3	Total Population in Ilocos Region, by Sex and Age Group (2010)	150
Figure 13.4	Projected Comparative Population of Region 1 (2010-2060)	150

Figure 13.5	Projected Comparative Population of Region 1 by Age-Sex (2010-2060)	151
Figure 13.6	Strategic Framework to Reach for Demographic Dividend in Region 1 (2017-2022)	154
Chapter 14	Vigorously Advancing Science, Technology, and Innovation	
Table 14.1	Number of Micro, Small and Medium Enterprises (MSMEs) Provided with Technology and Interventions, Region 1 and by Province (2011-2015)	158
Table 14.2	Plan Targets to Ensure Rapid Adoption and Promotion of New Technologies in Region 1 (2017-2022)	160
Table 14.3	Legislative Agenda to Ensure Rapid Adoption and Promotion of New Technologies in Region 1 (2017-2022)	162
Figure 14.1	Strategic Framework to Ensure Rapid Adoption and Promotion of New Technologies in Region 1 (2017-2022)	161
Chapter 15	Ensuring Sound Macroeconomic Policy	
Table 15.1	Percent Contribution to GRDP, Philippines and by Region (2011-2015)	168
Table 15.2.a	Percent Share to GRDP by Industry of Origin, Region 1 (2011-2015)	170
Table 15.2.b	Percent Share to GRDP by Industry of Origin, Region 1 (2011-2015) (continuation)	171
Table 15.3.a	Percent Contribution to GRDP Growth by Industry of Origin, Region 1 (2011-2015)	171
Table 15.3.b	Percent Contribution to GRDP Growth by Industry of Origin, Region 1 (2011-2015) (continuation)	172
Table 15.4	Labor Productivity, Region 1 and by Sector (2011-2015 Accomplishments vs. 2016 Targets)	173
Table 15.5	Poverty Incidence and Magnitude of Poor Families and Population, Region 1 and by Province (2006-2015)	174
Table 15.6.a	Plan Targets to Realize a Stable and Sound Macroeconomic Environment in the Region (2017-2022)	179
Table 15.6.b	Plan Targets to Realize a Stable and Sound Macroeconomic Environment in the Region (2017-2022) (continuation)	180
Figure 15.1	GRDP Growth Rates, Philippines and by Region (2011-2015)	168

Figure 15.2	Growth Rate by Sector, Region 1 (2011-2015)	168
Figure 15.3	Labor Statistics, Region 1 (2011-2016)	172
Figure 15.4	Inflation Rate, Region 1 (2011-2015)	175
Figure 15.5	Strategic Framework to Achieve a Stable and Sound Macroeconomic Environment in the Region (2017-2022)	180

Chapter 16 Leveling the Playing Field through a National Competition Policy

Table 16.1.a	Assessment of the Business Climate Situation in Region, Accomplishments versus Targets (2011-2016)	185
Table 16.1.b	Assessment of the Business Climate Situation in Region, Accomplishments versus Targets (2011-2016) (continuation)	186
Table 16.2	Cities and Municipalities Competitiveness Index (CMCI) Ranking and Rating by Province, Region 1, 2015 versus 2016	188
Table 16.3.a	Top Three Most Competitive Cities, 1st to 3rd Class Municipalities, and 4th to 6th Class Municipalities by Category and Pillar, Region 1 (2016)	188
Table 16.3.b	Top Three Most Competitive Cities, 1st to 3rd Class Municipalities, and 4th to 6th Class Municipalities by Category and Pillar, Region 1 (2016) (continuation)	189
Table 16.4.a	Plan Targets to Promote Competitiveness in Region 1 (2017-2022)	189
Table 16.4.b	Plan Targets to Promote Competitiveness in Region 1 (2017-2022) (continuation)	190
Figure 16.1	Strategic Framework to Promote Competitiveness in Region 1 (2017-2022)	190

Chapter 17 Attaining Just and Lasting Peace

Figure 17.1	Strategic Framework to Attain a Just and Lasting Peace in Region 1 (2017-2022)	199
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Chapter 18 Ensuring Security, Public Order, and Safety

Table 18.1	Index and Non-Index Crimes, by Province, Region 1 (2011-2016)	205
Table 18.2	Plan Targets to Ensure Security, Public Order, and Safety in Region 1 (2017-2022)	207

Table 18.3	Legislative Agenda to Ensure Security, Public Order, and Safety in Region 1 (2017-2022)	208
Figure 18.1	Crime Solution Efficiency Rate (CSER), Region 1 (2011-2016)	204
Figure 18.2	Crime Solution Efficiency Rate (CSER), by Province, Region 1 (2011-2016)	204
Figure 18.3	Strategic Framework to Ensure Security, Public Order, and Safety in Region 1 (2017-2022)	207

Chapter 19 Accelerating Infrastructure Development

Table 19.1	Plan Targets to Accelerate Infrastructure Development in Region 1 (2017-2022)	220
Table 19.2	Legislative Agenda to Accelerate Infrastructure Development in Region 1 (2017-2022)	226
Figure 19.1	Major Tourist Destinations, Region 1	213
Figure 19.2	Proposed Connectivity Network, Region 1	214
Figure 19.3	Existing Airports and Seaports, Region 1	216
Figure 19.4	Strategic Framework to Accelerate Infrastructure Development in Region 1 (2017-2022)	221

Chapter 20 Ensuring Ecological Integrity, Clean and Healthy Environment

Table 20.1	Number of Casualties from Natural Hazards during Disasters, Region 1 (2011-2016)	230
Table 20.2	Value of Damages to Properties from Natural Hazards during Disasters, Region 1 (2011-2016)	230
Table 20.3	Air Quality in Selected Stations, Region 1 (2012-2016)	231
Table 20.4	Water Quality (BOD) in SDRS and NRS, Region 1 (2011-2016)	232
Table 20.5	Jobs Generated from Forests and Mining Activities, Region 1 (2011-2016)	233
Table 20.6	Comparative Number of Beneficiaries of the Community-Based Forest Management Agreement (CBFMA) by Sex, Region 1 (2013-2016)	233
Table 20.7	Members of Protected Area Management Board (2015) and Patentees by Sex, Region 1 (2014)	233

Table 20.8.a	Plan Targets to Maintain Ecological Integrity in Region 1 (2017-2022)	235
Table 20.8.b	Plan Targets to Maintain Ecological Integrity in Region 1 (2017-2022) (continuation)	236
Table 20.9	Legislative Agenda to Maintain Ecological Integrity in Region 1, 2017-2022	244
Figure 20.1	Strategic Framework to Ensure Ecological Integrity, Clean and Healthy Environment in Region 1, 2017-2022	237
Chapter 21	Plan Implementation and Monitoring	
Figure 21.1	Plan Implementation and Monitoring of the Ilocos Regional Development Plan (RDP) 2017-2022	249

FOREWORD



By virtue of Memorandum Circular No. 12 issued by the Office of the President, the Regional Development Council (RDC-1), being the highest policy-making body in the region, spearheaded the formulation of the Ilocos Regional Development Plan (RDP) 2017-2022 which is an integral part of the Philippine Development Plan (PDP). Through the RDC Sectoral Committees, sectoral components of the RDP were formulated and subsequently endorsed to the RDC Full Council for approval. The RDP was approved in its entirety through Resolution No. 8, s.2016 on 19 December 2016.

Region 1 is envisioned to be the agribusiness and tourism hub in Northern Philippines by 2022. All strategies, programs and projects in the Plan are therefore anchored along this vision. The RDP specifically aims to improve the living conditions of the people of Region 1 and strengthen their resiliency by improving agricultural productivity and expanding the tourism industry supported by an accelerated infrastructure development, a healthy natural environment, and a peaceful and secure social environment.

As part of its mandate, the RDC-1 shall ensure the smooth implementation and monitoring of the programs, projects and activities indicated in the RDP. Results Matrices (RMs) shall be utilized in tracking the gains achieved annually vis-à-vis the RDP targets. Also, the Regional Project Monitoring and Evaluation System (RPMES) shall be used in monitoring and assessing the physical and financial accomplishments of the programs and projects included in the Plan.

The RDC-1 counts on the support of all stakeholders to make the region's vision a reality. With the RDP as guide, regional line agencies, state colleges and universities, and local government units are enjoined to formulate and implement their plans, programs and activities accordingly for the attainment of the region's vision. We also encourage the private sector and civil society organizations to participate in and support the development programs and projects laid down in the Plan.

The RDC-1 convey its heartfelt gratitude to all those who helped in crafting the RDP 2017-2022. With determination, hard work and united effort, we will be able to fulfill our hope and dream of a better future for Region 1

A stylized, handwritten signature in black ink, appearing to read 'JCM'.

JUAN CARLO S. MEDINA
Chairman, RDC-1
(Mayor, Vigan City)

PREFACE



The Ilocos Regional Development Plan (RDP) 2017-2022 provides the strategic direction for the development of Region 1. The Plan aims to lay a strong foundation for inclusive growth, a high-trust and resilient society, and a globally-competitive regional knowledge economy. In support to the national development agenda, the 0 to 10-point Socio-economic Agenda of His Excellency President Rodrigo Roa Duterte serves as the take off point of the Plan. In addition, it is also anchored on the Ambisyon Natin 2040, the country's Long Term Vision (LTV), and the 2030 Agenda for Sustainable Development with 17 Sustainable Development Goals (SDGs).

Region 1 adopted the country's overall strategic framework, and focused on its priority industries as well as on the the aspirations of its peoples. As a major producer of agri-fishery products and being endowed with many tourist attractions, the region envisions to become the agribusiness and tourism hub in the northern part of the country. The development of its agribusiness and tourism industries support the administration's socio-economic agenda to promote rural and value chain

development toward increasing agricultural and rural enterprise productivity and rural tourism.

The formulation of the Plan utilized a participatory approach. The RDP formulation activities included two regional consultations, two provincial consultations, and various meetings of sectoral technical working groups. The five sectoral committees of the Regional Development Council (RDC) reviewed and approved their respective sectoral plans. Each sectoral committee also ensured that (a) good governance principles, (b) Gender and Development (GAD) for development planning concerns; and (c) rights-based principles were mainstreamed in their respective sectoral plans. The Regional Gender and Development Committee (RGADC) endorsed the Ilocos RDP 2017-2022 as a gender-sensitive Plan while the Governance Sectoral Committee endorsed it as compliant to good governance principles.

The Ilocos RDP 2017-2022 is composed of seven parts which include: Part 1: Introduction; Part 2: Enhancing the Social Fabric (*"Malasakit"*); Part 3: Inequality-Reducing Transformation (*"Pagbabago"*); Part 4: Increasing Growth Potential (*"Patuloy na Pag-unlad"*); Part 5: Enabling and Supportive Economic Environment; Part 6: Foundations for Sustainable Development; and Part 7: From Plan to Action. The Plan followed the chaptering of the Philippine Development Plan (PDP) 2017-2022 wherein Part 1 focused on the overall framework of the Plan whereas Part 7 detailed the implementation and monitoring framework of the Plan. The remaining parts were subdivided among the five sectors of the region: (1) Governance Sector (Parts 2 and 6); (2)

Economic Development Sector (Parts 3, 4 and 5); Social Development Sector (Parts 3 and 4); Infrastructure Sector (Part 6); and Environment and Natural Resources Sector (Part 6).

To ensure the smooth implementation, monitoring and evaluation of the Ilocos RDP 2017-2022, the National Economic and Development Authority (NEDA) Region 1, as the secretariat of the Regional Development Council (RDC) 1, will continue to provide technical support along synchronized planning, project development, programming, budgeting, monitoring and evaluation system (SPPBMES). All these will be undertaken in partnership with concerned agencies and the public.

The NEDA Region 1 acknowledges the relentless support of its partner agencies, local government units, non-government organizations, private sector, academe, and civil society organizations in sharing their knowledge and expertise during the consultations as well as the RDC 1 which spearheaded the crafting and approval of the Plan. The valuable contributions of all stakeholders will lead to the realization of the region's vision: *“By 2022, Region 1 shall be the agribusiness, and tourism hub in Northern Philippines with equitable economic opportunities for its globally competitive, happy, resilient and culturally diverse peoples.”*


NESTOR G. RILLON
Regional Director, NEDA Region 1

MESSAGE



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 Roa Duterte'.

RODRIGO ROA DUTERTE

President

Republic of the Philippines

MANILA
May 2017

MESSAGE



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

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

PART I

INTRODUCTION



01

The Long View

The Long View

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

AmBisyonNatin2040

AmBisyon Natin 2040

President Rodrigo R. Duterte signed Executive Order (EO) No. 5, s. 2016 on October 11, 2016 approving and adopting the country's 25-year long-term vision (LTV) entitled *AmBisyon Natin 2040* as a guide for development planning. Section 3 of EO 5 states that the four medium-term Philippine Development Plans (PDPs) to be crafted and implemented until 2040 shall be anchored on the *Ambisyon Natin 2040* and its overall goals. The EO further states that the PDPs shall ensure sustainability and consistency of strategies, policies, programs and projects across political administrations. In addition, Section 4 of EO 5 prescribes that all plans of government departments, offices and instrumentalities, including government-owned or controlled corporations and local government units, shall be consistent with *Ambisyon Natin 2040*.

AmBisyon Natin 2040 is the result of a long-term visioning process conducted at the national level which started in 2015 under the previous administration. Focus group discussions (FGD) and a national survey with about 10,000 respondents were conducted to gather inputs for the visioning process. The FGD participants and survey respondents were asked on the kind of life they want for themselves and their children. They were also asked on what they hope the country would be like

in 2040. Strategic options for realizing the vision spelled out by the citizens were identified based on the results of commissioned technical studies. An advisory committee composing of selected representatives from government, academe, civil society, and the private sector provided the guidance to the exercise.

AmBisyon Natin 2040 represents the collective LTV and aspirations of the Filipino people for themselves and the country in the next 25 years. The LTV is not a plan. It is a vision that presents a picture of the future which includes a set of personal life goals and ideals for the country. It also provides the anchor for the country's development plans until 2040.

The vision of the Filipinos for the Philippines in 2040 is a prosperous, predominantly middle class society where there is equality of opportunities and poverty has been eradicated. The people will live long and healthy lives with a higher life expectancy at birth of 80 years. The people will be smarter and more innovative and the country is envisioned to be a major player in the global economy. It is envisioned that the Philippines will be a high trust, more caring, and peaceful society where human security is assured

and the government enjoys the trust of the people.

For their vision for themselves, Filipinos want a life that is strongly-rooted (*matatag*), comfortable (*maginhawa*), and secure (*panatag*). “*Matatag*” means that the people are living with their families and they have time for their family and friends as they observe work and life balance. “*Maginhawa*” means that the people are free from hunger and poverty, they have guaranteed mobility, secure home ownership, and travel and vacation opportunities. “*Panatag*” means that the people have security of place, they have resources adequate for their day-to-day needs and unexpected expenses, and they have passive income during retirement.

To support the realization of the country’s LTV by 2040, the region’s RDP during the four planning cycles until 2040 will be anchored on the country’s LTV. The region will support the following broad areas for strategic action over the next 25 years as identified in the PDP 2017-2022¹ to realize the national vision:

Toward building a **prosperous, predominantly middle-class society where no one is poor**, create the conditions for the growth of enterprises that generate high-quality jobs and produce high-quality goods and services at competitive prices. Give priority to enterprises in sectors that produce goods and services that meet *Ambisyon* (i.e for which there is a domestic market) and those that are able to participate in global trade. The following are the identified nine priority sectors with the greatest potential to contribute to realizing *Ambisyon*:

- Housing and urban development
- Manufacturing (food processing,

housing-related goods and services, transport)

- Connectivity (roads, ports, bridges, communication)
- Education services
- Financial services
- Health services
- Tourism-related services
- Agricultural development
- Countryside development

Toward promoting a **long and healthy life**, a range of programs starting with quality and affordable universal health care and social protection is required.

- Reduction of infant mortality rate through quality maternal health and child care
- Reproductive health and family planning programs
- Eradication of malnutrition
- Programs and facilities to encourage development of healthy lifestyles
- Efficiently-managed natural resources and environment

Toward becoming **smarter and more innovative**, people need to expand their skills in order to adapt to rapidly changing technology and work requirements.

- Education system should equip citizens with knowledge and skills necessary to occupy high-productivity jobs, while remaining adaptable to changing needs of the economy
- Strong intellectual property rights framework to encourage Filipinos to generate innovative products and ideas
- A mature research and development (R & D) program

Toward building a **high-trust society**, government must be people-centered, effective, and accountable.

- Public goods and services should be efficiently delivered by a professional bureaucracy, including at the local level

¹ National Economic and Development Authority (NEDA). *Philippine Development Plan 2017-2022*

- Promote competition and inclusiveness in the political system through major political and electoral reform
- Pursue the peace agenda that accompanies a long-term development agenda for areas threatened by armed conflict
- Create social and cultural awareness and develop in every Filipino a deep appreciation of the Filipino nation.

The above national broad areas for strategic action to support the realization of the national vision will be put into action in the Ilocos RDP until 2040 (RDP

2017-2022, RDP 2023-2028, RDP 2029-2034, and RDP 2035-2040). This will require the buy-in and support of all stakeholders in the region including local officials so that succeeding plans will not be drastically changed as administrations change. Succeeding plans will build on previous plans while taking also into consideration emerging concerns and other development trends. Continuous advocacy campaign on *Ambisyon Natin* 2040 covering all sectors of the region will be conducted to sustain the awareness, appreciation and support of all stakeholders.

The Regional Development Plan 2017-2022

The Ilocos RDP 2017-2022 takes off from the Administration's 0-10 Point Socioeconomic Agenda. It is the first medium-term plan anchored on the country's LTV 2040 as approved through EO No. 5, s. 2016. The Plan aims to lay a stronger foundation for inclusive growth, a high-trust society, and a globally-competitive economy toward realizing the Vision by 2040.

As an agricultural region, the region will focus on the improvement of the productivity of the agriculture sector in support to the region's agri-based industrialization goal during the next six years. This will be complemented with the strengthening of the local tourism industry which is expected to bring multiplier effects to its allied industries. The desired outcome is to reduce poverty, specifically in agriculture and in provinces with high poverty incidence and magnitude of poverty. Under the Plan, poverty incidence among population is targeted to go down from 13.1 percent in 2015 to 8.0 percent by 2021.

The strategies to achieve the above targets are grouped in three major pillars: enhancing the social fabric, reducing inequality, and increasing potential growth. Chapter 4 provides a discussion of the strategic framework of RDP 2017-2022.

This document is organized into seven parts. Part I provides the overall context for the Plan. Part II is about enhancing the social fabric to build the foundations for a high-trust society. Part III stresses the importance of reducing inequalities in economic development opportunities. Part IV focuses on increasing potential growth. Part V calls for a supportive economic environment that will enable the region's economy to sustain growth. Part VI is about the foundations for sustainable development. The last part, Part VII, describes the institutional arrangements for the implementation and monitoring of the Plan to ensure that what is planned gets implemented and that timely adjustments are done, as needed.

02

Global and
Regional Trends
and Prospects

Global and Regional Trends and Prospects

In the next six years, there will be major changes at the global and national levels that will affect the implementation of the Ilocos RDP 2017-2022. The region recognizes that economic, political, social, demographic, technological and environmental trends and prospects at the international and national levels will have effects on the region's development agenda in the next medium-term. The extent of their effects on the region's development goals will depend on the region's readiness to adjust to such changes. Meanwhile, there are other factors existing in the region that will affect the implementation of the Plan and the attainment of the region's development. The trends, prospects and local factors that will have significant impact on the region's development efforts are discussed below including the challenges that should be addressed to make them beneficial to the region.

The country's integration into the ASEAN Economic Community (AEC) will bring bright prospects. The country's integration into the AEC carries with it bright prospects from the national down to the regional level. Region 1's proximity to ASEAN countries will be an advantage as the region will benefit from a bigger market for its produce. The big challenge is on the readiness of the region to compete in the ASEAN market considering concerns on economies of scale and international standards. There is a need for the region to locate its strategic position in the value chain and implement necessary reforms to acquire the most

advantageous position. Concerned industries will have to introduce innovations geared towards the production of quality products suited for international markets.

The country's commitment to the 2030 Agenda for Sustainable Development with the 17 Sustainable Development Goals (SDGs) will serve as vehicle in the attainment of development goals. The region's support to the attainment of the 17 SDGs will lead to the allocation of resources for the attainment of these goals. It is expected that the region's stakeholders will support the SDGs which will contribute to the attainment of the region's development goals which are also anchored on the SDGs.

As an agricultural region, Region 1 will continue to be a major producer of agricultural products which are important inputs in agri-business activities. The region's manufacturing industry has a great potential in contributing to the region's economic performance due to the availability of raw materials in the region, particularly agricultural products. The region is a top producer of tobacco, mango, garlic and milkfish which can be processed into higher value commodities. The partnership of the stakeholders in the agriculture and manufacturing industries is important to realize this economic development agenda.

The manpower supply being produced by educational institutions is a major concern. The attainment of the region's

development goals will depend a lot on the availability of adequate qualified human resources. The region's education system has been producing a number of graduates every year. However, the big challenge is on being able to accommodate all of the region's labor force given the existing economic landscape in the region. There is a need for the region's productive population to have the proper training and education to suit the needs of the industries particularly on agribusiness and tourism.

Natural disasters will continue to affect the region. Based on current trends brought about by climate change, the occurrence of natural disasters is expected to continue in Region 1 because of its location. The region's economic performance will be affected by natural disasters particularly the agriculture sector. Natural disasters will have adverse effect on the region's poverty situation since about one-third of the region's labor force are employed in the agriculture sector. There is a need to introduce Disaster Risk

Reduction and Climate Change Adaptation (DRR+CCA) programs and projects to minimize the impact of natural disasters to agricultural workers. The agriculture sector will also benefit a lot if new technologies will be developed to have disaster-resistant commodities.

The support of private sector and local government units in our development efforts is important. The implementation of the programs and projects in the RDP will depend a lot on the support of the private sector. The region needs the private sector to invest in key industries in the region including the support industries such as information and communication technology (ICT) and infrastructure development. The support of the private sector, on the other hand, will depend on the presence of a supportive enabling environment. The local government units will play a critical role along this concern by providing the right environment for the ease in doing business, peace and security, among others.

03

Overlay of Economic
Growth, Demographic
Trends, and Physical
Characteristics

Overlay of Economic Growth, Demographic Trends, and Physical Characteristics

The Ilocos RDP 2017-2022, consistent with the development goals of the PDP 2017-2022, aims for the realization of inclusive development which is anchored on *AmBisyon Natin* 2040. The Plan defines the desired spatial distribution of the human activities in the region considering economic, social, political and environmental conditions. Below are discussions on the region's economic and demographic trends, and physical characteristics which are important considerations in the Plan's implementation.

Economic and Demographic Trends

Regional Shares in GDP

Region 1 shared about three percent, on the average, to the Gross Domestic Product (GDP) during the period 2010-2015. The region's Gross Regional Domestic Product (GRDP) recorded an average of 5.4 percent growth rate from 2010 to 2015 which is lower than the GDP average growth rate of 6.2 percent during the same period. It also contributed about 0.2 percentage points to the GDP growth during the same period.

Trends in Population Growth

Based on the 2015 Census of Population, the population of Region 1 reached 5,026,128, which accounted for about 4.98 percent of the total Philippine population. This figure is higher by 277,756 from the

region's population of 4.75 million in 2010. It grew by 1.46 percent from 1990 to 2010 and increased by 1.09 percent, on average, during the period 2010 to 2015. Among the four provinces in Region 1, Pangasinan registered the biggest population in 2015 with 2.96 million. It was followed by La Union with 787 thousand, Ilocos Sur with 690 thousand and Ilocos Norte with the smallest population size of 593 thousand. San Carlos City was the most populous city in the region in 2015 with 189 thousand followed by Dagupan City and Urdaneta City with population sizes of 171 thousand and 132 thousand, respectively.

Table 3.1 shows the population sizes of the cities in Region 1 from 1990-2015 while Table 3.2 shows their growth rates.

Table 3.1 Population by Province and City, Ilocos Region, in Thousands (Census Years 1990, 1995, 2000, 2007, 2010 and 2015)

Area	1990	1995	2000	2007	2010	2015
Ilocos Region	3,550.6	3,803.9	4,200.5	4,546.8	4,748.4	5,026.1
Ilocos Norte	377.9	394.3	419.8	444.8	463.1	593.1
Ilocos Sur	437.9	458.2	498.5	529.6	551.0	689.7
La Union	463.8	505.5	555.9	606.2	626.9	786.7
Pangasinan	1,623.4	1,752.8	1,964.5	2,133.4	2,230.6	2,956.7
Alaminos City	59.4	65.1	73.4	79.8	85.0	89.7
Batac City	43.1	45.5	47.7	50.7	53.5	55.2
Candon City	43.5	45.1	50.6	56.3	57.9	60.6
Dagupan City	122.2	126.2	130.3	149.6	163.7	171.3
Laoag City	83.8	88.3	94.5	102.5	104.9	111.1
San Carlos City	124.5	134.0	154.3	161.9	175.1	188.6
San Fernando City	84.9	91.9	102.1	114.8	115.0	121.8
Urdaneta City	90.7	100.3	111.6	120.8	125.5	132.9
Vigan City	38.6	42.1	45.1	47.2	49.7	53.9

Source: Philippine Statistics Authority

Table 3.2.a Average Annual Population Growth Rate by Province and City, Ilocos Region, in Percent (Census Years 1990-2015)

Area	1990-2000	2000-2010	1990-2010	2010-2015
Ilocos Region	1.69	1.23	1.46	1.09
Ilocos Norte	1.08	1.00	1.04	0.83
Ilocos Sur	1.34	1.03	1.19	0.88
La Union	1.83	1.21	1.52	1.12
Pangasinan	1.88	1.34	1.61	1.18
Alaminos City	2.14	1.48	1.81	1.08
Batac City	1.02	1.15	1.09	0.63
Candon City	1.52	1.36	1.44	0.92
Dagupan City	0.64	2.31	1.47	0.91
Laoag City	1.21	1.05	1.13	1.16

Source: Philippine Statistics Authority

Table 3.2.b Average Annual Population Growth Rate by Province and City, Ilocos Region, in Percent (Census Years 1990-2015) (continuation)

Area	1990-2000	2000-2010	1990-2010	2010-2015
San Carlos City	2.17	1.27	1.72	1.50
San Fernando City	1.86	1.20	1.53	1.16
Urdaneta City	2.10	1.18	1.64	1.15
Vigan City	1.57	0.98	1.27	1.64

Source: Philippine Statistics Authority

Among the provinces, Pangasinan recorded the highest average annual population growth rate from 2010-2015 at 1.18 percent followed by La Union at 1.12 percent which are above the 1.09 percent regional average. In the case of the cities, Vigan registered the highest population growth rate at 1.64 percent which is way

above the 0.88 percent growth rate of its province, Ilocos Sur. The other cities with higher growth rates than their provinces are San Carlos City in Pangasinan at 1.50 percent, Laoag City in Ilocos Norte and San Fernando City in La Union at 1.16 percent each, and Urdaneta City in Pangasinan at 1.15 percent.

Physical Characteristics

Region 1 lies at the northwestern tip of the island of Luzon. It is bounded in the east by the Cordillera Administrative Region (CAR) and Cagayan Valley and in the south by Central Luzon. As of 2016, Region 1 has total land area of 1,284,019 hectares. Pangasinan accounted for the biggest share at 41.81 percent, followed by

Ilocos Norte, Ilocos Sur and La Union with 26.47 percent, 20.09 percent and 11.63 percent shares, respectively. Out of the total land area, 810,062 hectares were classified as alienable and disposable land. Table 3.3 below shows the status of land classification in the region.

The Overall Spatial Strategy

The region's spatial strategy, as reflected in the Regional Spatial Development Framework (RSDF) 2016-2045¹, was anchored on the National Spatial Strategy (NSS) with three core strategies, namely: Concentration, Connectivity, and Vulnerability Reduction. It was formulated within the context of the Luzon Spatial

Development Framework (LSDF)², which serves as the integrating framework of the various regional physical plans in Luzon. It supports the development vision of inclusive growth and the spatial distribution of the region's population and related economic characteristics, growth scenarios and corresponding growth

¹NEDA Regional Office 1. Regional Spatial Development Framework (RSDF) 2016-2045.

²NEDA. Luzon Spatial Development Framework (LSDF) 2015-2045.

issues. Programs and projects to be implemented during the period 2017-2022 shall consider the NSS core strategies in support to the attainment of the region's development vision.

The region's settlements are situated on narrow coastal lowlands and are economically close to larger markets in Manila with access via Central Luzon.

The objective of the concentration strategy is to enhance the ability of settlements to absorb as much growth as possible in and around existing built-up areas to increase the scale and efficiency of urban-based production, services and markets in general as well as to minimize land conversion. The adoption of this strategy

will also provide opportunities to improve existing urban environments. On the other hand, the aim of the connectivity strategy is to fully integrate settlements and production centers by strengthening communication and transportation linkages, and other infrastructure systems. It will put people and places closer to each other resulting to increased access to employment opportunities and higher level of services. Meanwhile, the objective of the vulnerability reduction strategy is to ensure the safety of settlements and the sustainable operation of production and value-chain processes from the threats of hazards.³ At the same time, it shall ensure that development activities and interventions will not result in increased vulnerability of communities.

Table 3.3 Status of Land Classification by Province (in Hectares), Ilocos Region (2015)

Area/Land Classification	Ilocos Region	Ilocos Norte	Ilocos Sur	La Union	Pangasinan
Land Area	1,284,019	339,934	257,958	149,309	536,818
Alienable and Disposable Land	810,062	144,948	138,412	120,307	406,395
Unclassified Forest Lands	33,155	-	26,176	4,132	2,847
Classified Forest Lands	440,802	194,986	93,370	24,870	127,576
Established Forest Reserves	217,846	193,272	1,609	90	22,875
Established Timberland	208,140	1,374	90,141	13,833	102,792
National Parks/GRBS/WA	12,999	340	1,620	10,947	92
Military/Naval Reservation	288	-	-	-	288
Civil Reservation	923	-	-	-	923
Fishpond Development	606	-	-	-	606

NOTE: GRBS – Game Refuge and Bird Sanctuaries; WA – Wilderness Area

Source: Department of Environment and Natural Resources

Concentration

Based on population and economic activities, the settlements in the region can be described through a four-tiered network of settlements which consist of regional centers, sub-regional centers, provincial

centers and local centers. The lower tiers have smaller catchment areas and provide basic urban services while the upper tiers have larger coverage areas and provide more advanced urban services. This is in consonance with the concentration strategy which aims to plan for and guide

increases in overall densities of settlements in terms of population and economic activities. Its specific objectives³ are:

- a. To increase access to the benefits associated with urbanization, including increased economic activities and greater opportunities for employment and poverty reduction;
- b. To make available a larger variety and higher levels of services and amenities;
- c. To reduce encroachment into agricultural land and other environmentally-sensitive or protected areas; and
- d. To define and further develop the roles of regional centers as catalysts for socioeconomic development and as providers of immediate and advanced support services.

Table 3.4 shows the summary of the growth centers⁴ of the region considering population and economic activities. The roles of the growth centers in pursuit of the region's development agenda are discussed below.

Regional Centers

The two regional centers in the Ilocos Region are Laoag City and San Fernando City.

Laoag City is the provincial capital of Ilocos Norte and is considered as the international gateway to Northern Philippines as it hosts the Laoag International Airport. The city is expected to expand its direct area of influence over adjacent municipalities, namely: San Nicolas and Batac City, which are projected to be areas for commercial and industrial activities. It is seen as the northern service and institutional center

for North Luzon. It has major tourist destinations with its rich historical, cultural and natural attractions and tourism-oriented establishments. On the other hand, San Fernando City, the provincial capital of La Union, is the financial, industrial, political and educational hub of the province of La Union. Its sphere of influence spills over minor growth centers such as Bauang, Nagueilian, Bacnotan, San Juan, San Gabriel and Bagulin. The city, which is geographically located in the center of the region, is the flagship regional center of Region 1. It hosts majority of the government's regional offices, higher educational institutions and tertiary level medical establishments.⁵

Sub-regional Centers

Region 1 has four identified sub-regional centers: Dagupan City, Alaminos City, Urdaneta City and Vigan City. They connect to and serve as service centers of smaller provincial and local centers.⁶

Dagupan City is one of the prime areas for marine and aquaculture production. It ranks second in the region, next to San Carlos City, in terms of population. It functions as the center of commerce, trade, education and health services, and the seat of sub-regional offices of government agencies. It is also considered as Pangasinan's industrial hub.

Alaminos City is home to the Hundred Islands National Park. It is one of Pangasinan's major urban centers that complement the services provided by Dagupan City in areas of education, health services, tourism, trade, information and communication, and services for the distribution of agricultural produce within the province.

³NEDA. Luzon Spatial Development Framework (LSDF) 2015-2045.

⁴NEDA. RSDF 2016-2045 as cited in the LSDF 2015-2045.

⁵NEDA. RSDF 2016-2045 as cited in the LSDF 2015-2045.

⁶Ibid.

Table 3.4 Growth Centers in Region 1

Regional Center	Sub-Regional Center	Provincial Center
Laoag City San Fernando City	Alaminos City Dagupan City Urdaneta City Vigan City	Agoo Bacnotan Bangui Batac City Bolinao Calasiao Candon City Cervantes Dingras Lingayen Rosales San Carlos City San Emilio Tagudin Tayug

Table 3.5 Provincial Centers and their Areas of Influence in Region 1

Provincial Center	Area of Influence
Agoo	Aringay, Santo Tomas, Tubao, Pugo, Rosario
Bacnotan	Balaoan, Santol, Luna, Bangar, Sudipen
Bangui	Pagudpud, Burgos Ilocos Norte, Dumalneg, Adams
Batac City	Marcos, Paoay, Banna, Pinili, Nueva Era, Badoc, Sinit
Bolinao	Bani, Anda, Agno, Burgos Pangasinan
Calasiao	Sta. Barbara, Mapandan, Manaoag, Malasiqui
Candon City	Sta. Lucia, Santiago, Banayoyo, Galimuyod
Cervantes	Sugpon, Sigay, Suyo, Salcedo
Dingras	Solsona, Sarrat, Piddig, Carasi
Lingayen	Binmaley, Bugallon, Labrador
Rosales	Balungao, Bautista, Alcala, Bayambang
San Carlos City	Basista, Aguilar, Mangatarem, Urbiztondo, Aguilar
San Emilio	Nagbukel, Burgos Ilocos Sur, Lidlidda, Gregorio del Pilar, Quirino
Tagudin	Sta. Cruz, Suyo, Alilem
Tayug	San Quintin, Natividad, San Nicolas Pangasinan, Umingan

Urdaneta City is the center of trade, commerce and industry in Eastern Pangasinan. The city is also a strategic area for agricultural production in the province. It also serves as distribution center and

provides tertiary education and medical services in said portion of Pangasinan.

Vigan City is 80 kilometers away from Laoag City and 139 kilometers from San

Fernando City. It is dubbed as a heritage city as it is one of the few remaining 16th century towns in the Philippines. In 2015, the city was officially recognized as one of the world's New 7 Wonder Cities. The city serves as a center of education, business, trade and other economic and social activities. Tourism and related activities in the city are expected to extend to adjacent municipalities in the province, namely: San Ildefonso, Bantay, San Vicente, Sta. Catalina, Caoayan, Santa, Narvacan and Sta. Maria.

Provincial Centers

The region has 15 identified provincial centers, namely: Agoo, Bacnotan, Bangui, Batac City, Bolinao, Calasiao, Candon City, Cervantes, Dingras, Lingayen, Rosales, San Carlos City, San Emilio, Tagudin and Tayug. These centers consist of major cities and municipalities that provide services to adjacent towns or cluster of settlements. Table 3.5 shows the list of provincial centers and their areas of influence.

The regional, sub-regional and provincial centers are strategically located in the four provinces of the region as shown in Figure 3.1.

Local Centers

All other cities and municipalities not included in the higher levels of the network of settlements are considered as local centers.

Connectivity

Region 1 can be reached by land, air and water. It is accessible through its four provinces from Cagayan (Region 2), Nueva Vizcaya (Region 2), Benguet (CAR), Abra (CAR), Zambales (Region 3), Nueva Ecija (Region 3), and Tarlac (Region 3) by any mode of land transportation. It has one

main airport, i.e. the Laoag International Airport (LAO) in Laoag City, Ilocos Norte that is serving the northern Luzon area with one domestic flight daily to Manila and vice versa.

Table 3.6 shows the estimated travel time to Region 1 by air and land from various points in Luzon. Improvements in connectivity as discussed below will reduce travel time to the various parts of the region.

The connectivity strategy intends to increase transportation and communication linkages among the settlements and key production including tourism areas to:

- a. Increase access to and improve the efficiency of markets;
- b. Encourage (or discourage) growth and concentration according to specific urban and regional plans through transportation alignments that support corresponding development objectives; and
- c. Reduce vulnerability during emergency situations by increasing redundancy⁸.

To improve connectivity, the gravity model is recommended where the strongest linkages take place between the largest settlements that are closest to each other, while the weakest linkages occur between the smallest settlements that are farthest apart. Access and circulation between and among the different sub-regional, provincial and local centers will be facilitated through the development of backbone, lateral and strategic all-access roads. The critical sections of the existing MacArthur Highway and Pan-Philippine Highway (North-South arterial backbone roads) will be rehabilitated and/or widened

⁷NEDA. RSDF 2016-2045 as cited in the LSDF 2015-2045.

⁸Ibid.

to improve capacity. Existing East-West laterals such as the La Union-Benguet-Nueva Vizcaya-Quirino-Aurora road will be improved and rehabilitated to facilitate lateral interregional access. Other strategic

roads not falling under the backbone or lateral road links will also be developed to connect two or more adjacent provincial centers or link several clusters of settlements (Figure 3.2).

Figure 3.1 Network of Settlements in Ilocos Region

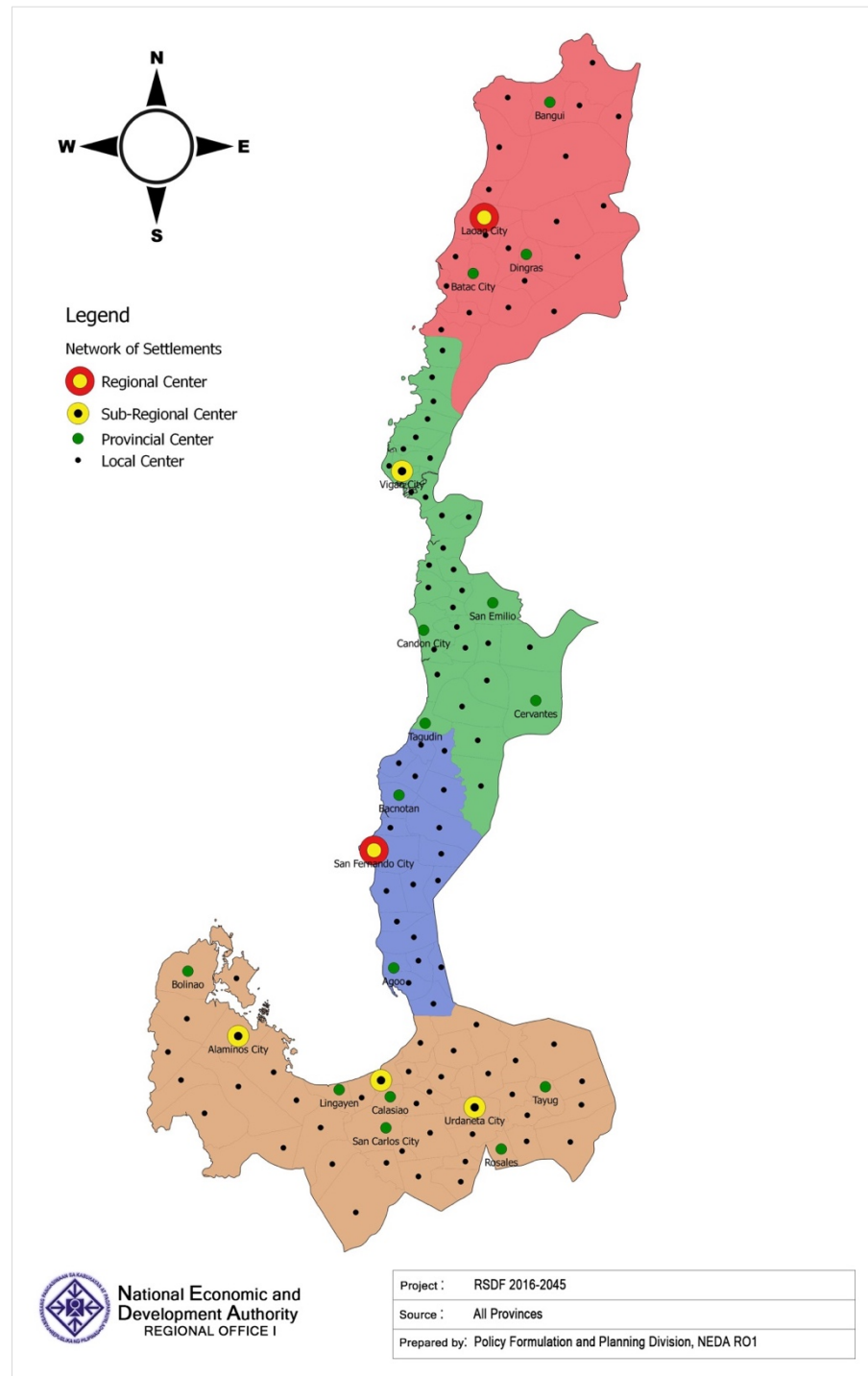


Table 3.6 Travel Time to Ilocos Region by Air and by Land

From	To	By Air (Mins)	By Road (Hh:Mm)
Baguio, Benguet	Lingayen, Pangasinan	18	1:24
Baguio, Benguet	Rosales, Pangasinan	18	1:25
Baguio, Benguet	San Fernando, La Union	14	1:00
Baguio, Benguet	Vigan, Ilocos Sur	45	2:54
Tuguegarao, Cagayan	Laoag, Ilocos Norte	11	5:03
Clark, Pampanga	Rosales, Pangasinan	26	1:25
Iba, Zambales	Lingayen, Pangasinan	28	2:22

Source: 2012/2013 Philippine Human Development Report

Table 3.7 Protected Areas in Ilocos Region

Name of Protected Area		Area (Ha.)	
Location		PA	BZ
National Parks (NP)		3,500.00	
1. Paoay Lake NP	Paoay, Ilocos Norte	340.00	
2. Northern Luzon Heroes Hill NP	Santa and Narvacan, Ilocos Sur	1,316.00	
3. Hundred Islands NP	Alaminos City, Pangasinan	1,844.00	
B. Watershed Forest Reserves (WFR)		2,971.00	
1. Ilocos Norte Metro WFR	Pasuquin, Ilocos Norte	2,815.00	
2. Santa WFR	Santa, Ilocos Sur	25.00	
3. Naguilian Watershed Reservation	Naguilian, La Union	90.00	
4. Tanap WFR	Burgos, Ilocos Norte	41.00	
C. Natural Monument/Landmark		693.32	427.79
Bessang Pass Natural Monument/Landmark	Cervantes, Ilocos Sur	693.32	427.79
D. Protected Landscape (PL)		3,449.19	965.09
1. Manleluag Spring PL	Mangatarem, Pangasinan	1,935.17	965.09
2. Libunao PL	Sinait, Ilocos Sur	46.70	
3. Bigbiga PL	Narvacan, Ilocos Sur	135.71	
4. Sta. Lucia PL	Salcedo, Ilocos Sur	174.16	
5. Lidlidda PL	Lidlidda and Banayoyo, Ilocos Sur	1,157.44	
E. Protected Landscape and Seascape (PLs)		10,513.30	135.64
1. Agoo PLS	Agoo, Sto. Tomas and Rosario, La Union	10,513.30	135.64
F. Natural Park			
1. Kalbario-Patapat Natural Park	Pagudpud and Adams, Ilocos Norte	3,800.00	1,937.00
		3,800.00	1,937.00

Note: PA – Protected Area; BZ- Buffer Zone

Source: Department of Environment and Natural Resources (DENR)

An inter-modal transport system will be implemented to link the region's airports, seaports and network of roads and bridges. The Manila North Road (MNR) traversing in the four provinces of the region will continue as the main economic backbone of the region. It will also continue to serve

as the main link of the region to its neighboring regions.⁹

The Tarlac-Pangasinan-La Union Expressway (TPLEX) will serve as the main link of

⁹LSDF 2015-2045.

Region 1 to Region 3 and Metro Manila while the Laoag-Allacapan Road will continue as the main link of the region to Region 2. The Naguilian Road, Marcos Highway, Kennon Road and the Tagudin-Cervantes-Mankayan Road will continue to link Region 1 to the CAR. To support the main roads, by-pass roads will be constructed to facilitate the flow of traffic when traversing to the region's urban centers.

Meanwhile, the Laoag International Airport in Ilocos Norte will remain as the main link to its ASEAN neighbors.

Chapter 19 discusses the detailed strategies to be implemented in the medium term to improve the connectivity in support to the region's development thrusts. Also included in the chapter are the specific infrastructure programs and projects to improve the region's transportation network to enhance economic activities focusing on agribusiness and tourism. Improvements in the region's road networks will lessen road travel time to urban centers and economic areas.

Vulnerability Reduction

The protection and maintenance of natural parks and protected landscapes in the region is one primary concern due to the increasing population and activities in communities adjoining the protected areas. Another concern is the prevention of settlements from encroaching in areas which are susceptible to geologic and hydrometeorologic hazard.

The protected areas¹⁰ of Region 1 are listed in Table 3.7 while Figure 3.3 shows the location of the protected areas. Chapter 20 discusses the strategies on the protection of these areas and the environment in general. The strategies on environment

protection are also in consonance with the vulnerability reduction strategies as discussed below.

The vulnerability reduction strategy aims to separate or control the extent of interaction between the general population and areas that need to be protected as well as those areas that are prone to hazards. Vulnerability reduction will require the resolution of land use conflicts involving built up areas, urban and non-urban protection and production areas. In the resolution of such conflicts, the following principles may be used as guide¹¹:

Safety cannot be compromised. Hazard-prone areas should be free from settlements as a disaster mitigation measure. To achieve this, the population should be relocated to safe and accessible sites with service infrastructure.

In the event of conflict between urban expansion and key production areas, the conflict should be resolved in favor of the latter. The preferred way of accommodating future growth is through higher densities within the existing built-up areas provided the appropriate support infrastructure and services are in place. Transportation routes and facilities should be integrated in protection plans in order to channel growth into areas that can accommodate them.

The success of a tourism enterprise should depend in part on maintaining the protected land use. It will require appropriate institutional capacity both within the public and private sectors to manage and resolve conflict between protected and production areas.

Where transportation routes cannot avoid passing through a disaster-prone area, alternative routes through an

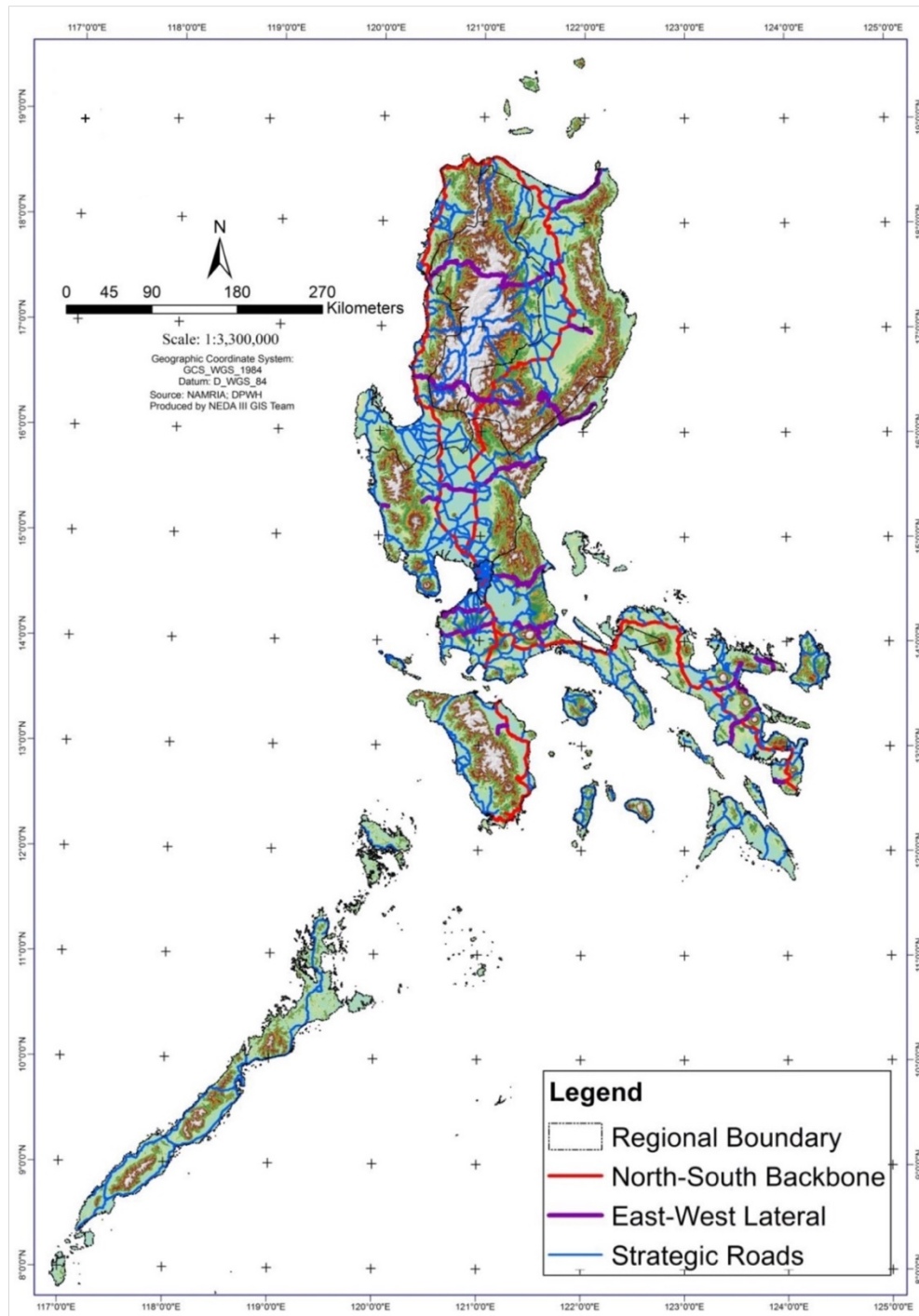
¹⁰RSDF 2016-2045.

¹¹RSDF 2016-2045.

alignment that is not subject to the same threat should be built. Ideally, all major regional and provincial routes should have such redundancy. This is especially

important during the period immediately after the occurrence of a disaster when rescue operations are ongoing.

Figure 3.2 North-South Backbone/East-West Lateral/Strategic Road Development Framework



Source: Luzon Spatial Development Framework (LSDF) 2015-2045

Figure 3.3 Map of Protected Areas in Region 1



In support to the region’s vulnerability reduction strategy, the following major programs and projects are proposed to be implemented during the next medium-term as contained in the region’s RSDF¹⁰:

- Water Harvesting Program which will involve the construction of the following small water impounding projects (SWIP) to store excess water during the rainy season:

- San Angel Small Reservoir Impounding Project (IP) in Pangasinan;
- Barbara Small Reservoir IP in Ilocos Sur;
- Sulvec Small Reservoir IP in Ilocos Norte;
- San Felipe Small reservoir IP in La Union;
- Dumuloc Small Reservoir IP in Pangasinan;
- Bayaoas Small Reservoir IP in Pangasinan;
- Dau Small Reservoir IP in Pangasinan;
- Agno River Flood Control Project Phase III (Asingan - San Manuel stretch, Alcala - Asingan stretch) in Pangasinan;
- Allied Rivers Improvement Project (Pantal-Sinocalan River, Cayanga-Patalan River) in Pangasinan;
- Transbasin Project in Ilocos Sur;
- Banaoang Pump Irrigation Project, Phase 2 in Ilocos Sur;
- Gregorio del Pilar Irrigation Project in Ilocos Sur; and
- Sand dunes slope protection in Ilocos Sur.

04

Regional
Development Plan
2017-2022 Overall
Framework

Regional Development Plan 2017-2022 Overall Framework

The Ilocos RDP 2017-2022 is the first medium-term plan anchored on *AmBisyon Natin 2040*. The over-all goal is to enable the Filipinos to have a “*matatag, maginhawa at panatag na buhay*.” Its goal in 2022 is to lay down the foundation for inclusive growth, a high-trust and resilient society and a globally-competitive knowledge economy. The Plan considers the accomplishments and lessons learned from the previous medium-term Plan.

Assessment and Challenges

Table 4.1 shows the results of the assessment of the RDP 2011-2016. Results of the assessment showed that the region’s desired development outcomes were partly attained. Out of the 24 development outcomes, 19 were partly attained while five were fully attained. All of the six identified sectors of the region, namely: Trade, Industry and Tourism,

Agribusiness, Infrastructure Development, Governance, Social Development, and Environment and Natural Resources, partly attained their targeted development outcomes. The details of the results of the assessment of the sectors including the factors which affected the accomplishments are discussed in the sectoral chapters.

Table 4.1 Summary Assessment of Attainment of Development Outcomes in the RDP (2011-2016)

Sector	Sector Outcome	Level of Attainment (by Sub-Sector Outcome)		Assessment	See Detailed Assessment in their Respective Chapters
		Fully	Partly Not at All		
1. Trade, Industry and Tourism	Trade, Industry and Tourism Sector Expanded	1	3	Partly	Chapter 9, 14 – 16
2. Agribusiness	Vibrant Agribusiness achieved	2	2	Partly	Chapter 8, 14 – 16
3. Infrastructure Development	Quality, adequacy and reliability of infrastructure facilities enhanced	-	5	Partly	Chapter 19
4. Governance	Growth and development through good governance sustained	1	2	Partly	Chapter 5, 6, 17 and 18
5. Social Development	Socio-economic condition of the poor and vulnerable sectors in Region 1 improved	1	3	Partly	Chapter 10 – 14
6. Environment and Natural Resources	Region 1 environment sustainably-managed	-	4	Partly	Chapter 20
TOTAL		5	19	Partly	

The region's economy continued to grow with an average growth rate of 5.4 percent during the period 2011-2015. This is below the 8.2 – 9.2 percent target in the RDP 2011-2016 but it is within the 5.0 – 8.0 percent target in the Regional Development Agenda (RDA) 2016. The RDA is the annual portion of the RDP which contains the adjusted economic targets based on assessment of latest performance.

The region's accelerated growth from 2011 to 2013 was not sustained due to natural disasters caused by typhoons that visited the region affecting the performance of the agriculture sector. The manufacturing subsector has a great potential considering the available raw materials in the region. However, it did not sustain robust growth which could also be due to the poor performance of the agriculture sector and the lack of agri-based entrepreneurs in the region. Hence, there is a need to come up with strategies to entice investors in agri-based industries. In addition, other sectors which have great potentials as significant contributors to the region's economy will have to be identified and be given the necessary support.

The region's employment targets were not yet attained based on 2016 data. The region's unemployment rate was recorded at 6.3 percent which is within the 6.2 to 7.2

percent target by 2016. However, the underemployment rate of the region remained high at 13.90 percent which is also above the 13.0 target by 2016. Nevertheless, this is already a big improvement from the underemployment rate figure recorded in 2011 at 19.82 percent. The region's employment situation could be due to the modest economic performance of the region. The region's economy will have to sustain a high growth to generate sufficient employment to accommodate the region's growing labor force.

Despite the above setbacks in the region's economic performance, the region's poverty incidence continued to decline from 2009 to 2015. The region's poverty incidence among population declined from 22.0 percent in 2009 to 13.1 percent in 2015 surpassing the 13.6-16.0 percent target by 2016. In spite of these achievements, poverty is still a major concern in the region. The magnitude of poor population in the region is still high at 671,087 individuals, majority (65.52 %) of whom came from Pangasinan. There is a need for the region to focus its poverty reduction efforts in the province while sustaining efforts in the other provinces to support the region's improving poverty situation. The detailed discussion on the region's macroeconomic performance can be found in Chapter 15.

Strategic Framework

By the end of 2022, the peoples of Region 1 will be closer to achieving the *Ambisyon* to have a “*matatag, maginhawa at panatag na buhay*.”

Targets

The region's GRDP growth by 2022 will range from 7.2 – 8.0 percent. More

investors will be coming to Region 1 resulting to more employment opportunities. Labor productivity will improve from its current level while low inflation rate will be sustained. Poverty incidence of population will decline to 8.1 percent in 2022. There will be greater trust in government and society. Individuals and families will be more resilient and

individuals will have greater drive for innovation. The specific targets are included in the sectoral chapters.

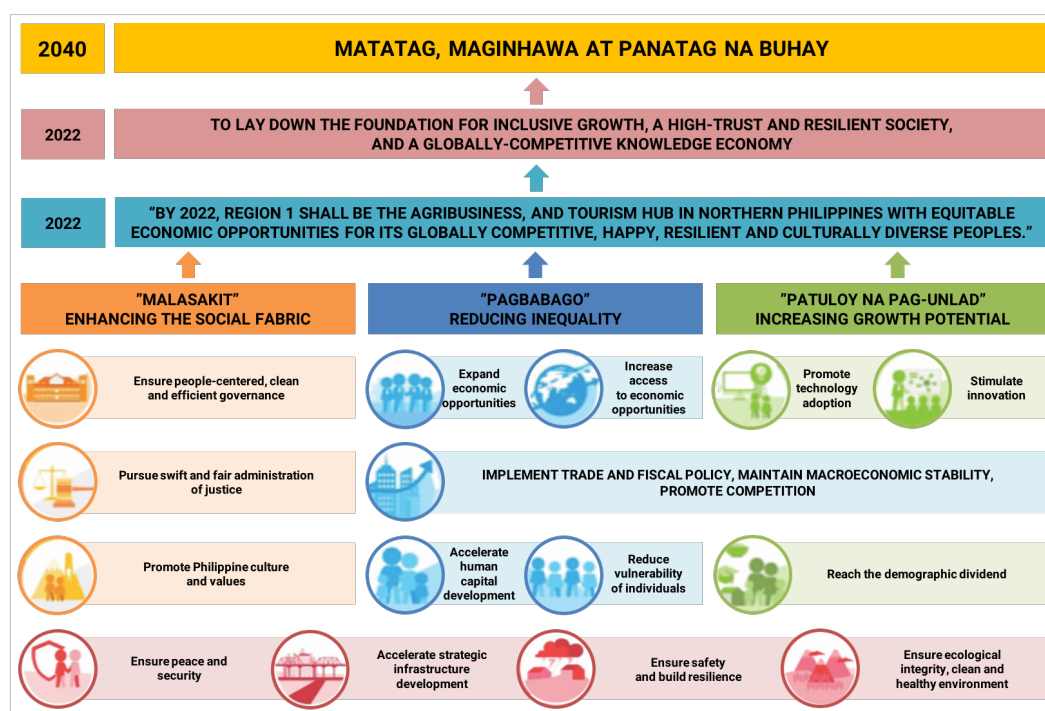
Strategies

The strategies to achieve the above targets are grouped under three major pillars, namely: “*Malasakit*,” “*Pagbabago*,” and “*Patuloy na Pag-unlad*.” These shall be supported by cross-cutting strategies that will provide the enabling and supportive

environment, and foundations for sustainable environment.

Enhancing the social fabric. The aim is to regain peoples’ trust in public institutions and cultivate trust in fellow Filipinos. Public institutions will be people-centered, efficient and clean (Chapter 5). Administration of justice will be swift and fair (Chapter 6). The region’s and country’s culture and values (Chapter 7) will also be promoted.

Figure 4.1 Overall Strategic Framework



Inequality-reducing transformation: ordinary Filipinos will feel the “*Pagbabago*”. This is concerned with the expansion of economic opportunities and in increasing access to these opportunities. (Chapters 8 and 9). There will be more options to the women and men in Region 1 to develop their potentials by improving their educational qualifications and their nutritional and health status. Programs and projects that will increase their

income-earning abilities will be implemented (Chapter 10). The vulnerability of individuals will be reduced (Chapter 11) while communities will be more safe and secure (Chapter 12).

Increasing potential growth: It is imperative that growth is accelerated and sustained for “*Patuloy na Pag-unlad*”. Adoption of technology will be promoted and innovation will be encouraged to

increase the potential for growth (Chapter 14).

The potential for growth will be supported with strategies to reach for the demographic dividend. Strategies will be implemented to ensure that families will be of the size that can be adequately cared for (Chapter 13).

Enabling and supportive economic environment. The region will continue to support the maintenance of an economic environment that will ensure macroeconomic stability (Chapter 15). At the same time, market competition will be enhanced through introduction of interventions that will ease the doing of business in the region (Chapter 16).

Foundations for sustainable development. To have a foundation for sustainable development, the necessary infrastructure in the region will be maintained, improved, or established (Chapter 19). In addition, the ecological integrity, and the cleanliness and health of the environment will be maintained (Chapter 20).

All of these will be supported with the maintenance of peace and security in the region (Chapters 17 and 18).

While the region fully adopted the country's overall strategic framework, it will also give focus on the priority industries of the region and the aspirations of its peoples. Taking into consideration the region's development performance during the period 2011-2016, the region's development vision for the next medium-term is:

“By 2022, Region 1 shall be the agribusiness, and tourism hub in Northern Philippines with equitable economic opportunities for its globally

competitive, happy, resilient and culturally diverse peoples.”

The region will continue to capitalize on its existing resources for the attainment of its development objectives. As a major producer of agricultural products, it aims to become the agribusiness hub in the northern part of the country. At the same time, being endowed with many tourist attractions, it aims to become a tourism hub for domestic and foreign tourists.

The development of the region's agribusiness and tourism industry supports President Duterte's socio-economic agenda number 5 which is on the promotion of rural and value chain development toward increasing agricultural and rural enterprise productivity and rural tourism.

In the succeeding planning periods, the region will include additional development strategies while maintaining previous development goals leading to the attainment of the region's and the country's LTV by 2040.

For the period 2023-2028, the development vision of the region is:

“By 2028, Region 1 shall be the agribusiness, industrial and tourism hub in Northern Philippines with equitable economic opportunities for its globally competitive, happy, resilient and culturally diverse peoples.”

Being an industrial hub is an additional development goal, in addition to being agribusiness and tourism hub.

For the period 2029-2034, the development vision of the region is:

“By 2034, Region 1 shall be the agribusiness, industrial, trade and tourism hub in Northern Philippines with

equitable economic opportunities for its globally competitive, happy, resilient and culturally diverse peoples.”

To be a trading hub is another development goal, in addition to being agribusiness, tourism and industrial hub.

For the period 2035-2040, the development vision of the region is:

“By 2040, Region 1 shall be the agribusiness, industrial, trade, services and tourism hub in Northern Philippines with equitable economic opportunities for its globally competitive, happy, resilient and culturally diverse peoples.”

In addition to being agribusiness, tourism, industrial and trade hub, the region is expected to become a service hub.

The attainment of the region’s vision by 2040 will contribute to the attainment of the country’s *Ambisyon Natin 2040*.

The strategies, programs, projects and activities to be implemented by the five sectors, namely: Governance Sector, Economic Development Sector, Social Development Sector, Infrastructure Sector, and Environment and Natural Resources Sector, shall be in support to the attainment of the region’s development vision. To ensure consistency with the region’s development goals, the five sectors shall be guided by their vision during the period 2017-2022:

Governance Sector

Vision: “The Sector shall achieve a better quality of life for the people who have easy access to effective and efficient frontline services, safeguarded by the rule of law and good governance.”

The Governance Sector is concerned with the “*Malasakit*” component of the RDP overall strategic framework. It is also concerned with the provision of the foundations for inclusive and sustainable development with the following chapters of the RDP:

- Chapter 5. Ensuring People-Centered, Clean, and Efficient Governance;
- Chapter 6. Pursuing Swift and Fair Administration of Justice;
- Chapter 7. Promoting Philippine Culture and Values;
- Chapter 17. Attaining Just and Lasting Peace; and
- Chapter 18. Ensuring Security, Public Order, and Safety.

Economic Development Sector

Vision: “A robust and resilient agribusiness and tourism hub in Northern Philippines supported by ecologically sound and socially just economy.”

The Economic Development Sector is concerned with the “*Pagbabago*” and “*Kaunlaran*” components of the RDP’s overall strategic framework, and in providing the enabling and supportive economic environment. It covers the following chapters:

- Chapter 8. Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries;
- Chapter 9. Expanding Economic Opportunities in Industry and Services through *Trabaho* and *Negosyo*;
- Chapter 14. Vigorously Advancing Science, Technology, and Innovation;
- Chapter 15. Ensuring Sound Macroeconomic Policy; and
- Chapter 16. Leveling the Playing Field through a National Competition Policy.

Social Development Sector

Vision: “A better quality of life through expanded and accessible opportunities on globally competitive education and skills, decent and stable employment, health and social protection services, for a sustained human development resilient to natural calamities”

The Social Development Sector is concerned with the “Pagbabago” and “Kaunlaran” components of the RDP strategic framework for individuals and people groups. It covers the following chapters:

- Chapter 10. Accelerating Human Capital Development;
- Chapter 11. Reducing Vulnerability of Individuals and Families;
- Chapter 12. Building Safe and Secure Communities; and
- Chapter 13. Reaching for the Demographic Dividend.

Infrastructure Sector

Vision: “Adequate, reliable and sustainable infrastructure support for agriculture, commercial, industrial, tourism, Information Communication and Technology (ICT), and human resource development provided in accordance with appropriate design standards, plans and specifications”

The Infrastructure Sector supports the provision of the foundations for sustainable development. It covers Chapter 19. Accelerating Infrastructure Development

Environment and Natural Resources Sector

Vision: “A region with sustained environment and natural resources-protective and disaster resilient communities by 2022”

The Environment and Natural Resources Sector supports the provision of the foundations for sustainable development. It covers Chapter 20. Ensuring Ecological Integrity, Clean and Healthy Environment.

PART II

ENHANCING THE SOCIAL FABRIC ("MALASAKIT")



05

Ensuring
People-Centered,
Clean, and Efficient
Governance

Ensuring People-Centered, Clean and Efficient Governance

Creating a system of governance that promotes, supports, and provides better quality of life for both men and women, and all sectors of society - especially the poor and marginalized has been a challenge in the region for so many years. Efficient governance agenda for the region is towards translating efforts that benefits the major stakeholders while sustaining growth and development at the sub-national and local levels.

This chapter shows the assessment of the RDP 2011-2016 specifically focusing on the implementation of good governance practices in the region. It further illustrates various challenges, strategies, and needed policies and legislations to achieve the thrust of the present administration and the aspirations of every Filipino of a people-centered, clean and efficient governance anchored on clean, efficient and fair government.

Assessment and Challenges

Region 1 continued to implement good governance practices. Government entities in the region, at the sub-national and local levels, continuously sustained their efforts in adopting good governance practices over the years. This was supported by the collaboration and active participation of the non-government and private organizations.

Sub-Sector Outcome 1: Responsive, Efficient and Accountable Public Service Delivery Ensured

Partly Attained: Despite the 100 percent compliance of the Local Government Units (LGUs) in the Anti-Red Tape Act (ARTA) and the Full Disclosure Policy from 2013 to 2016, the goal to have a responsive, efficient and accountable public service delivery was partly attained. This was due to the lower performance of the LGUs in the enhanced Seal of Good Local

Governance (SGLG) brought about by the more stringent requirements of the program. As of 2016, only 45 provincial, city and municipal LGUs or 34.88 percent passed the SGLG. This was attributed to the non-compliance of some LGUs with the Accessibility Law and non-payment of Government Service Insurance System (GSIS) obligations. Nevertheless, Region 1 outranked the other 16 regions in the Philippines with the most number of LGUs that passed the SGLG in 2016. However, the greater task is to increase the number of LGUs in the region to comply with the requirements of SGLG. It is also a challenge for the LGUs that were conferred with the Seal to sustain or even level up their performance.

Moreover, some LGUs utilized enhanced streamlined regulatory business processes with a much simpler and faster processing scheme with three step processes: file, pay

and claim since 2015. Streamlining of business processes improved the competitiveness of the LGUs as measured by the cities and municipalities competitiveness index. However, further streamlining of business processes remains a challenge. More efforts are needed particularly on automation especially with the issuance of DILG-DTI-DICT Joint Memorandum Circular (JMC) 2016 – 01 which imposes stricter performance standards for business permit processing and automation or computerization of the business permit and licensing system¹.

Of the 129 LGUs in the region, 55 or 42.64 percent had websites in 2016. The number of LGUs without website increased by 19.35 percent from 62 in 2015 to 74 in 2016. Out of the LGUs with websites 2016, 47.17 percent had updated websites. The low web presence of LGUs due to the lack of ICT infrastructure in the rural parts of the region also contributed to the partial attainment of the sub-sector outcome. Nonetheless, other advocacy activities and sharing of development information through various means had been continuously undertaken. The institutionalization of e-government systems and fully utilizing ICT in the region is also a challenge most particularly to LGUs.

The region has gained momentum in the area of disaster risk reduction as manifested by the various accomplishments of LGUs from 2011 to 2016. All provincial, city and municipal LGUs prepared their calamity response protocols, Disaster Risk Reduction and Management (DRRM) plans, designated their respective DRRM Officers, and organized their Local Disaster Risk Reduction and Management Councils (LDRRMCs). However, only about 20.93 percent LGUs had established and fully operational emergency operations center.

In addition, there is a need to mainstream Disaster Risk Reduction and Climate Change Adaptation (DRR+CCA) in the Comprehensive Development Plans (CDPs) of the LGUs to achieve development objectives without necessarily sacrificing the environment.

Sub-Sector Outcome 2: Revenue collections enhanced

Partly attained. The total revenue collections of the Bureau of Internal Revenue (BIR) in 2011 was recorded at P9.59 billion. The collections declined to P7.18 in 2012 but increased to P9.89 billion in 2015 resulting to only 3.12 percent growth rate from 2011 to 2015.

The average revenue collection efficiency rate for all kinds of taxes from 2011 to 2015 was recorded at 91.59 percent, 8.41 percent short of the 100 percent target by the end of the Plan period. Though massive tax collection campaigns were implemented, revenue collection efficiency rate continued to decline from 2013 to 2015 due to the change in target collections as dictated by the BIR CO (Figure 5.1).

On the other hand, customs collections of the Bureau of Customs also registered an erratic performance in the past five years. The baseline year in 2011 recorded a collection of P1.76 billion and went down to P1.74 billion in 2015. Customs collections in 2014 was the highest for the five-year period at P2.51 billion. The ports of San Fernando in La Union and Sual in Pangasinan were among the top five performers in customs collections in the country in 2015. As shown in Figure 5.2, the customs collection efficiency rate rose to 93.74 percent in 2014 but dropped to 67.60 percent in 2015 which is 32.40 percentage points short of the 100 percent target by the end of the Plan. The average customs collection efficiency rate during

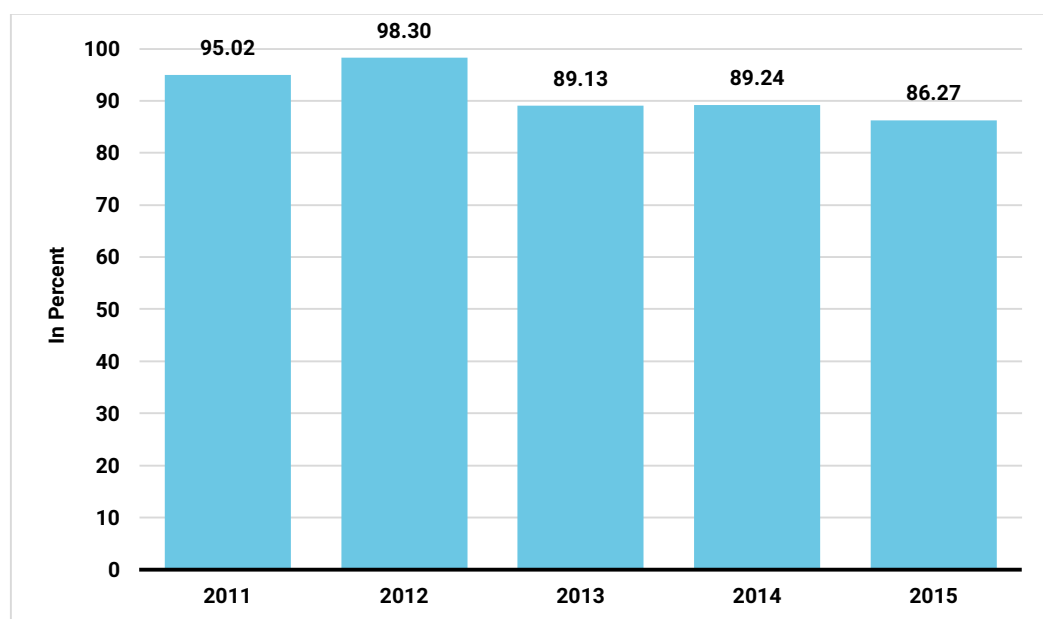
¹DILG-DTI-DICT JMC 2016-01, <http://www.dilg.gov.ph>

the period 2011-2015 was recorded at 77.91 percent.

2011 to P6.95 billion in 2015, registering an increase of 414.98 percent from 2011 to 2015.

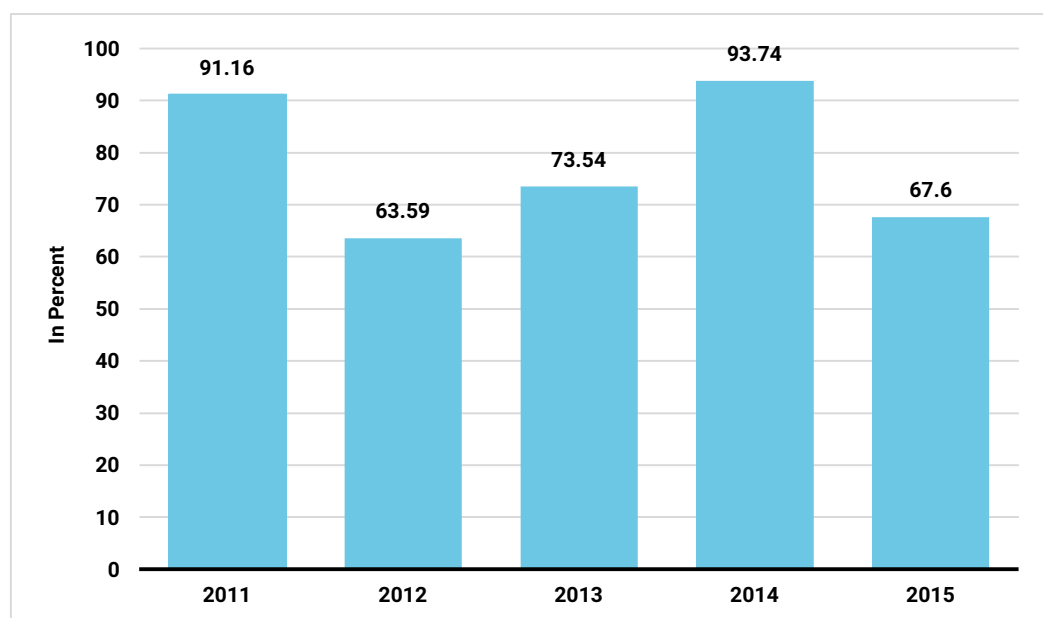
The local sources tax collections posted an increasing trend, from P1.35 billion in

Figure 5.1 Revenue Collection Efficiency Rate, Region 1 (2011-2015)



Source: Bureau of Internal Revenue (BIR)

Figure 5.2 Customs Collection Efficiency Rate, Region 1 (2011-2015)



Source: Bureau of Customs (BOC)

The local sources tax collections efficiency rate in 2015, on the other hand, was recorded at 92.41 percent with the province of Pangasinan having the highest rate at 47.98 percent while the province of Ilocos Sur recorded the lowest at 14.15 percent.

There is still a need to increase revenue, customs and local sources tax collections. Despite the increasing collections, the government still needs to double its efforts to generate more revenue, customs and local sources tax collections to support development programs and projects.

Strategic Framework

To ensure people-centered, clean and efficient governance, the government will improve accountability and efficiency in governance measures, enhance public access to information and enhance revenue collections.

Targets

Table 5.1 presents the detailed list of major indicators for the chapter with their corresponding end-of-plan targets.

Strategies

To realize a people-centered, clean and efficient governance, the following priority strategies are to be pursued:

Sub-Sector Outcome 1: Accountability and efficiency in governance measures improved

Enhance capacity of all government instrumentalities to improve productivity through e-governance systems, and other performance measurement and monitoring systems. The capacities of government institutions in the region to improve performance and productivity will be enhanced through the intensive implementation of e-government systems, and performance measurement and monitoring systems. The monitoring of the LGUs' compliance to the SGLG will still be the milestone activity of DILG to drive

local performance, and encourage people participation in the processes that fuel a change in governance practices. In addition, monitoring of the ARTA compliance of the RLAs, LGUs, SUCs and GOCCs will be continued. Continuing technical assistance will also be provided to government institutions to sustain their 100 percent compliance. Implementation of the Full Disclosure Policy (FDP) will be a continuing activity during the Plan period as it ensures transparency and accountability among LGUs.

To improve LGU performance, the DILG will continue to provide technical assistance and capacity building to LGUs to include: a) automation of the business registration; b) formulation of a business plan, and the Local Investments and Incentive Code (LIIC) along fast-growing sectors like ICT and tourism and Local Revenue Code (LRC); c) formulation of the Local Climate Change Adaptation Plan (LCCAP); d) mainstreaming DRR-CCA in the CDPs of the Major River Basin (MRB) LGUs; and e) Child-Friendly Local Governance. The monitoring of the Barangay Governance Performance Management System (BGPMS), functionality of Local Council for the Protection of Children (LCPC) and Local Peace and Order Council (LPOC), and the Assistance to Disadvantaged Municipalities (ADM) will be heightened.

In addition, the capacities of LGUs for integrated planning, investment programming, budgeting, implementation, and monitoring and evaluation will be strengthened.

In a bid to strengthen disaster preparedness of LGUs, “Operation Liso,” an advocacy program using the whole of government approach, will be implemented. The program consists of disaster preparedness and disaster processes on the courses of actions that need to be done by Local Chief Executives (LCEs) before, during and after the occurrences of disasters in their areas of responsibilities. The capacities of the LGUs in terms of disaster fund utilization will also be enhanced. The establishment of Local Disaster Risk Reduction and Management Office (LDRRMO) will be reviewed and undertaken to all LGUs that have not complied with this specific provisions of RA 10121.

In terms of financial management systems, monitoring of collection efficiency for

revenues and local taxes will be vigorously undertaken through revenue audit and evaluation, and assessment audit and evaluation. Capacities of LGUs will be improved through the e-Statement of Receipts and Expenditure (e-SRE) roll-out, revenue and market codes updating, and treasury and assessment operations.

Closer coordination among government agencies and the private sector. The government and the private sector will continue to closely work together to attain a common good. Public-private partnerships will be strengthened. Participation of Civil Society Organizations (CSOs), private groups, volunteers and communities in times of disasters will be intensified. Volunteerism will be revitalized in the region to harness citizen engagement in public participation in all the affairs of the government. It will promote a consultative process in policy, and decision making and conflict management to enhance public accountability in managing development programs of the government.

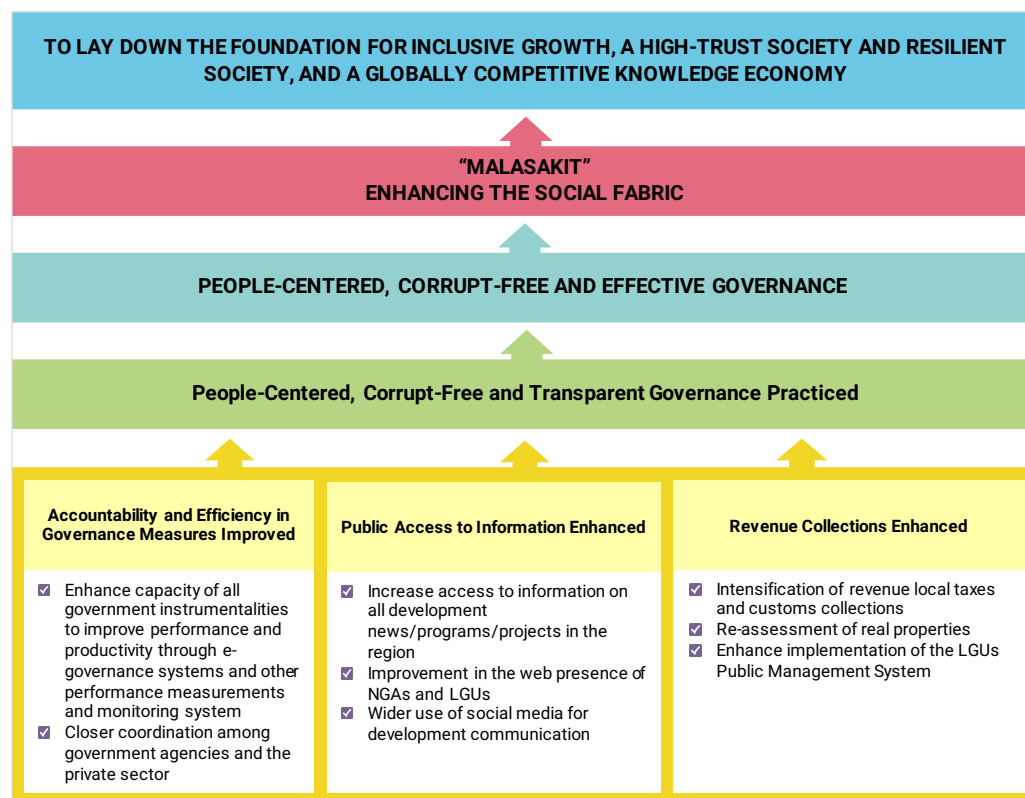
Table 5.1.a Plan Targets to Ensure People-centered, Clean, Efficient, and Effective Governance in Region 1 (2017-2022)

INDICATORS	BASELINE		END-OF-PLAN TARGET 2022
	YEAR	VALUE	
Sub-Sector Outcome 1: Accountability and efficiency in governance measures improved			
Percentage of LGUs complying to the Full Disclosure Policy	2016	100	100
Percentage of LGUs conferred with SGLG	2016	35 (45 LGUs)	100 (of qualified LGUs)
Percentage of LGUs which adopted Business Permits and Licensing System	2015	100	100
Percentage of MRB-LGUs with DRR+CCA mainstreamed CDPs	2016	0	100
Percentage of MRB-LGUs with DRR+CCA mainstreamed CDPs	2015	6	30

Table 5.1.b Plan Targets to Ensure People-centered, Clean, Efficient, and Effective Governance in Region 1 (2017-2022) (continuation)

INDICATORS	BASELINE		END-OF-PLAN TARGET 2022
	YEAR	VALUE	
Percentage of LGUs with Functional Local Peace and Order Council	2015	93.25	100
ARTA Compliance Rate	2016	100	100
Percentage of LGUs conferred with Seal of Child-Friendly Local Governance	2015	100	100
Sub-Sector Outcome 2: Public access to information enhanced			
Percentage of NGAs with Updated Websites	2016	100	100
Percentage of NGAs with Facebook Accounts	2016	97.78	100
Percentage of LGUs with Updated Websites	2016	42.64	To be determined
Percentage of LGUs with Facebook Accounts	2016	39.53	To be determined
Percent increase of NGAs with Updated Websites	2016	3	10
Percent increase of NGAs with Facebook Accounts	2016	3	10
Percent increase of LGUs with Updated Websites	2016	3	10
Percent increase of LGUs with Facebook Accounts	2016	3	10
Average speed of entry-level broadband connection			To be determined
Sub-Sector Outcome 3: Revenue collections enhanced			
Revenue Collection Efficiency Rate	2015	86.57	To be determined
Percent Increase in Revenue Collections	2015	11.93	To be determined
Customs Collection Efficiency Rate	2015	67.60	To be determined
Local Sources Tax Collection Efficiency Rate	2015	92.41	100
Percent Increase in Local Taxes Collections	2015	1.06	10
Amount of facilitated national collections deposited			10
Amount of validated MDS for replenishment	2015	3.81B	6.75B
Amount of remitted fidelity bonds	2015	73.08B	98.39B
Revenue Collection Efficiency Rate	2015	32.3M	57.21M

Figure 5.3. Strategic Framework to Ensure People-Centered, Clean and Efficient Governance in Region 1 (2017-2022)



Sub-Sector Outcome 2: Public access to information enhanced

Increase access to information on all development news, programs and projects in the region. ICT is one of the best platforms in increasing access to information. Hence, the ICT infrastructure as well as the corresponding policies will be addressed by the Department of Information and Communications Technology (DICT) through the National Broadband Plan (NBP). The NBP will establish a peering network framework to mandate existing players to connect with other networks and to maintain the local internet traffic within the networks in the country. The DICT will provide guidelines on sharing infrastructure which will cover (1) systems interconnection, and integration models and standards; (2) interconnection fee structure; (3) dis-

pute resolution; and (4) repository of available infrastructure. The government will ensure availability of ICT services to areas not served by the private sector.

The traditional media – broadcast, print and radio will continue to be harnessed as these remain to be reliable platforms in disseminating development news and information.

Improvement in the web presence of NGAs and LGUs and enhancing web capability. The National Broadband Plan of the DICT particularly the Juankonek and free public wifi when implemented can improve the web presence of the LGUs.

Wider use of social media for development communication. Wider use of social media for the development communication needs of LGUs and RLAs

will be explored and encouraged. The social networking sites allow users, even the government to share and interact online. The strength of the social media in rapid dissemination and amplification of content, and the ability to lead informal conversations make it a powerful tool to use in a professional manner.

Sub-Sector Outcome 3: Revenue collections enhanced

Intensification of revenue, local taxes and customs collection. The BIR will continue to strictly implement their priority programs such as the Run-After-Tax-Evaders, Oplan Kandado, and other enforcement activities or collection measures to increase tax revenues. The electronic filing and payment system (e-FPS) wherein payments of taxes will be processed and transmitted electronically will be continued. The DOF-BLGF will likewise monitor collections of taxes of the LGUs.

Re-assessment of real properties. The DOF-BLGF will conduct the re-assessment of real properties to generate more revenue from real property tax for the LGUs. The assessment will ensure a uniform set of standards of valuation and prevent speculations that oftentimes result to unnecessary increase in land value. The DOF-BLGF will maintain an up-to-date electronic database of the sale, exchange, lease, and all other property transactions in the region.

Enhance implementation of the LGU Public Financial Management System - The drive for improved public financial management (PFM) through transparent and accountable leadership will be a continuing effort of the government. The PFM is an essential and enabling mechanism through which the government can aggregate fiscal discipline, create sound strategies for resource allocation, and finally, ensure the efficient delivery of public goods and services.

Legislative Agenda

There is still a need for the passage or revisit of legislative measures to support development priorities to augment good governance initiatives that are underway. Table 5.2 summarizes the legislative measures that will be undertaken within the Plan period.

Table 5.2.a Legislative Agenda to Ensure People-centered, Clean and Efficient Governance in Region 1 (2017-2022)

LEGISLATIVE AGENDA	RATIONALE
Sub-Sector Outcome 1: Accountability and efficiency in governance measures improved	
Unified National Identification System (UNIS) Act	The UNIS provides centralized database of all citizens of the country through the issuance of the National ID Card. The Card will be of general use by the citizens for all types of identity verification purposes to ease transactions as well as provide an easy access to relevant information when transacting with the government. This tool will also be very helpful in crime prevention and solution.
Revisit of RA 10121	RA 10121 needs a review after 5 years of implementation to strengthen the DRRM system.

Table 5.2.b Legislative Agenda to Ensure People-centered, Clean and Efficient Governance in Region 1 (2017-2022) (continuation)

LEGISLATIVE AGENDA	RATIONALE
Ease of Doing Business/Fast Business Permit Act	There is a need to push for the passage of this act to enhance national competitiveness and improve the ease of doing business. The act should also provide longer duration of business permits (3 years) for a more continuous flow of business operations.
Revisit the Local Government Code (LGC), Section 18	Under the LGC, the LGUs have decentralized revenue generating system. Updating of the LGUs' Local Revenue Codes will expand their coverage, eliminate unproductive bases of revenues, update revenue rates, increase transparency and stimulate economic development.
Freedom of Information Law	Require government institutions to allow public review and copy of all official information to promote transparency, participation of the people in government decision-making and ensure public accountability.
Passage of an Act Right-sizing the National Government to Improve Public Service Delivery	Streamline the operations of the government by right-sizing the organizational structure and staffing pattern as well as simplifying systems and procedures for better public service delivery in the region. ²

²Philippine Development Plan 2017-2022

06

Pursuing Swift and
Fair Administration
of Justice

Pursuing Swift and Fair Administration of Justice

The administration of justice is a basic function of the government. It is through this function that order is maintained within the community. For this purpose, laws are enacted and enforced fully to prevent the commission of offenses and when committed, to punish and/or rehabilitate the offender and restore rights of the offended in the society.

Access to justice is a crucial factor to achieving good governance. This can be attained by having a responsive, transparent, accountable and accessible legal institutions which will guarantee justice for all. This chapter presents priority strategies to ensure swift and fair administration of justice in Region 1.

Assessment and Challenges

There is an improved administration of the criminal justice system in Region 1 in the previous Plan period. In terms of investigation and prosecution of criminal offenders¹, the case disposition rate² increased from 87.47 percent in 2011 to 93.02 percent in 2015. Moreover, both pre-parole investigation cases, and courtesies pre-parole or executive clemency referrals³ recorded a 100.0 percent disposition rate⁴ in 2016.

Despite these accomplishments, there are still some challenges that need to be addressed to further improve justice

administration in the region as discussed below.

Further enhance access to justice and improve the level of public trust in the justice system. The absence of Municipal Trial Courts (MTCs) in some municipalities hampered the speedy resolution of cases resulting to limited access to justice and low public trust in the justice system. Hence, there is a need to establish MTCs in municipalities where these are needed.

Lack of complaint mechanisms at the barangay level. The resolution of disputes or complaints begins in the Lupon Tagapamayapa (LP) in the barangay. Mediation and conciliation is the primary technique undertaken by the LP to settle complaints. There is a need to create mechanisms to ensure speedy and smooth handling of complaints at the barangay level.

¹Department of Justice – National Prosecution Service (DOJ -NPS)

²For the investigation and prosecution of criminal offenders, disposition rate refers to the ratio of total cases decided/resolved over total cases filed in a year (PSA)

³Department of Justice – Parole and Probation Administration (DOJ-PPA)

⁴Disposition rate pertains to the ratio of pre-parole investigation cases decided/courtesy pre-parole or executive clemency referred over total pre-parole investigation cases filed/courtesy pre-parole or executive clemency referrals in a year.

Absence of a unified criminal information system. The absence of a unified information system on crime-related information and concerns not only in the region but also in the whole country affects the swift administration of justice. A unified criminal information system needs to be created within the criminal justice system. This will store criminal records that will facilitate fast access, and provide real-time and reliable information.

Absence of eCourts in the region. In spite of the nationwide launching of electronic Court (eCourt) system in 2013, none has been established yet in Region 1. This system can be used to capture basic case information as they are filed, and to track subsequent documents filed at the branch courts. Also, the system minimizes or prevents court fee payments' errors as it automatically assesses the correct fees to be charged. With the eCourt system,

assigning of cases or "docketing" as well as raffling of cases to judges are all done electronically.

There is a need to intensify integration programs for offenders to society. Various intervention strategies and activities under the Correction and Rehabilitation Program of the Department of Justice – Parole and Probation Administration (DOJ-PPA) were implemented to integrate offenders into the community. These include individual and group counselling; moral, spiritual, and values formation; work or job placement/referral; vocational and livelihood and skills training, among others. In spite of these accomplishments, there is still a need to intensify the implementation of existing integration programs in the region.

Strategic Framework

Targets

For the Plan period, this chapter will focus on achieving the following sub-sector outcomes: (a) Responsiveness, transparency and accountability in the administration of justice enhanced; and (b) access to justice enhanced. Table 6.1 presents the list of indicators with their corresponding end-of-plan targets.

Strategies

In order to attain a swift and fair administration of justice in the region, the following strategies will be pursued:

*Sub-Sector Outcome 1:
Responsiveness, transparency and*

accountability in the administration of justice enhanced

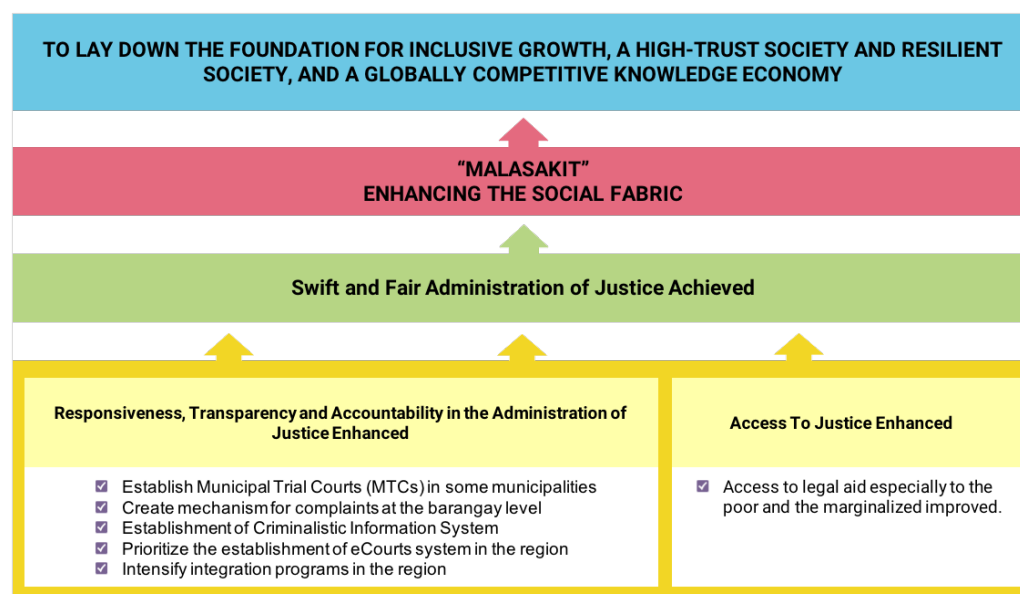
Establish Municipal Trial Courts (MTCs) in some municipalities. In order to facilitate the speedy resolution of cases and improve the level of public trust in the justice system in the region, MTCs will be established in municipalities where deemed necessary.

Create mechanism for complaints at the barangay level. The government will devise guidelines on mediation and conciliation of complaints at the barangay level. In relation to this, the Lupong Tagapamayapa will be capacitated on effective handling of complaints.

Table 6.1 Plan Targets to Pursue Swift and Fair Administration of Justice in Region 1 (2017-2022)

INDICATORS	BASELINE		END-OF-PLAN TARGET 2022
	YEAR	VALUE	
Sub-Sector Outcome 1: Responsiveness, transparency and accountability in the administration of justice enhanced			
Case Disposition Rate			
a. Investigation and prosecution of criminal offenders	2015	93.02	To be determined
b. Pre-parole investigation	2016	100.00	To be determined
c. Courtesy pre-parole or executive clemency referrals	2016	100.00	To be determined
Sub-Sector Outcome 2: Access to justice enhanced			
Number of programs (GAD, child rights, etc) for vulnerable groups	2016	No data available	To be determined
Number of free legal assistance and services provided	2015	964	1,289
Number of MTCs established	2016	No data available	To be determined

Figure 6.1 Strategic Framework to Achieve Swift and Fair Administration of Justice in Region 1 (2017-2022)



Establish Criminal Information System.

A unified information system on crime-related data and concerns will be established to facilitate fast access, and provide real-time and reliable information in the region. The information that can be obtained from the system can be accessed and used by the entire criminal justice chain like the police, lawyers, prosecutors, judges and prison officers for effective investigation and prosecution of cases.

Prioritize the establishment of eCourts system in the region.

The government will prioritize the setting-up of eCourt system in the region. This system organizes and controls case workflows, from filing to implementation. This will result to a more streamlined and efficient “paperless Courts”. Moreover, through this system, pertinent information about cases would be readily available both to courts and the public, thereby, enhancing transparency in the judicial system.

Intensify integration programs in the

region. Integration programs will be intensified to rehabilitate the offender and restore the rights of the offended in the society. These programs will include individual and group counselling; moral, spiritual, and values formation; work or job placement/referral; vocational and livelihood and skills training, among others.

*Sub-Sector Outcome 2: Access to justice enhanced***Improve access to legal aid especially to the poor and the marginalized.**

To ensure the delivery of fair and equal justice, access to legal aid especially to the poor and the marginalized sector will be improved. Free legal assistance and services through the public attorney’s office (PAO) will be expanded in the region.

07 Promoting Philippine Culture and Values

Promoting Philippine Culture and Values

The rich culture and values of the people in Region 1 are embodied in their diverse beliefs, customs and traditions, religion, history, and morals. These were shaped by their shared background and experiences which play a significant role in fostering social cohesion and nurturing common aspirations that provides a strong foundation for charting the region's future. Culture offers benefits necessary to achieving inclusive, sustainable and people-centered development.

Enriching the region's culture and values through peoples' awareness and appreciation will pave the way to maximizing the benefits to achieve socio-economic development. Promotion of culture and values should be integrated in the formulation of development policies and programs in the region.

This Plan recognizes the role of culture as a building block of the region's development by (a) empowering the community; (b) strengthening regional culture; (c) improving community engagement; (d) increasing peoples' awareness.

Assessment and Challenges

Region 1's rich culture and values can be witnessed in the various traditions and festivities of the region. Native Ilocanos and Pangasinenses are well known weavers, wood carvers, pottery experts, and wine and vinegar makers. The region is also abundant in handicrafts and is famous for bamboo and rattan artifacts which are among the major industries in the region. Another feature of the region's culture could be noted in the famous dances (e.g. courtship dance and tagam, a war dance) in the region which reflect the peoples' values and skills.

To ensure the preservation and promotion of culture and values in the region and taking into account its role in achieving inclusive, sustainable and people-centered

development, the following challenges needs to be addressed in the medium term.

Need to document local cultural resources in the region. To promote and preserve the rich culture and values of the region, there is a need to document local cultural resources in Region 1. This can be done by conducting cultural mapping¹, a tool used by communities to identify and document local cultural resources. Essentially, the primary goal of cultural mapping is to help communities recognize,

¹Cultural mapping is a valuable tool for identifying a community's strengths and its resources. this process can help as communities move into the planning and implementation phase by identifying early the resources, efficiencies and links between arts and cultural groups, as well as their common aspirations and values (https://www.creativecity.ca/database/files/library/cultural_mapping_toolkit.pdf).

celebrate, and support cultural diversity for economic, social and regional development.²

Need to sustain and institutionalize cultural education program. There is a need to sustain and institutionalize culture in the education system. This will contribute to increasing peoples' awareness and appreciation of the region's culture and values. This is also in support to RA 10523 otherwise known as the Enhanced Basic Education Act of 2013. One of the major changes in the basic education curriculum is the introduction of Mother Tongue-Based Multilingual Education (MT-BME) which refers to "first-language-first" education. This model, which promotes language of instruction in the mother tongue in kindergarten and the first three years of elementary education increases learners' awareness and appreciation of their own language and culture. The implementation of MT-BME should be sustained in the region.

Underrepresentation of the marginalized sectors in all the facets of development. To improve the quality of implementation and mainstream culture in governance, the marginalized sectors should be well represented in local development councils. As per RA 8371³, culture bearers, which include the indigenous cultural communities (ICCs) and indigenous peoples (IPs), have the right to participate fully at all levels of decision making which may affect their rights, lives and destinies. Both ICCs and IPs are also given mandatory representation in policy-making bodies and other local legislative councils. Other supporting policies include

(1) NCIP AO No. 001 Series of 2009 which is the "National Guidelines for the Mandatory Representation of Indigenous Peoples in Local Legislative Councils," and DILG; and (2) NCIP Joint Circular No. 001 Series of 2011 which stipulates the "Guidelines for the Determination of the Minimum Threshold of IP/ICC population in an LGU to allow Mandatory Representation in the Local Sanggunians".

Limited culture-focused interventions on DRR-CCA. Despite the vulnerability of cultural and historical structures to disasters, hazards and other risks, there is still limited culture-focused interventions on disaster risk reduction and climate change adaptation (DRR+CCA) in the region. Only few LGUs have existing culture-focused interventions such as restoration and preservation of historical and cultural sites. Hence, there is a need to intensify such interventions to ensure the protection and preservation of historical and cultural sites in the region.

Difficulty to mainstream culture in LGU programs. There is a need to encourage LGUs to mainstream culture in their programs since only a few of them have exerted much attention on the value of their culture and heritage. Among the LGUs that have mainstreamed culture in their programs include Vigan City, Ilocos Sur, the only UNESCO World Heritage City in the country. Vigan City has undertaken various conservation practices as well as conducted cultural awareness programs.

²UNESCO Bangkok. *Cultural Mapping*. Retrieved from <http://www.unescobkk.org/culture/tools-and-resources/tools-for-safeguarding-culture/culturalmapping/>

³RA 8371 – An act to recognize, protect and promote the rights of Indigenous Cultural Communities/Indigenous Peoples, creating a National Commission on Indigenous Peoples, establishing implementing mechanisms, appropriating funds therefor, and other purposes

Strategic Framework

Targets

For the plan period, this chapter will focus on attaining the targets specified in Table 7.1.

Strategies

To recognize the role of culture as a building block of development and to promote culture and values in the region, the following priority strategies will be pursued:

Sub-Sector Outcome 1: Enhance community engagement by instilling values of culture and concept of cultural diversity

Strengthen representation of marginalized groups in Local Development Planning, including the full implementation of the IPRA Law. The active participation of marginalized groups which include ICCs and IPs in local fora is the key to ensuring that all factors that may affect them will be considered at all levels of decision making. The DILG will strictly monitor and encourage LGUs to comply with Memorandum Circular 2010-119 pursuant to Section 16 of RA 8371, and other pertinent laws and policies in the region.

Sub-Sector Outcome 2: Stronger regional culture

Establish database/inventory of tangible and intangible cultural resources. With the dispersed information of both tangible and intangible cultural resources in the region, a comprehensive database on culture and local heritage including language, poetry, practices, among others, will be established. Likewise, LGUs will be encouraged to conduct their respective

cultural mapping to document their respective local cultural resources.

Mainstream culture in LGU programs. LGUs will be encouraged to mainstream culture in their programs since only a few of them have exerted much attention on the value of their culture and cultural heritage. They may also undertake various conservation practices as well as conduct cultural awareness programs.

Integrate culture-focused interventions on DRR-CCA. LGUs will be enjoined to integrate culture-focused interventions on their disaster risk reduction and climate change adaptation (DRR+CCA) programs. These interventions will include restoration and preservation of historical and cultural sites in the region.

Integrate culture-focused interventions in local development plans. All LGUs in the region will be encouraged to integrate culture-focused interventions in their local development plans to ensure the protection and preservation of their cultural and historical structures particularly in times of disasters and other catastrophic events.

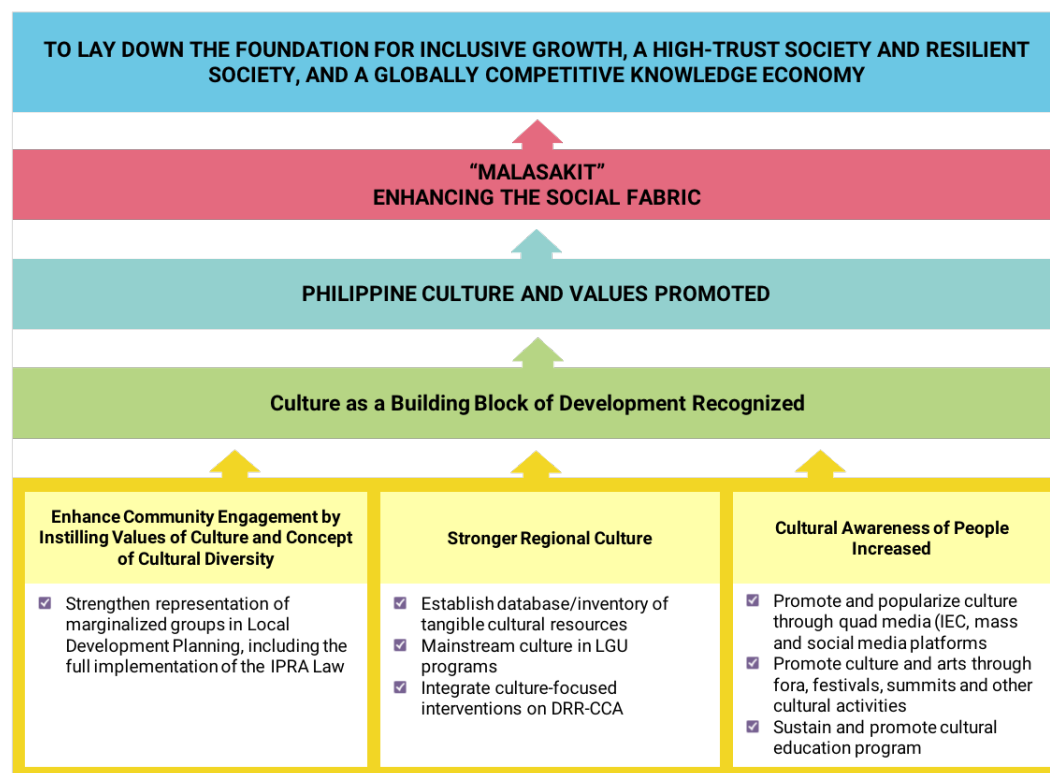
Sub-Sector Outcome 3: Cultural awareness of the people increased

Promote and popularize culture through quad media (IEC, mass and social media platforms). Various mode of communication will be utilized to promote and popularize culture, history and values in the region. Learning materials will be developed to promote cultural diversity. Concerned government institutions, both at the sub-national and local levels, will collaborate to develop information materials, and disseminate these in all forms of media platforms.

**Table 7.1 Plan Targets to Promote Philippine Culture and Values in Region 1
(2017-2022)**

INDICATORS	BASELINE		END-OF-PLAN TARGET 2022
	YEAR	VALUE	
Sub-Sector Outcome 1: Enhance community engagement by instilling values of culture and concept of cultural diversity			
Number of marginalized groups representative (breakdown by province/sex-disaggregated)	-	-	To be determined
Percent of LGUs with IPMR	-	-	To be determined
Percent increase of LGUs with IPMR	-	-	To be determined
Number of marginalized groups representative (barangays) (breakdown by province/sex-disaggregated)	-	-	To be determined
Number of marginalized groups organizations (by province)	-	-	To be determined
Percentage of marginalized groups organizations (by province)	-	-	To be determined
Sub-Sector Outcome 2: Strong regional culture			
Cultural information database available	2016	1	1
Number of ordinances and local issuances that promote local cultural tourism	-	-	To be determined
Number of IP festivals	2016	5	5
Number of cultural festivals (by province)	-	-	To be determined
Number of IEC materials disseminated	-	-	To be determined
Number of cultural materials disseminated	-	-	To be determined
Sub-Sector Outcome 3: Cultural awareness of the peoples increased			
Number of culture-related IEC materials disseminated (by province/agency)	-	-	To be determined

Figure 7.1 Strategic Framework to Promote Philippine Culture and Values in Region 1 (2017-2022)



Promote culture and arts through fora, festivals, summits and other cultural activities. To promote culture and arts, various festivals, fora, summits and other cultural activities will continue to be held in the region. This will help enhance the pride of women and men in the region to preserve and cultivate local culture. Festivals can be included with other tourism activities to encourage tourists to extend their stay in the region.

Sustain and promote cultural education program. To increase peoples' awareness and appreciation of the region's culture and values, cultural education program will be sustained and promoted in the region. Further, this program seeks to develop among Filipinos greater awareness, understanding, and appreciation of their culture and arts, towards the evolution of a consciousness that will

improve the quality of their lives.⁴ This program was designed to make cultural education accessible to all sectors, particularly the youth, teachers, artists and cultural workers, officials and employees of the government, members of the media, and civil society.⁵

⁴National Commission for Culture and the Arts (NCCA). Retrieved from <http://ncca.gov.ph/philippine-cultural-education-program-pcep/>

⁵Ibid.

PART III

INEQUALITY- REDUCING TRANSFORMATION ("PAGBABAGO")



08

Expanding Economic
Opportunities in
Agriculture, Forestry,
and Fisheries

Expanding Economic Opportunities in Agriculture, Forestry and Fisheries (AFF)

This chapter assesses and provides direction to the agriculture, forestry and fisheries (AFF) sector in Region 1. As one of the priority sectors of the region, the expansion of economic opportunities in AFF will significantly contribute to the attainment of a robust and resilient agribusiness in Northern Philippines supported by ecologically sound and socially just economy. The AFF sector, as the core of agribusiness, will remain pivotal in employment generation and poverty reduction in the region.

Assessment and Challenges

Based on the assessment of the AFF sector component of the previous RDP, the sector partly attained its vision to transform its farmers and fisherfolks into agri-based enterprises and active players in the market. The AFF sector partly achieved a more vibrant agribusiness sector in the region.

Four sub-sector outcomes were assessed to determine the sector's performance in the preceding plan (See Table 8.1). The first sub-sector outcome which was households and food requirements met/sustained was fully attained. The remaining three sub-sector outcomes which include agri-based enterprise increased, farmers and fisherfolks' productivity increased, and farmers and fisherfolks' income increased were partly attained. The specific assessment of each sub-sector outcome are as follows:

Sub-Sector Outcome 1: Agri-Based Enterprises Increased

Partly attained. Despite the increase in

agriculture and fishery production in the region from 2011-2015, the sector did not meet its end-of-plan target due to weather and climate-related disasters that hit the region during the said period. From 2011-2015, the Gross Value Added (GVA) growth rate of the agriculture sector posted an erratic trend with an average growth rate of 2.24 percent. This figure was below the GVA agriculture growth rate target which ranges from 5.6 percent to 6.6 percent. The sector registered a negative growth of 1.3 percent in 2015. Likewise, the sector's contribution to the region's gross output was 22.2 percent in 2015, lower than the end-of-plan target which ranges from 25.4 percent to 26.4 percent.

Sub-Sector Outcome 2: Farmers/ Fisherfolks' Income Increased

Partly attained. From 2011-2015, employment in the agriculture sector registered a negative average growth rate of 4.62 percent, which fell short of the 2.8 percent to 3.8 percent end-of plan target. Despite the negative performance, the

average 36.3 percent share of agricultural employment to total employment in the region surpassed the end-of-plan target of 34.06 percent to 35.06 percent share. The value of agriculture and fishery production losses and damages in the region due to weather and climate-related disasters was

pegged at an annual average of P1,868.98 million from 2011-2015. The aim to increase farmers and fisherfolks' income was hampered by the losses they incurred from natural disasters and other agricultural-related perils.

**Table 8.1.a Assessment of the Agriculture, Forestry and Fisheries (AFF) Sector
Component of the RDP 2011-2016, Accomplishments versus Targets**

Major Development Indicators	Accomplishment					RDP Target
	2011	2012	2013	2014	2015	2016
Sub-Sector Outcome 1: Agri-based Enterprises Increased						
1. GVA Agriculture Growth Rate						
Low						5.6
High	3.0	2.6	2.1	4.6	(1.3)	6.6
2. GVA Agriculture Percent Share to GRDP						
Low						25.4
High	28.1	25.2	24.0	23.6	22.2	26.4
Sub-Sector Outcome 2: Farmers/Fisherfolks' Income Increased						
1. Employment in Agriculture Growth Rate						
Low						2.8
High	2.2	(11.5)	(4.0)	(1.5)	(8.3)	3.8
2. Percent Share of Agricultural Employment to Total Employment						
Low						34.06
High	39.7	38.2	35.8	35.3	32.5	35.06
Sub-Sector Outcome 3: Households and Food Requirements Met/Sustained						
1. Value of Agricultural Production (in Billion PhP)						
Cereals	17,468.32	36,052.69	19,257.34	19,899.30	19,835.58	21,765.16
Other Crops	14,466.60	22,156.66	14,570.99	15,014.90	14,848.52	15,179.46
Livestock and Poultry	12,136.48	22,885.03	12,905.33	12,680.70	12,953.17	12,748.54
Fishery	17,468.32	36,052.69	19,257.34	19,899.30	19,835.58	12,539.59
TOTAL	53,348.53	95,319.02	57,124.54	59,444.40	58,596.42	62,232.75

Source: Philippine Statistics Authority (PSA), Department of Agriculture (DA)

**Table 8.1.b Assessment of the Agriculture, Forestry and Fisheries (AFF) Sector
Component of the RDP 2011-2016, Accomplishments versus Targets
(continuation)**

Major Development Indicators	Accomplishment					RDP Target
	2011	2012	2013	2014	2015	2016
2. Volume of Agricultural Production (in Thousand MT)						
Cereals	1,990.70	2,172.42	2,197.56	2,272.97	2,268.06	2,474.07
Other Crops	634.74	626.89	674.97	696.12	690.71	987.25
Livestock	123.21	129.30	132.04	129.92	132.73	149.99
Poultry	95.22	101.02	100.50	93.55	100.53	140.00
Fishery	150.27	145.54	155.67	174.20	161.89	171.63
TOTAL	2,994.13	3,175.17	3,260.74	3,366.76	3,353.92	3,922.94
3. Food Sufficiency Level (in Percent)						
Rice	169.00	181.00	180.00	182.00	178.09	100.00
Corn	139.00	154.00	159.00	188.00	188.56	100.00
Fruits	268.00	325.00	251.00	258.00	247.79	100.00
Rootcrops	80.00	90.50	89.00	110.00	105.74	100.00
Vegetables	168.00	202.50	167.00	169.00	170.41	100.00
Legumes	110.00	138.30	108.00	111.00	108.24	100.00
Meat	116.00	121.26	123.00	117.00	123.00	100.00
Fishery	129.00	123.00	143.00	173.00	143.00	100.00
Sub-Sector Outcome 4: Farmers/Fisherfolks' Productivity Increased						
1. Agriculture Labor Productivity (in Php)						
Low						76,725
	58,576.08	67,902.59	72,194.48	73,582.80	79,285.73	
High						83,655

Sub-Sector Outcome 3: Households and Food Requirements Met/Sustained

Fully attained. The region continued to be more than sufficient in all major food commodities. On the average, the region's food sufficiency level was posted at 158.10

percent in 2015, 58.10 percentage points higher than the 100.0 percent target level for all major food commodities by the end of 2016.

From 2011-2015, the value and volume of agricultural production in the region posted an increasing trend with an average

growth rate of 10.31 percent and 2.90 percent, respectively. The sector's growth was affected by the negative performance of all commodities in 2015 due to the adverse effects of weather and climate-related disasters that hit the region on the said year. As a result, the sector's accomplishments in terms of value and volume of agricultural production slightly fell short of their 2016 targets.

In 2015, Region 1 also continued to exhibit a strong comparative advantage in the AFF sector as it ranked first in the production of mango, mongo, garlic, tomato, eggplant, shallot, tobacco, and milkfish in the country. The region sustained its rank in terms of rice and corn production. It ranked fourth in rice production contributing 9.79 percent of the total rice production in the country. Likewise, it ranked fifth in corn production, comprising 2.70 percent of the country's aggregate.

Sub-Sector Outcome 4: Farmers/ Fisherfolks' Productivity Increased

Fully attained. The productivity of agricultural workforce in the region improved from P58,576.08 in 2011 to P79,285.73 in 2015. The sector's performance, which comprised 19.02 percent of the region's total productivity, was within the 2016 target range of P76,725.00 to P83,655.00.

Among the challenges that affected the accomplishment of the sector in the previous plan are as follows:

Full realization of the vertical and horizontal integration between the agriculture and industry sector. As emphasized in the previous plan, the vertical and horizontal integration between the agriculture and industry sector remains vital in achieving a robust and globally competitive regional economy. The

agriculture sector serves as the primary engine that provides the necessary materials and goods for the industry sector while the latter contributes to the industrialization of the former in the long run. Ensuring the link between the two sectors, which positively influences the region's economic situation, will contribute to the reduction of inequality in economic opportunities in the region.

Exacerbated effect of climate change and unmitigated disasters to the inherent vulnerabilities of the agriculture sector. The AFF sector continued to be the most vulnerable sector to climate change and other agricultural-related disasters. Being prone to these agro-climatic conditions adversely affects the production of major commodities in the region.

Essentially, there is a need to improve the adoption of doable risk mitigating measures that will harness the negative effects of climate and weather-related disasters. There is a need to encourage farmers and fisherfolks to adopt these measures to protect their livelihood and stabilize their income in the event of crop loss. Undertaking necessary interventions will help transform the sector into a highly productive, resilient, environment-friendly and sustainable sector.

Low rate of adoption of low-cost but sustainable technologies including mechanization. Adoption of technology remains a critical factor to achieve the desired productivity of farmers and fisherfolks. Still, there is a low adoption of low-cost but sustainable technologies, including mechanization, with the prevalence of traditional farming system in the region. This prevents farmers and fisherfolks realize higher yield and better quality of production.

Aging population of farmers. The sector's potential in terms of production and

productivity may no longer be maximized with the observed increasing number of aging farmers. This is even more exacerbated by the lack of interest among the younger generation to engage in farming activities.

In the context of agricultural population age, studies show that changes in the working-age household have a significant impact on agricultural output. This can be considered as a potential threat to the future of agricultural development in the region. Hence, measures to encourage younger generation to pursue careers in agriculture and related discipline will help sustain the region's food sufficiency in all major food commodities.

Conversion of productive farmlands into non-agricultural purposes. In Region 1, the seemingly rampant conversion of productive farmlands into non-agricultural purposes remains a primary concern in the AFF sector. This could be attributed to the urbanization process and the changing agricultural landscape pattern in the country.

And, in relation to the concern on the aging population of farmers, the non-availability of farm workers during the time of planting and harvesting may urge farm owners to convert their lands for industrial or commercial purposes which could be more profitable on their part. As a result, the sustainability of the region's food sufficiency may be compromised.

The passage of the proposed National Land Use Act (NLUA), which will put the country's economic and physical development in order by setting four major categories of land uses for planning purposes – protection, production, settlements, and infrastructure, is still seen to provide the necessary mechanism to resolve existing land use policy conflicts

concerning social equity and economic efficiency.

Poor marketability of the region's agri-fishery products. The poor marketability of the region's agri-fishery products could be attributed to the low adoption of Good Agricultural Practices (GAP) and Good Aquaculture Practices (GAqP), and due to the presence of excessive middlemen in the region.

GAP pertains to the set of consolidated safety and quality standards for on-farm fruit and vegetable production while GAqP covers practices that aim to prevent or minimize the risk associated with aquaculture production (mariculture, coastal aquaculture/brackishwater culture, and freshwater culture). The adoption of these practices will help ensure food safety and assures quality produce while keeping high regard for environmental protection and that of workers' health, safety and welfare. Likewise, both standards are being promoted by the Association of Southeast ASEAN which is unanimously recognized globally, and is an export requirement.

And, though middlemen play a significant role in the agriculture sector by linking farmers to traders and final market, it was observed in the region that the presence of excessive middlemen reduces the marketability of the farmers' produce. Some ways to address this concern include cooperativism wherein farmers jointly own the enterprise, and adoption of technology to get better market price. In lieu of the middlemen, the cooperatives will market the produce of farmers to traders, and may directly sell their outputs to the final market.

Lack of advocacy by the government in terms of access to finance and insurance. Improving farmers and fisherfolks' access to finance and crop insurance remains a major battle of the government. Despite

the availability of financial facilities from formal lending institutions and crops insurance products that cater to farmers and fisherfolks, availment remains low which could be due to lack of advocacy by the government.

Farmers and fisherfolks' inclination to informal lending institutions, which are more accessible to them, lessen their opportunity to uptake loans from formal lending institutions. The inherent frugality of the predominant Ilocanos in the region, also influences decisions to avail of loan facilities. Apart from offering crop insurance products to self-financed farmers and fisherfolks, these are also offered to borrowing farmers who avail loans from formal lending institutions which include microfinance institutions as well as government financing institutions such as the LandBank. At present, the Philippine Crop Insurance Corporation (PCIC) offers fully subsidized and partly-subsidized crop insurance products.

Inactive participation of farmers and fisherfolks organizations in institutional bodies. Participation and involvement of farmers and fisherfolks organizations in institutional bodies remains a major concern in the medium-term. In order to engage them in the review and updating of agri-related policy measures as well as in the conduct of consultation meetings, there is a need to strengthen the engagement of the Regional Agriculture and Fishery Council (RAFC) including

Farmers Associations (FAs) and Fisheries and Aquatic Resource Management Councils (FARMCs) in the various institutional bodies in the region.

Proliferation of imported agri-fishery products. Based on the law of demand and supply, an increase in the supply of imported products will increase domestic supply and reduce domestic prices of products. In the case of Region 1, the prices of agricultural products, which are domestically produced, declined with the entry of cheaper imported agricultural products in the region. As a result, this negatively affected the income of local producers considering the high cost of production in agriculture. The reduction in prices of agricultural products is somehow beneficial to the consumers but detrimental to the farmers and fisherfolks in the region.

Limited access to funding for the appropriate infrastructure support facilities requirement. There is a limited access to funding for the appropriate infrastructure support facilities in the region. Among these agri-infra support facilities and equipment, which will be utilized to improve agri-fishery production and productivity, are irrigation facilities, common services facilities (CSFs) and farm-to-market roads. This is one of the major challenges that needs to be addressed in order to reduce inequality in economic opportunities in the region.

Strategic Framework

In the medium-term, the sector will seek to attain a robust and competitive AFF sector that will contribute to the reduction of inequality in economic opportunities in the region. This will be achieved by accomplishing the following by the end of

2022: (1) agri-based enterprise sustained; (2) farmers/ fisherfolks income sustained; (3) farmers/fisherfolks productivity sustained; and (4) resilience of farmers/ fisherfolks enhanced.

Targets

For the Plan period, the primary target for the AFF sector is to substantially improve the performance of the sector by increasing its growth rate to 5.0 percent by 2022 from its negative performance in 2015 at -1.3 percent. Other key targets for the sector are as follows: (1) sustain the region's more than 100.0 percent sufficiency level in all

major food commodities; (2) improve the productivity of agricultural workforce in the region; and (3) increase the number of insured farmers and fisherfolks in the region.

Table 8.2 presents the detailed list of key indicators for the AFF sector with their corresponding end-of-plan targets.

Table 8.2.a Plan Targets to Expand Economic Opportunities in Agriculture, Forestry and Fisheries, (AFF) Sector (2017-2022)

INDICATORS		BASELINE		END OF PLAN TARGET 2022
		YEAR	VALUE	
Sub-Sector Outcome 1: Agri-Based Enterprise Sustained				
1.	GVA Agriculture Growth Rate	2015	(1.3)	5.0
2.	GVA Agriculture Percent Share to GRDP	2015	22.2	To be determined
3.a.	Number of SMEs engaged in agri-based enterprises	2015		
	• Market-related events - Region 1			13
	• Stall Subsidy - 1 per province			4
3.b.	Number of SMEs engaged in agri-based enterprises	2015		
	Ilocos Norte			12
	Ilocos Sur			12
	La Union			12
	Pangasinan			24
Sub-Sector Outcome 2: Farmers/ Fisherfolks’ Income Sustained				
1.	Ave. income of families in the agriculture and fishery sector (in Pesos in Constant 2000 prices)	2015		NOTE: No data available but may be replaced with poverty incidence of farmers and fishermen.
2.	Employment in Agriculture Growth Rate	2015	-8.3%	To be determined
3.	Percent Share of Agricultural Employment to Total Employment	2015	32.5%	To be determined
Sub-Sector Outcome 3: Farmers/ Fisherfolks’ Productivity Sustained				
1.	Value of Agricultural Production (in Billion PhP)	2015		
	Cereals		19,835.58	To be determined
	Other Crops		14,848.53	
	Livestock		7,196.22	
	Poultry		5,756.95	
	Fishery		10,959.15	
	TOTAL		38,760.85	

Note: (*) Figure does not include damage to agri-infra which amounts to PhP1.28 billion

Sources: Philippine Statistics Authority (PSA), Office of the Civil Defense (OCD), Philippine Crops Insurance Corporation (PCIC)

Table 8.2.b Plan Targets to Expand Economic Opportunities in Agriculture, Forestry and Fisheries, (AFF) Sector (2017-2022) (continuation)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
2. Volume of Agricultural Production (in Thousand MT)	2015		
Cereals		2,268.06	To be determined
Other Crops		690.71	
Livestock		132.73	
Poultry		100.53	
Fishery		161.89	
TOTAL		3,353.92	
3. Food Sufficiency Level (in %)	2015		
Rice		178	185
Corn		191	196
Fruits		248	253
Rootcrops		108	113
Vegetables		171	176
Legumes		110	115
Meat		124	129
Fish		143	-
4. Agriculture Labor Productivity (in PhP)	2015	79,285.73	To be determined
5. Total area distributed to ARBs	2015		To be determined
Sub-Sector Outcome 4: Adaptation to Climate Risks and Disasters Increased			
1. Value of Agriculture Production and Fishery Production Losses and Damages due to Weather and Climate-Related Disasters (in Million PhP)	2015	P2,490.00*	To be determined
2. Number of farmers/fisherfolks insured	2015		To be determined

Note: (*) Figure does not include damage to agri-infra which amounts to PhP1.28 billion

Sources: Philippine Statistics Authority (PSA), Office of the Civil Defense (OCD), Philippine Crops Insurance Corporation (PCIC)

Strategies

In order to realize the sector and sub-sector outcomes and targets outlined in Table 8.2, the following priority strategies will be pursued in the region:

Sub-Sector Outcome 1: Agri-Based Enterprises Sustained

In order to achieve a robust and competitive AFF sector, agri-based enterprises will be sustained in the region. The future of the sector lies in the transformation of farmers and fisherfolks in the region into entrepreneurs and their integration into the business value chain.

Maintaining a thriving agribusiness-driven sector in the region will require the implementation of the following programs and projects: (1) market-related events, market engagements, stall subsidy programs for organic and processed products; (2) programs on productivity and efficiency, programs on access to market and finance, programs on business and investments in enabling environments; (3) Negosyo Center Program; (4) provision of operating capital for continuous processing of products and assistance in securing Food and Drug Administration (FDA) license or permit to commercial distribution of products; and (5) Small Enterprise Technology Upgrading Program (SETUP). These programs and

projects will be anchored on the following strategies:

Strengthen the linkage between the agriculture and industry sector to promote product competitiveness and increase economic productivity. The linkage between the agriculture and industry sectors in the region will be strengthened by transforming agricultural farming into a thriving agribusiness sector.¹ This will require acquisition of adequate and appropriate farming technologies, conduct of trainings in more sophisticated farming techniques, creating stable supply chains, establishing transport and agricultural infrastructure, and investing on research and development. These activities will contribute not only in diversifying and increasing the value of agribusiness outputs but also in expanding economic opportunities at the regional level. The centerpiece of this strategy shall be the convergence of various stakeholders, public and private, creating a network of value chains for the strategic commodities of the region in support to agri-tourism. In the medium-term, the AFF sector will be positioned to greatly contribute to the agro-industrial development of the region's economy.

Provision of higher incentives to students who take up agri-related courses. In order to encourage younger generation to pursue careers in agriculture and related discipline, incentives will be provided to students who take up agri-related courses. Agriculture will be promoted as a viable and versatile career option and not just about tilling the soil.² This can be done by

encouraging high school students to take agriculture and related sciences as their courses in college. As revealed in a study conducted by Manolo et. al (2013), increasing awareness of students on the importance of agriculture in Philippine society will increase the number of students who are interested in agricultural courses. Correspondingly, incentives such as free or minimal tuition fees may be granted to students who will take up agriculture-related courses and degrees. Matching graduates of agriculture-related courses with potential agro-industries may also be considered as a means to entice students.

Aggressive investment promotion of the region's strategic commodities and other agri-fishery products. With the aim to sustain agribusiness enterprises in the region, aggressive investment promotion of the region's strategic commodities and other agri-fishery products will be undertaken to ensure their viability and profitability.

In Region 1, mango is identified as the commodity with high value-adding and market potential based on vulnerability, suitability and value-chain analyses of the Department of Agriculture (DA). Other priority commodities in the region that need aggressive investment promotion include coffee, cacao, processed fruits and nuts, housewares and wearables, bangus, and bamboo. These are the commodities where Region 1 can have a comparative advantage. The DTI and DA, will lead in market facilitation through the conduct of domestic and international trade fairs and market-matching activities.

The government will also encourage farmers to form their own cooperatives or join existing cooperatives to facilitate the marketing of their produce.

¹Securing the Future of Philippine Industries: Agribusiness. Retrieved from <http://industry.gov.ph/category/agribusiness/>

²Manalo & Fliert. (2013). Push and Pull Factors in Rural Filipino Youth's Outmigration from Agricultural Communities. Retrieved from http://ageconsearch.umn.edu/bits/tream/199418/2/AJAD_2013_10_2_4Manalo.pdf

Strengthen value-adding and processing advocacy and IEC to improve farmers and fisherfolks' technical and entrepreneurial skills. Professional agricultural extension workers will be tapped to provide trainings to farmers and fisherfolks in Farmer Field Schools and demonstration farms that will be established and maintained in the region. Technical assistance will focus on technology updating and retooling of extension workers. The trainings will include processing, packaging and marketing, and compliance with product standards and certification.

Sub-Sector Outcome 2: Farmers/ Fisherfolks' Income Sustained

To increase and sustain the income of women and men farmers and fisherfolks, there is a need to improve access to innovative financing in the region. Among the priority programs and projects specified to realize this sub-sector outcome are: (1) provision of operating capital for continuous processing of products, (2) assistance in securing FDA license or permit for commercial distribution of products, and (3) extension support, education and training services.

Intensify advocacy of government in promoting access to formal lending institutions and crop insurance. Access to agricultural credit and insurance will be improved in the region by increasing the awareness of farmers and fisherfolks and improving their appreciation on agricultural credit and insurance (See related discussion in sub-sector outcome 4).

Improvement of financial, credit and marketing assistance to farmers and fisherfolks. Apart from increasing the awareness of farmers and fisherfolks on the current loan and crop insurance packages

available and intended for them, the government will also develop and implement innovative loan and insurance products that will be more attractive to them.

Furthermore, the government will provide the necessary extension support, education and training services, and establish additional Investment and Assistance Centers in every LGU to improve the facilitation and provision of financial, credit and marketing assistance to farmers and fisherfolks in the region.

Sub-Sector Outcome 3: Farmers/ Fisherfolks' Productivity Sustained

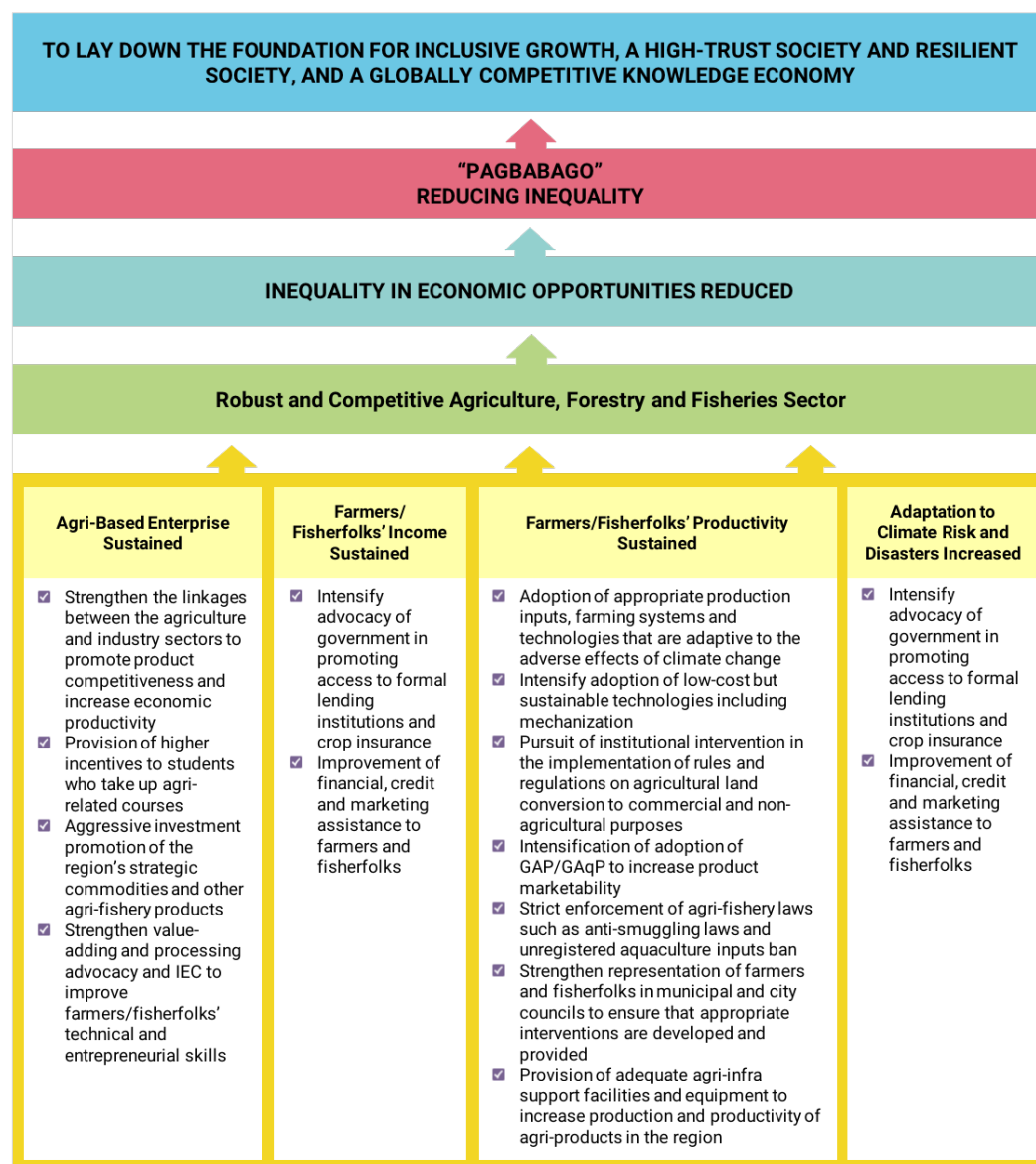
To sustain the productivity of the women and men farmers and fisherfolks in the region, the following strategies will be undertaken in the medium-term. In support to these strategies will be the implementation of the following programs and projects which will be undertaken by concerned government institutions: services for fishery productivity; infrastructure facilities and postharvest equipment for fishery industry; fisheries and aquatic resources regulation services; provision of seeds and production support services; provision of post-harvest facilities and farm machineries; provision of irrigation facilities and extension support and training services.

Adoption of appropriate production inputs, farming systems and technologies that are adaptive to the adverse effects of climate change. Farmers and fisherfolks will be encouraged to adopt appropriate production inputs, farming systems and technologies that are adaptive to the adverse effects of climate change as well as to other agri-related perils. This will not only increase the quantity and improve the quality of their produce but also reduce

their losses and lower their production and labor costs. The implementation of this strategy will be facilitated with the full

implementation of the Agricultural and Fisheries Mechanization Law or RA 1060.

Figure 8.1 Strategic Framework to Attain a Robust and Resilient Agriculture, Forestry and Fisheries (AFF) Sector (2017-2022)



Intensify adoption of low-cost but sustainable technologies including mechanization. In addition to the preceding strategy is the need to intensify the adoption of women and men farmers and fisherfolks of low-cost but sustainable technologies including mechanization to

improve their production and productivity. The government will intensify information, education and communication (IEC) activities on available local machinery (e.g., tractors, tillers, and harvesters), equipment, (e.g., mechanical dryers, threshers, and milling

equipment) and fishing technologies (e.g. fiberglass hull and small engines in fishing boats).

The labor force that will be displaced by the full adoption of farm mechanization in the region is expected to be absorbed by the agro-industrial activities of the AFF sector. The shift to an agri-based entrepreneurial ventures is being pushed for the sector as a means to increase farmers and fisherfolks' income.

Pursuit of institutional intervention in the implementation of rules and regulations on agricultural land conversion to commercial and non-agricultural purposes. The passage of the NaLUA will provide the necessary guidelines to regulate agricultural land conversion to commercial and non-commercial purposes. It shall set the parameters to guide concerned entities and to regulate such conversions.

This strategy also supports the need to revisit Section 20 of the Local Government Code (RA 7160) which authorizes the LGUs to reclassify agricultural lands for other uses.³ This law does not include any provision for sanctions or penalties for LGUs that have reclassified agricultural lands more than the allowable limit (i.e., 15% for highly urbanized cities, 10% for component cities, and 5% for 4th-6th class municipalities). In this regard, it is critical that LGUs establish the baseline information on their various land types that will serve as basis for proper-land classification.

Intensification of adoption of GAP/GAqP to increase product marketability. Adoption of GAP and

GAqP will be further intensified to improve and increase the product marketability of the region's agricultural produce. This will contribute to the country's commitment to the ASEAN Roadmap, which seeks to enhance intra- and extra-ASEAN trade and long-term competitiveness of ASEAN food, agriculture and forestry products/commodities.

Strict enforcement of agri-fishery laws such as anti-smuggling laws, RA 8550 – Philippine Fisheries Code of 1998 (as amended by RA 10654) and unregistered aquaculture inputs ban. Concerned government entities as well as Local Government Units (LGUs) will strictly enforce and monitor the implementation of agri-fishery laws in the region. This will be undertaken to address unsustainable agricultural practices, and illegal unreported and unregulated fishing (IUUF) which aggravate the limited capacity of the natural resources to recover from ill-effects of said activities.

The Anti-Agricultural Smuggling Act of 2016 will also be strictly enforced in the region to eradicate large-scale smuggling of agricultural products which is considered as economic sabotage. This will protect farmers and traders, particularly small and medium enterprises (SMEs), who struggle with the reduction of their sales due to unfair competition with traders who import and sell goods in the region without paying the correct taxes and duties.

Strengthen representation of farmers and fisherfolks in municipal and city councils to ensure that appropriate interventions are developed and provided. The inclusion of farmers and fisherfolk organizations in local councils is a key factor in active governance towards agricultural development. This will

³This was lifted from the AFF Sector Plan of the PDP 2017-2022. Revisiting the particular section of RA 7160 is one of the strategies identified to increase and protect access of small farmers and fisherfolks to land and water resources.

respond to the continued lament of organized farmers and fisherfolks on the poor development impacts of numerous programs and projects implemented by the government, and continuing poverty in the rural areas. Thus, strengthening the representation of farmers and fisherfolks in the Agriculture and Fishery councils (AFCs) at the municipal and city levels will be pursued.

Volunteerism will also be further encouraged among the farming and fishing communities to strengthen the culture of “*bayanihan*” in the region.

Provision of adequate agri-infra support facilities and equipment to increase production and productivity of agri-products in the region. Adequate agri-infra facilities and necessary equipment will be provided to farmers and fisherfolks to increase their production and productivity. Specifically, additional Farm-to-Market Roads (FMRs), which connect farmers and fisherfolks to the agricultural value chain, will be constructed. In addition, post-harvest facilities such as ice plants and cold storages, municipal fish ports, community fish landing centers (CFLCs), warehouses, factory buildings and other structures will be established to generate employment, increase productivity and marketability, and improve the quality standards of agri-fishery products in the region. Post-harvest facilities and other post-harvest-related infrastructure are recognized as critical investments to reduce post-harvest losses, extend the shelf-life and maintain the quality of agri-fishery products.⁴

Sub-Sector Outcome 4: Adaptation to Climate Risks and Disasters Increased

⁴As reflected and emphasized in R.A. No. 8435, otherwise known as the Agriculture and Fisheries Modernization Act (AFMA) of 1997

In order to achieve a robust and resilient AFF Sector, women and men farmers and fisherfolks will have access to credit and agricultural insurance. Studies reveal that having sufficient working capital allows them to use appropriate type of inputs, farm equipment, and facilities, which are necessary in improving their production and productivity. Also, being insured entails that the farmers and fisherfolks are protected from experiencing perpetual indebtedness as a consequence of crop devastation. Agricultural insurance will be utilized to stabilize farmers' income and protect formal lenders from potential loan default of farmers in the event of crop loss. Essentially, an effective crop insurance not only encourage farmers to take good risks by using disaster-resistant and high-yielding crops, but also boost lenders' willingness to participate in agricultural lending (Hill et al., 2014).

Intensify advocacy of government in promoting access to formal lending institutions and crop insurance. Farmers tend not to access credit from formal lending institutions due to lack of information on how to access these institutions, rigorous documentary requirements, complicated procedures, insufficient collateral, and a high borrowing interest rate.⁵ Likewise, since agricultural insurance is perceived as a complement to credit, improving access to formal credit and financing will also enhance the access and availment of crop insurance.

In Region 1, concerned government institutions will intensify their advocacy in promoting access to formal lending institutions and agricultural insurance. As revealed in the study of Balcita (2015), bundling crop insurance with formal credit

⁵As noted in the Philippine Development Plan (PDP) 2011-2016. This concern remains a major issue of the AFF Sector in the PDP 2017-2022.

positively affects rice crop insurance availment. Thus, other formal lending institutions are encouraged to adopt this scheme not only to ensure the protection of farmers and fisherfolks from production shocks but also safeguard lenders from potential loan default.

Table 8.3.a and Table 8.3.b provides the details of the insurance products currently offered by the Philippine Crop Insurance Corporation (PCIC). On the other hand, Table 8.4 shows the difference between the two types of crop insurance programs being offered by PCIC. Both programs, regular and special program, are subsidized by the government. They only vary in terms of the premium subsidy allotted to each program.

To intensify the advocacy of government in promoting access to formal lending institutions and crop insurance, the Department of Agriculture - Land Bank Sikat Saka Program will continue to be implemented. The program is intended to support the Food Staples Sufficiency Program (FSSP) of DA (LBP, 2014). Specifically, this program aims to provide fully subsidized insurance to marginalized subsistence rice farmers who are members

of Irrigator's Associations (IAs), Farmer Associations (FAs), Small Impounding Irrigators' Associations (SWISAs), and other farmer associations/groups (PCIC, 2012).

Other programs which may contribute to the provision of fully subsidized insurance productions in the region are the following: (1) Department of Agrarian Reform-Agrarian Reform Beneficiaries Agricultural Insurance Program (DAR-ARB AIP); (2) National Irrigators Association Third Cropping; (3) Department of Agriculture - Weather Adverse Rice Area (DA-WARA); and (4) the Department of Budget and Management - Registry System for Basic Sectors in Agriculture (DBM-RSBSA). The rationale for the continued implementation of fully-subsidized insurance programs could be rooted from the initiative of the government to improve the access of women and men farmers and fisherfolks to credit and other financial packages, strengthen the agriculture sector's insurance system as a significant risk-sharing management practice, and increase the sector's resilience to climate change risks.

Table 8.3.a Insurance Products offered by the Philippine Crop Insurance Corporation (PCIC)

Type of Insurance Product	Description
Rice Crop Insurance	- An insurance protection extended to farmers against losses in rice crops due to natural calamities as well as plant pests and diseases.
Corn Crop Insurance	- An insurance protection extended to farmers against losses in corn crops due to natural calamities as well as plant pests and diseases.
High-Value Commercial Crop Insurance	- An insurance protection extended to farmers against losses in high-value commercial crops due to natural calamities and other perils such as pests and diseases. High-value commercial crops include abaca, ampalaya, asparagus, banana, cabbage, carrot, cassava, coconut, coffee, commercial trees, cotton, garlic, ginger, mango, mongo, onion, papaya, peanut, pineapple, sugarcane, sweet potato, tobacco, tomato, water melon, white potato, etc.
Livestock Insurance	- An insurance protection for livestock raisers against loss of carabao, cattle, horse, swine, goat, sheep, poultry and game fowls and animals due to accidental death or diseases.

Source: Philippine Crop Insurance Corporation (PCIC) as cited from Balcita (2015)

Table 8.3.b Insurance Products offered by the Philippine Crop Insurance Corporation (PCIC) (Continuation)

Type of Insurance Product	Description
Non-crop Agricultural Asset Insurance	- An insurance protection extended to farmers against loss of their non-crop agricultural assets like warehouses, rice mills, irrigation facilities and other farm equipment due to perils such as fire and lightning, theft and earthquake.
Fisheries Insurance	- An insurance protection extended to fish farmer/ fisherfolk/grower against losses in unharvested crop or stock in fisheries farms due to natural calamities and fortuitous events.
Term Packages Insurance	
a. Agricultural Producers Protection Plan (AP3)	- An insurance protection to agricultural producers, fisherfolks and other stakeholders that covers death of the insured due to accident, natural causes, and murder or assault.
b. Loan Repayment Protection Plan (LRP2)	- An insurance protection to agricultural producers, fisherfolks and other stakeholders that guarantees the payment of the face value or the amount of the approved agricultural loan upon the death or total permanent disability of the insured borrower due to accident, natural causes and murder or assault.
c. Accident and Dismemberment Security Scheme (ADS2)	- An insurance protection to agricultural producers, fisherfolks and other stakeholders that covers death or dismemberment or disablement of the insured due to accident.

Source: Philippine Crop Insurance Corporation (PCIC) as cited from Balcita (2015)

Table 8.4 National Composite Rates and Premium Sharing for Rice Crop Insurance in the Philippines, By Type of Farmer, By Insurance Cover, and By Classification of Risk, in Percentage (as of 2015)

Crop/Type of Cover/ Risk Classification	Borrowing Farmers				Self-Financed Farmers		
	Farmer	Lending Institution	Government	Total	Farmer	Government	Total
Multiple-Risk Cover							
Low Risk	1.46	2.00	5.90	9.36	3.46	5.90	9.36
Medium Risk	2.91	2.00	5.90	10.81	4.91	5.90	10.81
High Risk	4.37	2.00	5.90	12.27	6.37	5.90	12.27
Natural Disaster Cover							
Low Risk	1.12	1.5	4.22	6.84	2.62	4.22	6.84
Medium Risk	2.23	1.5	4.22	7.95	3.73	4.22	7.95
High Risk	3.35	1.5	4.22	9.07	4.85	4.22	9.07

Source: Philippine Crop Insurance Corporation (PCIC) as cited from Balcita (2015)

Legislative Agenda

Table 8.5 provides the needed legislative action to strengthen the effectiveness of identified strategies for the AFF Sector.

Table 8.5 Legislative Agenda to Attain a Robust and Resilient Agriculture, Forestry and Fisheries (AFF) Sector, 2017-2022

Legislative Agenda	Rationale
Sub-Sector Outcome 3: Farmers/ Fisherfolks' Productivity Sustained	
Passage of the National Land Use Act (NaLUA)	At the regional level, there is also a need to 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.
Sub-Sector Outcome 4: Resilience of Farmers/Fisherfolks Enhanced	
Amend the Revised Charter of the PCIC Act of 1995 or RA 8175 as well as other relevant laws	The region supports the reorganization the Philippine Crop Insurance Corporation (PCIC) and increase its authorized PHP2 billion capital stock to cater more effectively to the demands of farmers and fisherfolks in the region. This will also help improve the access to credit and insurance in Region 1.

Source: Philippine Development Plan (PDP) 2017-2022

09

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

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

The Industry and Services (I&S) sector plays a critical role in attaining the region's development vision by the end of 2022 which is to become the agribusiness and tourism hub in Northern Philippines. For the past five years, the I&S sector continued to share more than three fourths of the region's growth with an average contribution to GRDP of 4.5 percentage points. Among its industries, Other Services (OS) which include health, education, hotels and restaurants, recreation and other personal services, registered the highest average contribution. Hence, it is necessary to achieve and sustain a robust and competitive I&S sector in the medium term.

Assessment and Challenges

Based on the assessment of the I&S sector in the previous Plan, the sector partly achieved its vision to become a transformed Trade, Industry and Tourism (TIT) sector at par with international standards significantly contributing to inclusive growth and sustainable development. Three sub-sector outcomes were gauged to assess the performance of the sector in the previous RDP. One sub-sector outcome, tourism arrival increased, was fully attained while the two remaining sub-sector outcomes, higher productivity achieved and access to technology, financing and market enhanced, were partly achieved.

The detailed assessment of each sub-sector outcome are as follows:

Sub-Sector Outcome 1: Higher Productivity Achieved

Partly attained. Higher productivity in the I&S sector was partly achieved due to the unmet target investments generated in the region. In 2015, total investments which include those generated from Business Name Registration (BNR), Board of Investments (BOI)-approved investments and investments in DTI-assisted Small and Medium-Sized Enterprises (SMEs) amounted to P6.95 billion, lower than the end of plan target which ranges from P38.34 to P39.77 billion. The decline was due to the decrease in BOI-approved investments, particularly in the real estate industry. Most of the real estate activities commenced in 2014 and there were no

additional investments in 2015. BOI-approved investments, both foreign and local, totaled to P1.38 billion in 2015. Total approved foreign investments in 2015 reached P725.6 million. The agriculture, forestry and fishing industry received the largest amount of approved foreign investments at P332.00 million. In terms of local BOI-approved investments, the electricity, gas, steam and air conditioning supply industry had the largest amount of investments at P806.87 million. On the other hand, out of the total investments in 2015, investments from Business Name Registration (BNR) accounted for the largest share at 80.14 percent while the remaining was obtained from BOI-approved investments.

In terms of enhancing the skills of the region's manpower, a total of 9,591 graduates of ICT courses were produced in 2015, around 31.0 percent increase from the 7,339 graduates in 2011. This figure surpassed the 10.0 percent target at the end of plan. Among the ICT trained individuals in 2015, 4,609 graduates were TESDA-certified as a badge of their competencies. This record is 86.0 percent higher than the 2,476 certified ICT workers and individuals in 2011.

On enhancing the language proficiency of Region I workers, in 2015, there were 200 graduates of english proficiency courses offered by the two Language Skills Institutes of TESDA Region I. This is 89.0 percent higher than the 106 graduates in 2011. The 2015 accomplishment is based on scholarship slots received from the TESDA Central Office.

In 2015, DOLE assessed 1,853 establishments for general labor standards, and 41 establishments for technical safety standards. These figures were lower than their levels in 2014 due to the decrease in the approved budget for labor standard enforcement programs. The region's compliance rate was 80.40 percent in terms of general labor standards, behind by 4.20 percentage points than its level in 2014 at 84.60 percent. Likewise, there were 371 establishments found with violations in 2015.

In terms of minimum wage violation, the number of establishments found to have violated this law declined by 12.80 percent, from 125 establishments in 2014 to 109 establishments in 2015.

Table 9.1.a Assessment of the Industry and Services (I&S) Sector Component of the RDP 2011-2016 (2011-2015 Accomplishments versus 2016 Targets)

Major Development Indicators	Accomplishment					RDP Target 2016
	2011	2012	2013	2014	2015	
Sub-Sector Outcome 1: Higher Productivity Achieved						
1. Skilled People in ICT	7,339	6,212	5,742	8,805	9,591	8,967
2. Skilled People in Language Proficiency	106	250	400	200	200	200
3. Number of TESDA-certified ICT workers/ individuals	2,476	3,008	4,235	4,284	4,609	

Notes: (*) Investments from BNR and DTI-assisted SMEs; (**)BOI-Approved Foreign and Local Investments; (***) Overseas Filipinos not included

Sources: Philippine Statistics Authority (PSA), Department of Tourism (DOT), Department of Trade and Industry (DTI), Bangko Sentral ng Pilipinas (BSP), Department of Science and Technology (DOST)

Table 9.1.b Assessment of the Industry and Services (I&S) Sector Component of the RDP 2011-2016 (2011-2015 Accomplishments versus 2016 Targets) (continuation)

Major Development Indicators	Accomplishment					RDP Target 2016
	2011	2012	2013	2014	2015	
4. (a) Investments (in Billions PhP)*						
Region 1	35.53	6.95	10.52	7.19	6.95	5.13
Low	4.22	5.75	5.48	5.79	5.57	38.34
High						39.77
Ilocos Norte	0.79	1.03	1.06	1.13	1.05	
Ilocos Sur	1.12	1.13	1.57	1.65	1.80	
La Union	0.64	1.19	1.11	0.97	1.12	
Pangasinan	1.67	2.40	1.75	2.04	1.60	
(b) Investments (in Billions PhP)**						
Region 1	31.31	1.75	4.99	1.40	1.38	
Ilocos Norte	26.43	0.00	4.14	0.00	0.72	
Ilocos Sur	0.00	0.00	0.65	0.00	0.00	
La Union	1.77	1.62	0.20	0.26	0.33	
Pangasinan	3.11	0.13	0.00	1.14	0.33	
5. Number of TESDA-certified individuals					293,369	No end of plan target
Sub-Sector Outcome 2: Access to Technology, Financing and Market Enhanced						
1. Number of MSMEs provided with technology and financing interventions	37	59	63	60	61	No end of plan target
2. Number of MSME Trained under the SME Roving Academy						No end of plan target
Region 1			1,776	5252	2,436	
Ilocos Norte			467	719	411	
Ilocos Sur			235	1664	1010	
La Union			925	697	438	
Pangasinan			149	2,172	577	
3. Amount of Loans Granted			P139.36 Billion			No end of plan target
4. Loans-to-Deposits Ratio			0.22 average ratio			No end of plan target
Sub-Sector Outcome 3: Increased Tourism Arrivals						
1. Tourist Arrivals***						
Region 1	510,023	627,725	802,765	1,131,352	1,621,792	1,301,651
Domestic Tourists	488,191	591,079	744,232	1,072,784	1,553,531	1,067,353
Foreign Tourists	21,832	36,646	58,533	58,568	68,261	234,297

Notes: (*) Investments from BNR and DTI-assisted SMEs; (**)BOI-Approved Foreign and Local Investments; (***) Overseas Filipinos not included

Sources: Philippine Statistics Authority (PSA), Department of Tourism (DOT), Department of Trade and Industry (DTI), Bangko Sentral ng Pilipinas (BSP), Department of Science and Technology (DOST)

Sub-Sector Outcome 2: Access to Technology, Financing and Market Enhanced

Partly attained. Necessary interventions were provided by the government to enhance access to technology, financing and market. However, there is a need to expand the coverage of priority programs, projects and activities to cater to more Micro, Small and Medium-Sized Enterprises (MSMEs) in the region.

From 2011-2015, a total of 280 MSMEs were provided with technology and financing assistance through the Small Enterprise Technology Upgrading Program (SET-UP) which is intended to enable MSMEs to address their technical problems and improve their productivity and efficiency through an array of services and technologies.

Likewise, science and technology services, specifically on packaging and labeling (e.g. development of functional designs for packages, and identification and development of suitable or alternative packaging materials), technology trainings, and technical assistance and consultancy were provided to MSMEs especially those engaged in food processing.

In strengthening efforts along MSME development, integrated livelihood and employment interventions were provided to 15 LGUs during the same period.

Other programs and projects implemented include the SME Roving Academy Program, and the Shared Service Facilities (SSF) Project (See detailed discussion in Chapter 14). The Roving Academy Program, which is a training program intended for MSMEs, provides basic skills and skills upgrading, and trainings on entrepreneurship covering the four areas of business: management, productivity,

marketing and financial concerns. In 2016, 2,758 MSMEs participated in the program, higher than the 2,436 participants in 2015.

On the other hand, as per report of the Bangko Sentral ng Pilipinas (BSP), total loans granted in the region was P139.36 billion in 2011-2015. In the same period, loans-to-deposits ratio was pegged at 0.22 which means that for every P1.0 a bank received in deposits, it loans 22.0 cents to businesses or consumers. This may be inferred that there is a low uptake of loans from formal lending institutions in the region which could be due to lack of technical capacity to develop viable project proposals; lack of or poor credit track record; lack of acceptable collateral; and limited information about the available loan products.

From 2011-2016, total loans granted by the Small Business Corporation (SBC) which offers a wide range of financial services, specifically for small and medium enterprises engaged in manufacturing, processing, agribusiness (except crop level production) and services (except trading) totaled to P85,681,921 benefiting 54 SMEs in the region. Majority were availed by 40 SMEs in Pangasinan at P61,986,225. For La Union and Ilocos Sur, six SMEs each availed P221,135,696 and P1,500,000 worth of loans, respectively. The remaining P1,350,000 were availed by two SMEs in Ilocos Norte.

Sub-Sector Outcome 3: Tourism Arrivals Increased

Fully attained. As of 2015, the number of tourist arrivals in the region had already exceeded the end-of plan target of 1,301,651 tourists, 1,067,353 of which were domestic tourists and 234,297 were foreign tourists. Inbound visitors totaled to 1,621,792 in 2015, higher by 24.60 percent than the expected tourist arrivals in 2016.

Out of this figure, 95.79 percent were domestic tourists, the rest were foreign tourists.

Majority of the tourists visited Ilocos Norte and Pangasinan, comprising 30.45 percent and 29.38 percent of the region's total tourist arrivals, respectively. Most of the tourists who visited the two provinces were nationals from South East Asian countries. This can be credited to the (1) diverse product offerings which include culture, nature, festivals and events among others, and (2) effective packaging of tourist attractions.

Foreign tourists have the penchant of visiting nature-related tourist destinations such as the pristine beaches and the green canopy of the mountains of Pagudpud, Ilocos Norte. The windmills at the hilltop of Burgos and Bangui is also a site to behold among the tourists. The Province of Pangasinan, on the other hand, takes pride in the island-hopping activity of the Hundred Islands in Alaminos City down to the white sand beaches of Bani and Bolinao, Pangasinan. The church in the municipality of Manaoag is also a lure to religious pilgrims.

Inbound tourists in La Union and Ilocos Sur totaled to 395,016 (24.36% share) and 256,413 (15.81% share), respectively.

The Province of La Union, particularly its long coastline, boasts of attracting domestic as well as foreign tourists who are into water-related recreational activities. San Juan, in particular, has earned its moniker as the surfing capital of the north due to its year-round presence of enchanting waves for surfing.

The City of Vigan in the province of Ilocos Sur is simply a destination worth visiting. The place has earned its niche in the tourism industry being one of the seven wonders cities of the world. Its Spanish-

dated structures continue to captivate the interest of foreign as well as local tourists.

The challenges that affected the sector's performance in the previous plan which should be taken into account in the medium term are as follows:

Full realization of the vertical and horizontal integration between the agriculture and industry sector. The AFF and industry sector play a critical role in each other's growth, hence, it is necessary to ensure vertical and horizontal integration between the two sectors. Full realization of both strategies will reduce costs and improve the efficiency of the sectors. Related discussion is provided in Chapter 8.

Bringing the level of investment inflow to a higher level of value-adding and globally competitive potential industries. There is a need to divert to high-value adding industries with globally competitive potentials to enhance the AFF-based enterprises in the region. Shifting to these industries will help improve the sector's performance in the medium term. Elaborated discussion on the strategy is provided in Chapter 15.

Difficulty to expand the manufacturing sector, develop SMEs' growth potential and generate employment capacities. The manufacturing subsector as well as the construction subsector failed to fully expand in the previous medium term due to reduction in manufacturing-related and construction activities in the region.

Improvement and development of infrastructure support based on international standard. The framework adopted by the Cities and Municipalities Competitiveness Index (CMCI) recognizes the role of infrastructure development in improving the competitiveness of the

region, locally and internationally. Likewise, the World Economic Forum (WEF) values infrastructure as a significant factor to achieving local competitiveness in the region.

The presence of extensive and efficient infrastructure facilities is critical to the performance of the region's economy since it is an important factor to determining the strategic location as well as the kind of activities or sectors that can be developed within the region.¹ It is also a major consideration of potential investors in the region.

Need to increase ICT and agribusiness industry skilled manpower and improve their competencies. Lifting from the previous RDP, there is still a need to meet the labor requirements of emerging industries such as ICT in the medium term. With the thriving business process outsourcing in the region, the dearth of ICT-skilled manpower remains to be a challenge worth addressing.

Likewise, it is also necessary to prioritize specified courses under the mutual recognition agreements (MRAs) among ASEAN countries to facilitate the mobility of skilled labor in the region within the ASEAN region.

Lack of investment on local Research and Development (R&D). Given the importance of R&D in developing appropriate technologies for the improvement of the productivity of firms in agriculture, industry and services, there is a need to increase public investments in R&D in the region. Results of these R&D shall be readily available for best use of the industry players.

Need to harness tourism potential of the region's emerging destinations. As Region 1 continues to aim to become the tourism hub in Northern Philippines, there is a need to take advantage of the opportunities offered by the ASEAN Economic Community (AEC), which offers the third largest market in the world. And, given the diverse and unique tourist destinations in the region (e.g. natural, historical, religious and heritage attractions), the government, DOT and the local government units specifically, should work hand-in-hand to intensify efforts in improving the region's tourism potential, including the development and packaging of tourism-related products and services.

Low participation rate of the services sector in training and direct employment of graduates. There is a need for the services sector to increase its participation in providing trainings and direct employment of graduates. This will be necessary with the sustained growth of the services sector in the region. Among the establishments that should participate in these activities include secondary tourism establishments such as hotels and restaurants.

Undercoverage of tourism data due to limited data sources. One of the major concerns of the tourism industry is the undercoverage of tourism data in the region. This is due to the non-submission of data by some tourism establishments in the region. There is a need to enhance the quality of tourism data to properly account for the tourist arrivals in the region. Tourism data are useful inputs in tourism marketing and promotion of the region including the enhancements of tourism-related products and services. The increase in tourist arrivals in the region will contribute in sustaining the growth of the services sector.

¹CMCI Manual. (2014). Cities and Municipalities Index: Manual of Operations

Lack of tourism support facilities. In Region 1, there is a need to improve tourism support facilities which include information centers, local tourism establishments, and sightseeing transport modes given the expected role of tourism in regional economic development.

Absence of LGU tourism development plans. The crafting of tourism development plans among local government units is essential as constraints hampering optimum tourism development continue to persist. Among these constraints include weak promotion of tourist destinations, product development, and unreliable service standards. R.A. No. 9593 or the Tourism Act of 2009, mandates both the national and local governments to

develop their respective tourism development plans.

Lack of expansion of secondary tourism establishments. Based on the assessment of the previous plan, it was found that apart from expanding primary tourism establishments, there is also a need to expand secondary establishments in the region. RA 9593 requires the mandatory accreditation of primary tourism enterprises and voluntary submission for accreditation of secondary tourism enterprises. Given this arrangement, there is a need for secondary establishments to also get accreditation from the DOT. This is needed to prepare them in catering to the increasing tourism arrivals in the region.

Strategic Framework

Reducing inequality in the region will require strategies that will lead to the achievement of a robust and globally competitive I&S sector in the region. This will be attained by accomplishing the following sub-sector outcomes which include (1) industry and services growth sustained; (2) higher productivity achieved; (3) access to financing enhanced; (4) access to market expanded; (5) tourism arrivals sustained; and (6) access to tourism-related services enhanced.

Targets

Table 9.2 presents the medium term targets for the I&S sector. The industry sector is expected to grow from 7.5 percent in 2015 to 7.6 – 8.4 percent in 2022 while the services sector is targeted to accelerate from 6.8 percent in 2015 to 7.8 – 8.6 percent, both by the end of the planning period.

Table 9.2.a Plan Targets to Expand Economic Opportunities in I&S Sector (2017-2022)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
Sub-Sector Outcome 1: Industry and Services Growth Sustained			
1. GVA Industry and Services Growth Rate	2015		
Industry		7.5	7.6 - 8.4
Services		6.8	7.8 - 8.6
2. GVA Industry and Services Percent Share to GRDP	2015		
Industry		26.4	To be determined
Services		51.4	To be determined

Table 9.2.b Plan Targets to Expand Economic Opportunities in I&S Sector (2017-2022)
(continuation)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
Sub-Sector Outcome 2: Higher Productivity Achieved			
1. Industry and Services Labor Productivity	2015		
Industry		227,618.00	To be determined
Services		110,001.00	To be determined
2. Number of MSMEs provided with improved technology and logistics facilitated	2015		
Region 1		61	60
Ilocos Norte		12	12
Ilocos Sur		12	12
La Union		13	12
Pangasinan		24	24
3. Number of trainings and technical assistance provided to tourism industry manpower and LGUs	-	-	To be determined
4. Number of tourism-related facilities and services accredited	-	-	To be determined
5. Number of assessed TVET graduates/workers	2015	81,297	487,782
6. Number of certified TVET graduates/workers	2015	69,102	414,612
Sub-Sector Outcome 3: Access to Financing enhanced			
1. Amount of Investments Generated	2015		
Investments from BNR and DTI-assisted SMEs		5.57	To be determined
BOI-Approved Foreign and Local Investments		1.38	To be determined
2. Number of MSMEs provided with financing interventions (in Million PhP)	-	-	To be determined
3. Amount of Loans Granted	2011-2015	P139.36 billion	To be determined

Table 9.2.c Plan Targets to Expand Economic Opportunities in I&S Sector (2017-2022)
(continuation)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
4. Loans to Deposits Ratio	2011-2015	0.22	To be determined
Sub-Sector Outcome 4: Access to market expanded			
1. Amount of sales generated	2016	1.25	To be determined
2. Number of enterprises provided with marketing assistance			To be determined
Sub-Sector Outcome 5: Tourism Arrivals Sustained			
1. Visitor Arrivals			
Region 1			
Domestic	2015	1,621,822	To be determined
Tourists		1,553,531	
Foreign Tourists		68,291	
Sub-Sector Outcome 6: Access to Tourism-related Services Enhanced			
2. Number of marketing assistance and promotion provided to tourism-related facilities and services	-	-	To be determined

Strategies

In order to achieve a robust and globally competitive I&S sector, the following priority strategies will be undertaken in the medium term.

Sub-Sector Outcome 1: Industry and Services Growth Sustained

Strengthen linkage between the agriculture and industry sectors to promote product competitiveness and increase economic productivity. The linkage between the two sectors will be strengthened by transforming agricultural farming into thriving agribusiness sector. This will contribute to the promotion of product competitiveness among the priority agri-fishery commodities in the region. Likewise, it will also improve the labor productivity of both sectors. Details of the strategy is provided in Chapter 8.

Increase investment inflow for the priority industries in the region. The government will implement programs and projects that focus on the identified priority industries in the region. These industries include mango, cacao, coffee, processed fruits and nuts, wearables and homestyles, bangus, and bamboo.

Among the activities to be implemented to facilitate the inflow of investment for these industries include the conduct of various seminars on upgrading skills and food processing, product development including labeling and packaging, business financing; orientation on FDA Requirements and Licensing; and regular conduct of local trade fairs and product development clinics. Regional industry profiles will also be prepared to determine the needed interventions to upgrade the industries as well as link and integrate the

manufacturing, agriculture and services, and deepen the industry participation in the global value chains.

Sub-Sector Outcome 2: Higher Productivity Achieved

Development and strengthening of human capital through employment facilitation and continuous capacity building. Assistance to workers entering the labor market will be strengthened through employment facilitation and continuous capacity building programs. Among the programs to be implemented include Career Guidance Advocacy Program, and Labor and Employment Education Services (LEES). Other services such as career advocacy, coaching and counseling will also be enhanced in the region. These undertakings will be done to assist those who are looking for jobs, domestically and internationally.

To capacitate the labor force for Trabaho and Negosyo skills requirements, technical-vocational skills training programs for the priority sectors in the region will be conducted (see also Chapter 10). The graduates of various technical-vocational education and trainings (TVET) and workers will also be subjected to competency assessment. The National Certificate and Certificate of Competency from TESDA will enhance their employability.

Prioritization of courses under the mutual skills recognition mechanism of the AEC. To facilitate the mobility of skilled labor from the region within the ASEAN region, the government will implement programs that will prioritize courses under the Mutual Recognition Agreements (MRAs). Among the priority courses to be considered include accountancy, tourism, engineering,

architecture, medical, nursing, dental practices and other professional services.

Increase investment on local R&D. In recognition of the significance of R&D in developing technologies and identifying good farm and fishery management practices, investments in R&D for production and post-harvest technologies will also be raised at the regional level primarily to reduce losses, maintain quality and food safety, and increase the value of agri-fishery commodities in the region. The development of climate-resilient and disaster-responsive technologies and innovations will be a priority undertaking in the region.

Accreditation of food manufacturers to LTO-FDA and other food accreditation processes (e.g. Halal) to ensure quality and safe products. To ensure access to safe and quality goods and services, the government will strictly implement the accreditation of food manufacturers to License to Operate – Food and Drug Administration (LTO-FDA) and other food accreditation processes such as the Halal food certification.

In support to the national strategy, Region 1 will embark on strengthening efforts along standards regulation and consumer protection.

Sub-Sector Outcome 3: Access to Financing enhanced

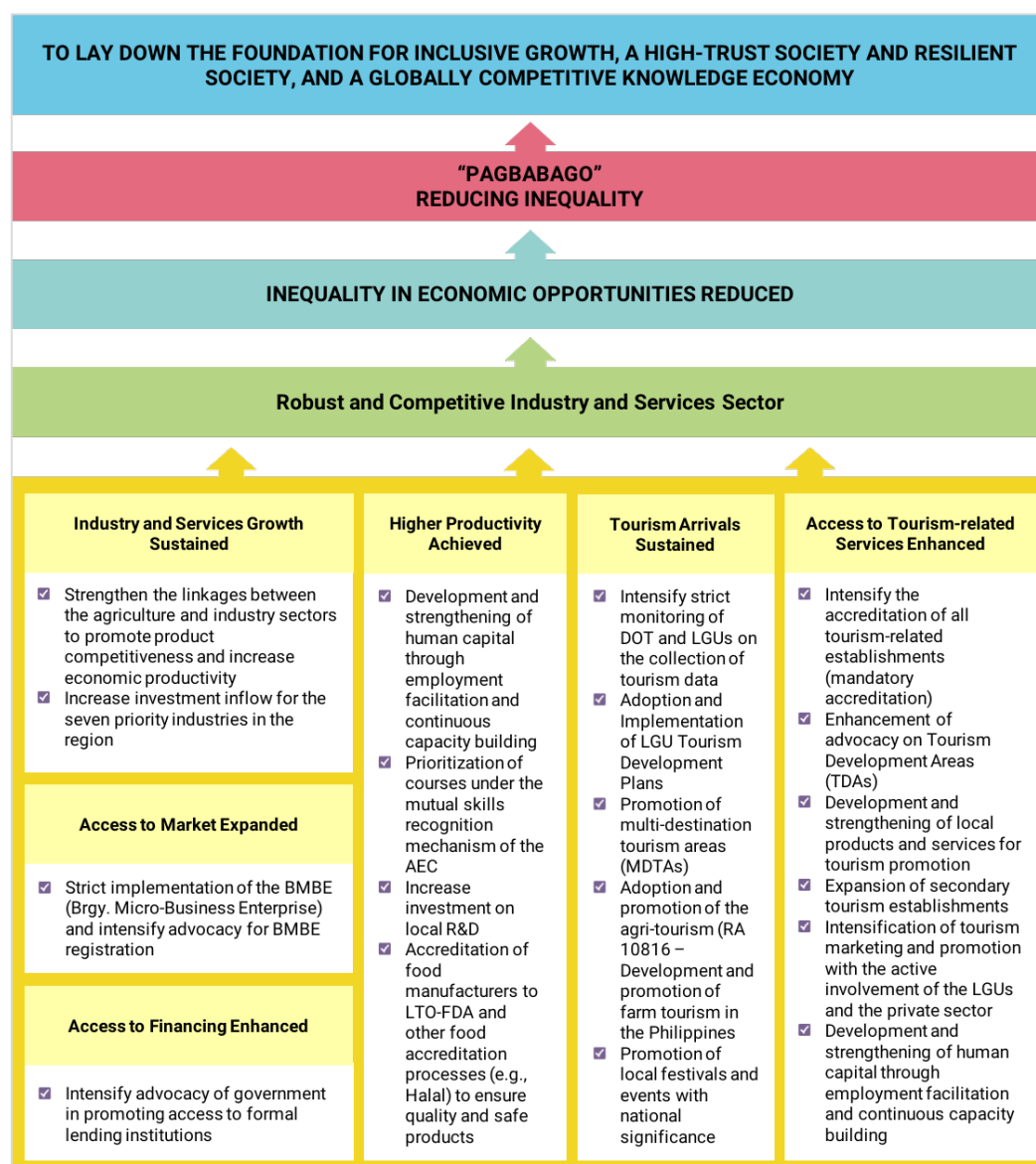
Intensify advocacy of government in promoting access to formal lending institutions. The region strongly supports efforts at the national level to increase access to finance by streamlining and simplifying loan processes for MSMEs, cooperatives, and overseas Filipinos (OFs). In this regard, the government will conduct financial literacy trainings to help

them understand and access financial products from formal lending institutions.

Additionally, the government will conduct financing facilitation activities, extend technical services and capacity development to Agrarian Reform Beneficiaries (ARBs) and other organizations to prepare them in accessing

credit. The DA will also expand the coverage and advocacy of the Sikat Saka Program, while the DOST will continue the implementation of SETUP. Other activities are financing programs of SBC, which include microfinance wholesale lending program, direct lending facilities, credit guarantee facilities, and wholesale lending facilities in the region.

Figure 9.1 Strategic Framework to Expand Economic Opportunities in Industry and Services (2017-2022)



Sub-Sector Outcome 4: Access to market expanded

Strict implementation of the BMBE (Barangay Micro-Business Enterprises) and intensified advocacy for BMBE registration. The government will strictly monitor the implementation of the BMBE Act of 2002. This will help expand market access among business entities who are engaged in production, processing or manufacturing of products or commodities, including agro-processing, trading and services, among others.

Among the incentives and benefits provided by the BMBE Act² include: exemptions from taxes and fees; exemption from the coverage of the minimum wage law; credit delivery; technology transfer, production and management training and marketing assistance; and trade and investment promotion. Awareness on BMBE registration will be enhanced through intensified advocacy and education campaigns.

In addition, the government will also conduct trainings on improving access to modern markets; assist and facilitate trade fairs; conduct market matching and fishery industry fora, among others.

Sub-Sector Outcome 5: Tourism Arrivals Sustained

Intensify strict monitoring of DOT and LGUs on the collection of tourism data. The DOT and LGUs will strictly monitor the collection of tourism data for proper accounting. The collected data will serve as input for planning and policy formulation and in the enhancement of the tourism marketing promotion of the region. Moreover, RA 9593 or the 2009

²RA 9178, An Act to Promote the Establishment of Barangay Micro Business Enterprises (BMBEs, providing incentives and benefits therefor, and for other purposes. Retrieved from http://www.bsp.gov.ph/downloads/laws/RA_9178.pdf

Tourism Act of the Philippines mandates the collection of data from tourism establishments and the regular submission of the same by the local government units.

Adoption and implementation of LGU Tourism Development Plans. As per Local Government Code, all LGUs are encouraged to craft their own tourism development plans. Basically, these plans will integrate zoning, land use, infrastructure development, the national system of standards for tourism enterprises, heritage and environmental protection imperatives which are essential to achieving sustainable tourism development in the region.

The role of the national government is to monitor the compliance of LGUs to national standards in the licensing of tourism enterprises and ensure the proper coordination, integration, prioritization and implementation of tourism development plans. These plans will serve as LGUs' guide in developing and improving their products and services, thus, strengthening the performance of their tourism sector.

Promotion of multi-destination tourism areas (MDTAs). Adoption of multi-destination tourism strategy among LGUs will be promoted in the region. This will add value to the local tourism experience while expanding its benefits within the provinces in the region and among its neighboring regions which include CAR and Region 2. Packaging major tourist destinations with other potential tourist areas will provide the needed push for the latter's promotion. This promotional strategy will continue to be adopted by the DOT in the preparation of tour packages in the region.

Adoption and promotion of agri-tourism. The government will promote the adoption of farm tourism programs that

adheres to RA 10816, otherwise known as the Farm Tourism Development Act of 2016, in the region. This law seeks to develop the local farm tourism industry in the country. Hence, adoption of the said law will generate more employment opportunities, boost farmers and fisherfolks' income and spur growth in major sectors of the region.

Agri-tourism development, the flagship program of the region will play a big role in the region's economy. With the DA-DAR-DENR-DILG convergence strategy, the region is envisioned to be a model with sustainable network of value chains aimed to provide impetus to the shifting of the region from a mere agri producer to a thriving agro-industrial manufacturer.

Promotion of local festivals and events with national significance. The promotion of local festivals and events with national importance will form part of the tourism promotion package of the region to attract more tourists, both domestic and foreign, in the region. The hosting by the region of these various festivals and events of great significance is seen as an opportunity to generate employment among the youth who have the required skills for tour guiding or hosting. These festivals and events will also provide a venue to showcase the culture, traditions, practices, and talents of the Ilocanos and Pangasinenses.

Sub-Sector Outcome 6: Access to Tourism-related Services Enhanced

Intensify the accreditation of all tourism-related establishments. The government will have to step up its efforts in facilitating the accreditation of all tourism-related establishments especially with the increasing number of tourist arrivals in the region. Both primary and secondary

tourism establishments will be encouraged to get accreditation.

Among the incentives³ of being accredited include the following: inclusion of their establishment profile in the DOT websites wherein database-related information on all accredited establishments in the country are made available for both foreign and local tourists and travelers' consumption; entitlement to subsidized human resource development seminars like waitering and bartending course, tour guiding, front office management, housekeeping and effective customer relations seminar; proper endorsement to concerned agencies for availment of incentives, exemption from Unified Vehicular Volume Reduction Program or number-coding scheme, exemption from regular franchising process for accredited accommodation establishments to use a maximum of two shuttle service vehicles, grant of Certificate of Public Conveyance for tourist land transport operators, grant of accreditation as preferred travel agents servicing passport-seeking clients. They will also be provided with technical assistance and access to database information on travel and tourism like visitor arrival statistics, market profiles, domestic survey on domestic travel, among others.

Enhancement of advocacy on Tourism Development Areas (TDAs). The DOT, in close coordination with the local government units, will have to intensify its advocacy efforts to promote its two TDAs which include (1) La Union-Pangasinan area; and (2) Ilocos Sur and Ilocos Norte area.

Development and strengthening of local products and services for tourism promotion. LGUs will have to

³Philippine Canadian Inquirer. DOT-6 asks tourism establishments to get accreditation. 17 July 2015. Retrieved from <http://www.canadianinquirer.net/2015/07/17/dot-6-asks-tourism-establishments-to-get-accreditation/>

conceptualize, develop and enhance their tourism products to create or enhance their offerings to the visiting public and attain customer satisfaction.

In addition, the government will conduct seminars and trainings along professional tour guiding and tourist reception as well as tourism awareness to improve the services provided to tourists.

Provision of technical assistance in the establishment of visitor information and *pasalubong* centers as well as in the accreditation of tourism enterprises will also be undertaken in the medium term.

Expansion of secondary tourism establishments. To take advantage of the growing tourist arrivals in the region, the government will facilitate the expansion of secondary tourism establishments such as restaurants, specialty shops, malls, sports facilities, museums, health and wellness facilities, rest areas in gas stations, agri-tourism farms and facilities, and outbound agencies by encouraging more investors to capitalize along these areas in the region. This undertaking will both increase investments and generate more employment opportunities in the region.

Through the provision of these tourism support facilities, tourists will fully enjoy and enhance their overall experience in the region.

Intensification of tourism marketing and promotion with the active involvement of the LGUs and the private sector. To enhance the competitiveness of the tourism sector in Region 1, the government in partnership with the LGUs and the private sector will implement market development programs; conduct local and international fairs and exhibits, and organize trade missions. These activities will focus on showcasing high quality tourism destinations and products in the region. All these will have to be supported by an improved international and domestic access and connectivity and destination infrastructure (see detailed discussion in Chapter 19 particularly in relation to the DOT-DPWH Convergence Program).

Development and strengthening of human capital through employment facilitation and continuous capacity building. The government will continue to conduct job fair activities for employment facilitation and continuous capacity building of the region's manpower. The Department of Labor and Employment (DOLE) will continue to monitor the compliance of establishments to both general labor standards and technical safety standards. Likewise, DOLE will also promote and strictly monitor the adoption of minimum wage among establishments in the region.

10 Accelerating Human Capital Development

Accelerating Human Capital Development

Investment in human capital plays a critical role in boosting both economic growth and inclusive growth. The presence of productive skills, education, talents, health, nutrition and expertise of the labor force is important in achieving human capital development.

This chapter focuses on two major components of human capital development: education and training, and health. In accelerating human capital development, the region will make sure that investments in people will enhance individual's capacity for productivity and resiliency at the same time to ensure that nobody is left behind.

Various programs and projects of agencies that provide human capital investment will be discussed as well as the role of human capital development in economic growth and inclusive growth.

Assessment and Challenges

Health and Nutrition

Good health allows people to be more productive. Consequently, increased productivity allows more people to invest in their health, education and training, among others, resulting in better employment opportunities.

Health and nutrition are one of the key components of human capital development. Moreover, sickness and illness, and the risk of death are the central issues in shaping human capabilities (Bloom and Canning, 2003). In the region, the improved access to essential health services was only partly attained from 2011 to 2015 as evidenced by the low attainment of the MDG and RDP targets. The health-related goals in the MDG do not give a total picture of the health situation of the

region but will give the vital and basic challenges or issues that are deemed imperative upon the government to address.

There is a need for the region to look for policy areas where improvements or changes are needed in the health system, and vital support should be provided. Therefore, it is necessary that the government continuously monitor the health and nutrition status of the people to improve their conditions and ensure good health at all times by providing equitable, accessible, affordable and quality health services. The Local Government Units (LGUs) will have to prioritize health investment planning of their respective localities to provide solutions and bridge

the gaps in service delivery, health financing, health regulations, human resources for health and health information.

Sub-Sector Outcome 1: Access to Essential Health Services Improved

Partly attained. In general, health-related MDG indicators showed poor performance. Only 8 out of the 23 health-related MDG indicators attained their targets.¹ This only shows that despite the provision of health facilities, deployment of human resources for health and the increase in budget for health, there were still gaps in the delivery of health care system in terms of: health governance, service delivery, health regulation, health information, human resources for health, and health financing.

Under Goal 1: Eradicate Extreme Poverty and Hunger. The prevalence of underweight children showed a slight reduction of 0.6 percentage points from 2011 to 2015 and significantly below the RDP target by 5.3 percent.

The annual reviews conducted at the regional and local levels headed by the Regional Nutrition Council and its technical arm helped in the improvement of the nutrition status in the region. The reviews included assessment of the nutrition status of the region as well as identification of the facilitating and deterring factors in nutrition plan implementation as basis in the formulation of nutrition action plans both at the regional and local levels to further improve the nutritional status of families in the region.

Among the provinces, Ilocos Norte posted a significant reduction of 1.1 percentage points. However, despite this reduction, the province still had the highest prevalence rate of underweight children under 6 years of age. Considering the challenges in combating malnutrition in the region, there is still a need to strengthen efforts among various stakeholders from the regional and local levels.

The proportion of underweight children under 6 years of age for both girls and boys was generally decreasing from 2011 to 2015. However, it was recorded that *more girls were underweight than boys*, except in 2014 where the prevalence of underweight boys were a little higher by 0.1 percentage point compared to the girls. Given the trend that more girls are underweight than boys, policies towards promoting nutrition among girls should be intensified.

In addition, the nutrition situation in the region, based on the results of the 2015 National Nutrition Survey, also showed that 1 out of 5 children, less than 5 years old, or 19.0 percent are underweight; 3 out of 10 children or 31.3 percent are stunted; 7 out of 100 children or 6.6 percent are wasted or thin and considered to be a public health problem; and 3 out of 100 children or 3.3 percent are overweight for their height.

Similarly, for school children (5 to 10 years old), 3 out of 10 children or 27.5 percent are underweight; 1 out of 4 school children or 25.1 percent are stunted; 1 out of 10 school children or 9.7 percent are wasted or thin and considered to be a public health problem; and 9 out of 10 or 9.2 percent are overweight for their height.

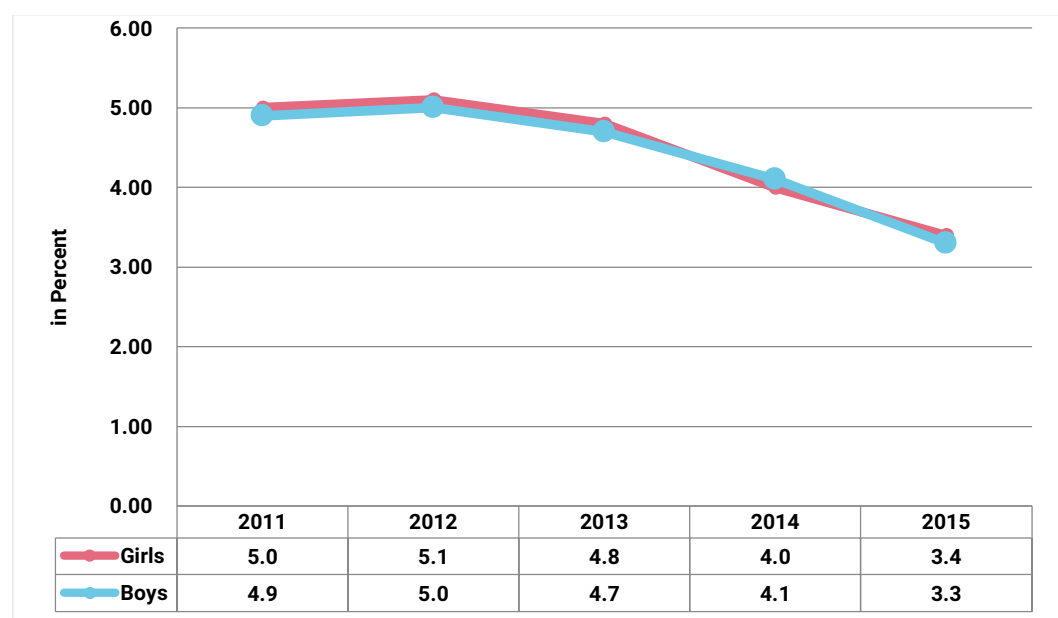
¹MDG Watch report as of February 1, 2017

Table 10.1 Prevalence Rate of Underweight Children under 6 years of Age by Province, Region 1 (2011 & 2015)

Region/ Provinces	Baseline	Accomplishment	RDP Target
	2011	2015	2015
Region 1	4.0	3.4	8.7
Ilocos Norte	6.3	5.2	No Target
Ilocos Sur	4.2	3.6	No Target
La Union	4.0	3.9	No Target
Pangasinan	3.7	3.0	No Target

Source: Department of Health, Regional Office 1 (DOH RO1)

Figure 10.1 Prevalence Rate of Underweight Children under 6 years of age by Sex, Region 1 (2011-2015)



Source: National Nutrition Council (NNC), and Philippine Statistics Authority (PSA)

Table 10.2 Nutrition Situation, Region 1, by Age Bracket and Type of Malnutrition (2015)

Age bracket of Children	Underweight	Stunted	Wasted or Thin	Overweight
Children, less than 5 years old	1 out of 5 (19.0%)	3 out of 10 (31.3%)	7 out of 10 (6.6%)	3 out of 100 (3.3%)
School Children, 5-10 years old	3 out of 10 (27.5%)	1 out of 4 (25.1%)	1 out of 10 (9.7%)	9 out of 100 (9.2%)
Pre-adolescent and Older Children, 10-19 years old	-	1 out of 5 (22.6%)	1 out of 10 (13.4%)	1 out of 10 (11.1%)

Source: National Nutrition Council (NNC)

For pre-adolescent and older children, 10 to 19 years old, 1 out of 5 or 22.6 percent are stunted; 1 out of 10 or 13.4 percent are wasted or thin; and 1 out of 10 or 11.1 percent are overweight and obese. These only suggest that **the region needs to focus the nutrition programs on the type of malnutrition across age groups to eradicate hunger among children in the region.** The capacitation and empowerment of the barangay nutrition scholars will have to be given priority attention as they coordinate the delivery of basic nutrition and related services in their respective areas of assignments.

Goal 4: Reduce Child Mortality. Infant mortality rate² in the region declined from 8.39 in 2011 to 4.49 in 2014 and a slight increase of 0.27 percent in 2015 – still below the RDP target of 9.0. Region 1 has recorded 88,565 live births of which 2.2 percent (192) were female and 2.6 percent (230) were males. Prematurity (1.11%) was the number one cause of death of infants which can be prevented through regular pre-natal check-ups. Likewise, the low percentage of fully immunized children in the region (77% in 2015) and the proportion of 1-year-old children immunized against measles with 79.52 percent accomplished in 2015 might have contributed to the increasing child mortality.

Child mortality indicates the level of accessibility and quality health care delivery, particularly in the implementation of the Maternal, Newborn, Child Health, and Nutrition (MNCHN) Program.

There is a need to track infants (0-12) months old and children (one-year-old)

²Infant mortality rate (IMR) is the number of deaths per 1,000 live births of children under one year of age. The rate for a given region is the number of children dying under one year of age, divided by the number of live births during the year, multiplied by 1,000.

who were missed during vaccination schedules. Deployed Human Resource for Health (HRH) from the DOH Regional Office are of great help to the primary care level to help track infants as well as pregnant mothers to complete their prenatal check-ups so as to prevent maternal and infant deaths. **The cultural beliefs of families on vaccinations and pre-natal checkups which affect maternal and child health still need to be addressed in the region.**

The indicators which need further interventions from the government include under-five mortality rate, proportion of 1 year-old children immunized against measles, maternal mortality ratio, contraceptive prevalence rate, and proportion of births attended by skilled health personnel.

Goal 5: Improve Maternal Health. The Maternal Mortality Rate (MMR)³ in the region decreased by 10.7 percentage points over the six-year period 2010-2015. The lowest MMR was recorded in 2013 at 39.1 percent. The MMR of the region is 47.42 which is below the national target of 52/100,000 live births. Despite the increase in facility-based deliveries (62.25 in 2011 to 97.67 in 2015) and deliveries attended by skilled health professionals (92.72 in 2011 to 98.59 in 2015) as well as trainings of health personnel on Basic Emergency Obstetric and Newborn Care (BEmONC) and Comprehensive Emergency Obstetric and Newborn Care (CEmONC), the region's MMR is very high as compared to the RDP target of 14.8 per 100,000 live births.

The underlying causes of maternal deaths are delays in taking critical actions, delay in seeking care, delay in making referral

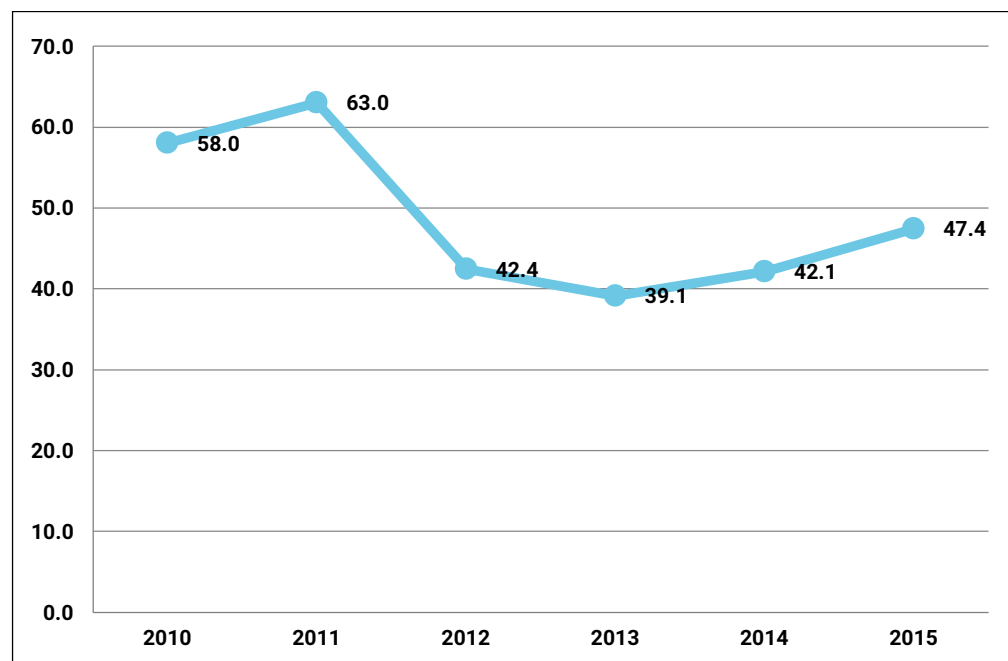
³The maternal mortality rate (MMR) is the annual number of female deaths per 100,000 live births from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes).

and delay in providing appropriate medical management.

Other factors that contributed to maternal deaths are: unplanned, mistimed and unwanted pregnancies, poor detection and management of high-risk pregnancies,

poor access to health facilities brought about by geographic distance and transportation cost, teenage pregnancies and their poor health seeking behavior (their compliance in their pre and post-natal check-up is low).

Figure 10.2 Maternal Mortality Rate in Region 1, per 100,000 live births (2010-2015)



Source: Department of Health (DOH)

There is a need to track all pregnant women to encourage and enhance their knowledge on the importance of a regular or complete pre and post-natal check-up, availing the services of a skilled birth attendant, delivering in a health facility and the rational use of modern contraceptive methods.

The *Buntis Congress*, an activity that is done yearly regionwide will have be sustained because this is a forum wherein all pregnant women and women of reproductive ages gather to learn about pregnancy, its complications and how to manage it. Despite a relative improvement in maternal care, the program needs to be strengthened; Service Delivery Network

(SDN) needs to be capacitated and functional and the Blood Service Facility Network needs to be strengthened by establishing close linkages with partner agencies.

Region 1 recorded a Contraceptive Prevalence Rate of 56.15 in 2015, higher by 19.3 percent as compared to 36.85 in 2011 though still below the national target of 65.0 percent and the RDP target of 100.0 percent. With this accomplishment, there is a need to strengthen the implementation of the RPRH Law to decrease unmet need for family planning, ensure adequate and available family planning contraceptives and by having trained and competent family planning service providers. By these

interventions, CPR will increase, maternal and Child Health will be better, thus maternal and infant deaths will further be reduced. (See Chapter 13)

In terms of Goal 6: Combat HIV/AIDS, Malaria and Other Diseases, 4 out of the 12 indicators have attained the targets. These were: the increasing condom use rate of the contraceptive prevalence rate, the proportion of tuberculosis cases detected (106.0%) and cured (99.0%) under the Directly Observed Treatment Short Course (DOTS), and the zero incidence rate and death rate associated with cholera.

Malaria remains a public health problem in the region. With intensified vector surveillance and control, border operations, epidemiologic and entomological survey, advocacy campaign and information drive and appropriate diagnosis and treatment there was a progressive decrease in malaria cases from five cases (all male) in 2011 (4 indigenous and 1 imported) to three cases (all male) in 2015, all of which were imported cases.

The province of Ilocos Norte had reported zero cases since 2012 thus vying for a Malaria Free Province. Likewise, for the provinces of La Union and Pangasinan with zero cases since 2011 (cases reported were imported in 2012, 2014-16). Ilocos Sur, on the other hand, reported zero cases in 2011-2012 and 2014-2016 but with 1 indigenous case in 2013. There is still a need to continue and intensify vector surveillance and control and other programs, activities and projects (PAPs) of the program in order to eliminate Malaria in the Region.

Rabies remains a public health problem in the region. For the past five years, Region I recorded an average of 17.2 deaths. The Province of Pangasinan has the highest number of human rabies (deaths) in 2011-2015 followed by La Union. Ilocos Norte

recorded zero deaths for two successive years (2014-2015). A total of 131,905 animal bite victims, of which dog is the principal biting animal, have been recorded for the past 5 years of which 79.85 percent (105,330) were given anti-rabies vaccines. Region I accounted for 9.46 percent of animal bite cases recorded in 2015 for the entire country (432,458) and 11.06 percent of 226 rabies deaths in the Philippines were from Region 1. The increasing number of animal bites seen and vaccinated is attributed to the increasing awareness and advocacy on the policy that once bitten by a dog, proper wound care should be done and victims submit themselves for vaccination. Provisions of 2 free anti rabies vaccines are given to patients throughout the entire treatment.

Cases of Sexually Transmitted Infections (STI), Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) in Region 1 have increased from 22 cases in 2010 to 142 cases in 2015 of which 13 were AIDs positive and 129 were Asymptomatic Cases. The threat of HIV-AIDS or STI runs parallel to the rapid economic growth and development and urbanization in cities and municipalities. The most affected cases are males and are being transmitted by vulnerable groups. This poses health risk and needs to be addressed and regulated. Establishment of a data-base of HIV and STD cases and organization, reactivation and strengthening of every Local Aids Council region-wide are likewise imperative.

On the other hand, all health-related indicators under *Goal 7: Ensure Environmental Sustainability* and *Goal 8: Develop a Global Partnership for Development* have achieved the targets. These were the proportion of households with levels I to III waterworks (96.5%), proportion of households with sanitary

toilet facility (93.2%), and proportion of barangays with “Botica sa Barangay” (63.9%).

Basic, Higher and Technical Education

Education is another key component of human capital development. Education is even a human right. It is the heart of sustainable development of any country and is critical to the development of individuals and societies as it helps pave the way to a successful and productive future (United Nations). Investing in human capital is a major concern in the government’s inclusive growth agenda.

Sub-Sector Outcome 2: Access to Quality Education Improved

Partly attained. Improved access to quality education was partly attained. Although increases were recorded in the literacy, enrollment, cohort survival, and completion rates in the region, still some targets especially in basic education were not achieved.

For higher education, six HEIs in the region were also identified as Centers of Excellence (COEs) and Centers for Developments (CODs) and six HEIs also received autonomous or deregulated status

award. The number of tertiary level and Technical Education and Skills Development (TESD) graduates, likewise, increased.

Basic Education

Improving simple and functional literacy rate. From 94.2 percent and 88.6 percent in 2003, simple and functional literacy rate increased to 98.2 percent and 91.3 percent in 2008, respectively.

Likewise, **there were increases in the enrollment, cohort survival, and completion rates but not all targets were achieved.** For SY 2015-2016, the Net Enrolment Ratio (NER) in primary education was registered at 95.39 percent, short of the target by 2.17 percentage points. For secondary education, the NER was recorded at 79.44 percent - an increase of 7.26 percentage points from the baseline data of 72.18 in SY 2011-2012 and also exceeding the plan target by 1.98 percentage points.

Cohort Survival Rates, on the other hand, increased for elementary (94.65%) and secondary (86.86%) levels from SY 2011-2012 to SY 2015-2016, but the increases were not enough to reach the targets of 95.50 percent and 87.49 percent, respectively.

Table 10.3 Rabies Deaths by Sex, Region 1 (2011-2015)

YEAR	ANIMAL BITE CASES	DEATHS		
		MALE	FEMALE	TOTAL
2011	12,474	9	3	12
2012	17,682	17	4	21
2013	22,952	5	3	8
2014	35,511	18	2	20
2015	43,286	15	10	25

Source: Department of Health (DOH)

Table 10.4 Dengue Cases and Deaths by Sex, Region 1 (2011-2015)

YEAR	CASES			DEATHS		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
2011	7,494	6,709	14,203	30	41	71
2012	4,839	4,314	9,153	16	20	36
2013	8,661	7,645	16,306	25	21	46
2014	3,662	3,203	6,865	12	6	18
2015	9,082	8,181	17,263	18	22	40

Source: Department of Health (DOH)

Similarly, Completion Rates for both primary (91.50%) and secondary (76.44%) education in SY 2015-2016 also increased from SY 2011-2012. Although, the progress on these indicators may be attributed to the Pantawid Pamilya program of the DSWD because of the cash grants received by the beneficiaries in return for sending their children to school, these were still short of the Plan targets.

The teacher to pupil and student ratios also surpassed the standard ratios. The teacher-to-pupil and teacher-to-student ratios improved at one teacher to 32 pupils and one teacher to 27 students, respectively, from SY 2013-2014 to SY 2014-2015. These figures were beyond the standard ratios of 1:34 pupils and 1:32 students, respectively.

The shortage of classrooms was significantly reduced. In 2015, the classroom to pupil ratio was registered at 1:24 and 1:41, for elementary and secondary levels, respectively. The PPP for School Infrastructure Project (PSIP) Phase 1 and 2 of the Department of Education (DepEd) significantly contributed to this reduction of classroom backlog in the region. The project involved designing, financing and construction of classrooms, including furniture, fixtures and toilets, in various sites in the region. See Chapter 19.

There is a need to improve the quality of basic education in line with the K to 12 Program. The K to 12 Program which covers kindergarten and 12 years of basic education – six years of primary education, four years of junior high school, and two years of senior high school aims to provide sufficient time for the mastery of concepts and skills, develop lifelong learners, and prepare graduates for tertiary education, middle-level skills development, employment and entrepreneurship. In 2015, the Regional Development Council Executive Committee issued a resolution, enjoining the Local Government Units (LGUs), concerned National Agencies, Civil Society Organizations (CSOs) and other stakeholders to support the implementation of the K to 12 Program in Region I. With this, it is expected that the foundation of the region's human capital will be strengthened.

Higher Education

Compared to the neighboring regions, Region 1 has a wider selection of colleges and universities. The region has a total of 92 Higher Educational Institutions (HEIs) - 82 are private HEIs, 6 are State Universities and Colleges (SUCs), and 4 are Local Universities and Colleges (LUCs), with higher education faculty of a total of 6,731, comprising 53.0 percent

females and 47 percent males for the Academic Year (AY) 2015-2016. Even across the regions, Region 1 ranked 1st with the most number of available HEIs in Northern Luzon and 7th in the country.

Moreover, *six HEIs in the region were identified as Centers of Excellence (COEs) and Centers for Developments (CODs).* The COE and COD status were granted to HEIs which continuously demonstrated excellent performance in the areas of instruction, research and publication,

extension and linkages, and institutional qualifications. The region is still looking forward to additional COE or COD HEIs considering that many of the colleges and universities are performing well.

Six HEIs received autonomous or deregulated status award. CHED awarded autonomous and deregulated status to the six HEIs in the region due to high level of institutional quality and program excellence.

Table 10.5 Tertiary Level Graduates by Course and Sex (Public & Private), Region 1 (SY 2014-2015)

Course	Tertiary Level Graduates by Course and Sex (Public & Private) SY 2014-2015			Sub-total
	Women	Men		
Agriculture, Forestry, Fisheries and Veterinary Medicine	499	430	929	3.0%
Architectural and Town Planning	65	120	185	0.6%
Business Administration and Related Course	5,988	2,900	8,888	29.1%
Education and Teacher Training	4,358	1,347	5,705	18.7%
Engineering and Technology	824	2,032	2,856	9.3%
General (unclassified Bachelor of Arts)	32	4	36	0.1%
Information Technology and Related Course	2,034	2,243	4,277	14.0%
Law, Justice and Jurisprudence	456	1,244	1,700	5.6%
Maritime Education	30	1,755	1,785	5.8%
Mass Communication and Documentation	50	13	63	0.2%
Medical and Allied	1,679	730	2,409	7.9%
Natural Science	107	169	276	0.9%
Religion and Technology	14	31	45	0.1%
Service Trades	524	83	607	2.0%
Social and Behavioral Science	616	211	827	2.7%
TOTAL	17,276	13,312	30,588	100.0%

Source: Commission on Higher Education (CHED)

Table 10.6 Enrollment in Higher Educational Institutions by Course and Sex (Public & Private), Region 1 (SY 2015-2016)

Course	Enrollment in Higher Educational Institutions by Course and Sex (Public & Private) SY 2015-2016			
	Women	Men	Sub-total	
Agriculture, Forestry, Fisheries and Veterinary Medicine	3,768	3,450	7,218	4.0%
Architectural and Town Planning	653	1,057	1,710	0.9%
Business Administration and Related Course	31,391	14,881	46,272	25.5%
Education and Teacher Training	27,170	8,774	35,944	19.8%
Engineering and Technology	5,488	14,537	20,025	11.1%
General (unclassified Bachelor of Arts)	600	255	855	0.5%
Information Technology and Related Course	9,866	12,672	22,538	12.4%
Law, Justice and Jurisprudence	3,118	9,053	12,171	6.7%
Maritime Education	204	12,294	12,498	6.9%
Mass Communication and Documentation	608	180	788	0.4%
Medical and Allied	7,836	2,708	10,544	5.8%
Natural Science	604	419	1,023	0.6%
Religion and Technology	126	238	364	0.2%
Service Trades	3,072	557	3,629	2.0%
Social and Behavioral Science	4,040	1,576	5,616	3.1%
TOTAL	98,544	82,651	181,195	100.00%

Source: Commission on Higher Education (CHED)

In terms of the graduates, 30,588 graduates were produced in the region for SY 2014-2015. Most of the graduates took Business Administration and Related Course (29.1%). This was followed by Education and Teacher Training (18.7%) and Information Technology and Related Course (14.0%). In terms of sex disaggregation, most women were graduates of Business Administration and Related Course and Education and Teacher Training, while most men were graduates of Information Technology and Related Course and Engineering and Technology.

Enrollment for the School Year 2015 to 2016 rose to 181,195. About 56.5 percent of

the total enrollees were women and 43.5 percent were men. Among the courses, Business Administration and Related Course was the most popular course, registering more than a quarter of the total enrollment for the year. This was followed by Education and Teacher Training (19.8%), Information Technology and Related Course (12.4%), and Engineering and Technology (11.1 percent).

Similar to the number of graduates by sex disaggregation, most women still preferred Business Administration and Related Course and Education and Teacher Training, whereas most men prefer Information Technology and Related

Course, Engineering and Technology and Maritime Education. This means that women still favor more 'feminine' subjects and careers over engineering, science and technology.

With the number of enrollees and graduates produced in the region, the availability of locally available jobs to absorb them will be needed.

Technical Education

To ensure that people in the region are given adequate skills trainings, the government provided Technical-Vocational Education and Training (TVET) and other scholarship programs. From 2011 to 2016, **there is a 97.32 percent increase in the total enrollment**

and 72.62 percent increase in the total graduates of Technical Education and Skills Development (TESD) in the region. The 2016 graduates were dominated by females (76,492 or 55%) rather than males (63,456 or 45%). Among the four provinces of Region 1, Pangasinan consistently produced the most number of enrollees and graduates for the said period.

Likewise, the number of assessed and certified TSED graduates/workers both manifested 100 percent increase from 2011 to 2016 (Table 10.8). Again, the province of Pangasinan recorded the most number of assessed and certified TSED graduates/workers among the four provinces of the region, with more than half of the total regional output coming from the province.

Table 10.7 Total Enrollment and Graduates in TSED, Region 1 (2011 & 2016)

Region/ Provinces	Enrollment in TSED		Graduates in TSED	
	2011	2016	2011	2016
Region 1	75,705	149,382	81,072	139,948
Ilocos Norte	13,323	33,542	12,074	30,536
Ilocos Sur	11,086	24,005	13,194	20,844
La Union	11,401	19,304	11,501	18,495
Pangasinan	39,895	72,531	44,303	70,073

Source: Technical Education and Skills Development Authority (TESDA)

Table 10.8 Total Assessed and Certified TSED Graduates/Workers, Region 1 (2011 & 2016)

Region/ Provinces	Assessed TSED graduates/workers		Certified TSED graduates/workers	
	2011	2016	2011	2016
Region 1	43,663	95,353	37,784	86,522
Ilocos Norte	6,706	19,491	5,990	17,820
Ilocos Sur	6,781	14,930	5,408	14,244
La Union	5,481	11,010	4,048	9,432
Pangasinan	24,695	49,922	22,338	45,026

Source: Technical Education and Skills Development Authority (TESDA)

This implies that the region needs to provide jobs to accommodate these TESD graduates.

Various scholarship programs increased the accessibility of TVET in the region, particularly, the people needing skills enhancement. The implementation of TESDA Training for Work Scholarship Program (TWSP) provided free skills training to 28,259 beneficiaries in 2011 to 2016.

The number of employed TVET graduates from 2011 to 2016 recorded a 170.46% increase (Table 10.10). Moreover, the employment rate of TVET graduates

posted a 23.34 percentage points increase for the same period, from 41.18 percent in 2011 to 64.52 percent in 2016. This could be primarily attributed to the implementation of various scholarship programs such as the Special Training for Employment Project (STEP) and Bottom-up Budgeting (BuB) Project starting in 2014 wherein graduates were provided with starter kits for their self-employment ventures. Still, there were issues confronting the employability of TVET graduates. These were the low participation rate of the industry sector to training and direct employment of graduates, as well as the limited number of industries in the region.

Table 10.9 TESDA Scholarship Beneficiaries, Region 1 (2011 to 2016)

TESDA Scholarship Programs	2011	2012	2013	2014	2015	2016	Total
Training for Work Scholarship Program(TWSP)	976	5,336	5,023	4,012	7,883	5,029	28,259
Private Education Student Financial Assistance(PESFA)	275	1,472	1,457	1,417	1,140	921	6,682
Special Training for Employment Project(STEP)				5,499	1,505	1,640	8,644
Bottom-up Budgeting Project(BUB)				3,070	3,155	4,546	10,771
Total	1,251	6,808	6,480	13,998	13,683	12,136	54,356

Source: Technical Education and Skills Development Authority (TESDA)

Table 10.10 Total TESD Graduates and Employed Graduates, Region 1 (2011 – 2016)

Year	TESD Graduates	Employed TESD Graduates	Percentage of Employed TESD Graduates
2011	81,072	33,387	41.18%
2012	89,390	57,120	63.90%
2013	94,080	61,154	65.00%
2014	108,988	69,044	63.35%
2015	146,971	110,174	74.96%
2016	139,944	90,297	64.52%

Source: Technical Education and Skills Development Authority (TESDA)

Table 10.11 Employment Figures, Region 1 (2013-2015)

INDICATOR	2013	2014	2015	2016
Household Population 15 Years Old and Over (in Thousand Persons)	3,476	3,550	3,587	3,474
Labor Force	2,130	2,191	2,199	2,154
Employed	1,954	2,012	2,014	2,018
Underemployed	391	309	340	353
Unemployed	176	179	185	136
Labor Force Participation Rate (%)	61.3	61.7	61.3	62.0
Employment Rate (%)	91.7	91.8	91.6	93.7
Underemployment Rate (%)	20.0	15.4	16.9	17.5
Unemployment Rate (%)	8.3	8.2	8.4	6.3

Source: Philippine Statistics Authority (PSA)

Although the region was able to produce a number of skilled persons through the provision of various skills trainings, **there is still a need to (1) ensure the quality of skills training delivery; (2) boost the global competitiveness of the skilled workers in relation to the ASEAN integration; and (3) strengthen the two-pronged approach for the employment of skilled workers which is the wage and self-employment.**

Labor Policies

The link between education and economic development is realized through the labor market. Skills learned in the educational system should be used by firms in the production of goods and services so that workers will be paid wages commensurate with their productivity. Without this link, however, even educated workers will not realize the returns from their education as reflected in their wages, and the economy will not reap investments in education through higher productivity.⁴

Employment situation in the region is generally positive. In 2016, out of the estimated population of 15 years old and over, about 2.1 million were economically active or in the labor force (Table 10.11). This number translated to the labor force participation rate (LFPR) of 62.0 percent.

For the past four years, the number of employed persons increased by 64,000 persons (from 1,954,000 in 2013 to 2,018,000 in 2016). The number of unemployed persons also significantly decreased in the same period (from 176,000 in 2013 to 136,000 in 2016). These mean that the jobs available in the region are now somehow able to accommodate all the people who are willing and able to work.

Accordingly, unemployment rate in the region decreased from 8.4 percent in 2015 to 6.3 percent in 2016. However, underemployment rate for the year worsened, recording an increase of 0.6 percentage point compared to the 16.9 percent figure in the previous year.

⁴Son, Hyun H. (October 2010). Human Capital Development. ADB Economics Working Paper Series No. 225. Asian Development Bank (ADB). Retrieved from <https://www.adb.org/sites/default/files/publication/28427/economics-wp225.pdf>

www.adb.org/sites/default/files/publication/28427/economics-wp225.pdf

Despite the improving employment situation in the region, there is a need to address the following issues and challenges: (1) the marginalized and vulnerable sectors have limited access to decent work and livelihood opportunities; (2) there is a shortage of locally-available jobs for skilled workers; (3) the growing mismatch between employers' need; and 4)

the talents/skills available in the region continue to grow. Hence, targeted interventions, sound strategies, adequate resources and political will must be sustained in order to achieve the goal of increased levels of opportunities for and access to decent and productive work. (See Chapter 15).

Strategic Framework

Under the pillar “*Pagbabago*” or reducing inequality, this plan in line with the PDP 2017-2022 aims to accelerate human development through achieving (1) healthy and educated population; and (2) highly skilled and globally competitive workforce.

Targets

The plan targets to accelerate human development as provided in Table 10.12.

Strategies

Accelerating Human Capital Development aims to achieve healthy and educated population, and highly skilled and globally competitive workforce. Under healthy and educated population, the sub-sector outcomes are: 1) access to quality health services improved; and 2) universal quality basic education achieved. On the other hand, highly skilled and globally competitive workforce includes the following sub-sector outcomes: 1) access to quality and affordable higher education improved; 2) access to industry-driven skills training improved; and 3) increased levels of opportunities for and access to decent & productive work.

Sector Outcome A: Healthy and Educated Population Achieved

Sub-Sector Outcome 1: Access to quality health services improved

Expand and sustain Universal Health Care programs and Health Facilities Enhancement Program (HFEP). This strategy will hopefully address the poor performance of the health sector and help in achieving the SDGs. Since Region 1 was not able to achieve the MDG Goals 4 and 5 of reducing child mortality and improving maternal health, the region through the DOH will track all pregnant women to encourage and enhance their knowledge, on the importance of a regular and complete pre and post-natal check-up, availing the services of a skilled birth attendant, delivering in a health facility and the rational use of modern contraceptive methods. On the other hand, Buntis Congress will also be sustained.

Ensure functional and efficient networks of health care providers. The region will be supporting the expansion and strengthening of the Service Delivery Networks (SDNs) to allow more men and women, especially the adolescents, to reach health facilities and avail of needed services such as nutrition, reproductive health, and services related to health emergency response. The SDNs will facilitate access to care, specifically, gatekeeping and continuum of patient-friendly services from primary care level up to the specialty

centers. Delivery of services will also be made more accessible with the use of information and communication technology. The SDNs will also be strengthened by establishing close linkages with partner agencies.

Step up implementation of the RPRH Law focusing on informed choice and expansion of partnerships with CSOs. Accelerating the full implementation of the RPRH law will ensure universal access to quality sexual and reproductive health focused on the elimination of unmet need to family planning methods and reducing the incidence of teenage pregnancy which

sometimes result to infant and maternal mortality. (See Chapter 13).

Promote convergence in the implementation of the various education, health and nutrition programs to improve program and project effectiveness. This strategy will hopefully address the fragmented efforts of the government in improving the access to various services. The beneficiaries of education, health and nutrition programs will now be identified through NHTS. The Pantawid Pamilya beneficiaries will also be given priority in the provision of these programs.

Table 10.12.a Plan Targets to Accelerate Human Development, Region 1 (2017-2022)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
Sector Outcome A: Health and Educated Population Achieved			
Sub-Sector Outcome 1: Access to Quality Health Services Improved			
Maternal Mortality Rate	2015	47.42	Not higher than 45%
Infant Mortality Rate	2015	4.76	Not higher than 3.5%
Under-Five Mortality Rate	2015	8.08	Not higher than 73.5%
Proportion of fully immunized children	2015	77.32	95%
Facility Based Deliveries	2015	97.67%	98%
Proportion of mothers with 4 or more Ante Natal Care	2015	67.24%	90%
TB Treatment Success Rate	2015	95.00%	95%
Prevalence of Underweight Children	2015	3.4%	To be determined
Sub-Sector Outcome 2: Universal Quality Basic Education Achieved			
Simple Literacy Rate	2013	98.2%	To be determined
Functional Literacy Rate	2013	93.0%	To be determined
Net enrollment ratio in primary education	SY 2015-2016	95.39%	99.5
Net enrollment ratio in secondary education	SY 2015-2016	79.44%	83.0
Cohort Survival Rate in elementary education	SY 2015-2016	94.65%	To be determined
Cohort Survival Rate in secondary education	SY 2015-2016	82.86%	To be determined

Table 10.12.b Plan Targets to Accelerate Human Development, Region 1 (2017-2022)
(continuation)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
Completion Rate in elementary education	SY 2015-2016	91.50%	To be determined
Completion Rate in secondary education	SY 2015-2016	76.44%	To be determined
Sector Outcome B: Highly Skilled and Globally Competitive Workforce Achieved			
Sub-Sector Outcome 1: Access to Quality and Affordable Higher Education Improved			
Total Number of Student Financial Assistance Programs (StuFAPs)	2016	490	To be determined
Total Enrolment in Higher Education institutions	SY 2015-2016	181,195	To be determined
Total Tertiary Level Graduates	SY 2014-2015	30,588	To be determined
Sub-Sector Outcome 2: Access to Industry-Driven Skills Training Improved			
Number of TVET enrollees	2015	151,109	820,512
Number of TVET graduates	2015	146,971	738,462
Number of assessed persons/TVET graduates	2015	81,297	487,782
Number of certified persons/TVET graduates	2015	69,102	414,612
Number of beneficiaries of Private Education Students Financial Assistance Program (PESFA)	2015	889	5,334
Number of beneficiaries of Training for Work Scholarship Program (TWSP)	2015	6,764	40,464
Number of beneficiaries of the Barangay Scholarship Program	No baseline (New Program)		To be determined
Sub-Sector Outcome 3: Increased Levels of Opportunities for, and Access to Decent and Productive Work			
Percent decrease in underemployment rate	2016	0.6% increase	To be determined
Percent decrease in unemployment rate	2016	2.1% decrease	To be determined

Sub-Sector Outcome 2: Universal quality basic education achieved

Improve quality of basic education in line with the K to 12 program. The region will need to improve the quality of basic education to support the full implementation of the K to 12 program

since the success of the program requires the provision of (a) timely delivery of adequate education inputs such as school infrastructure, quality learning materials including assistive devices, and ICT equipment; (b) hiring and professional development of teachers; c) effective and transparent monitoring and evaluation

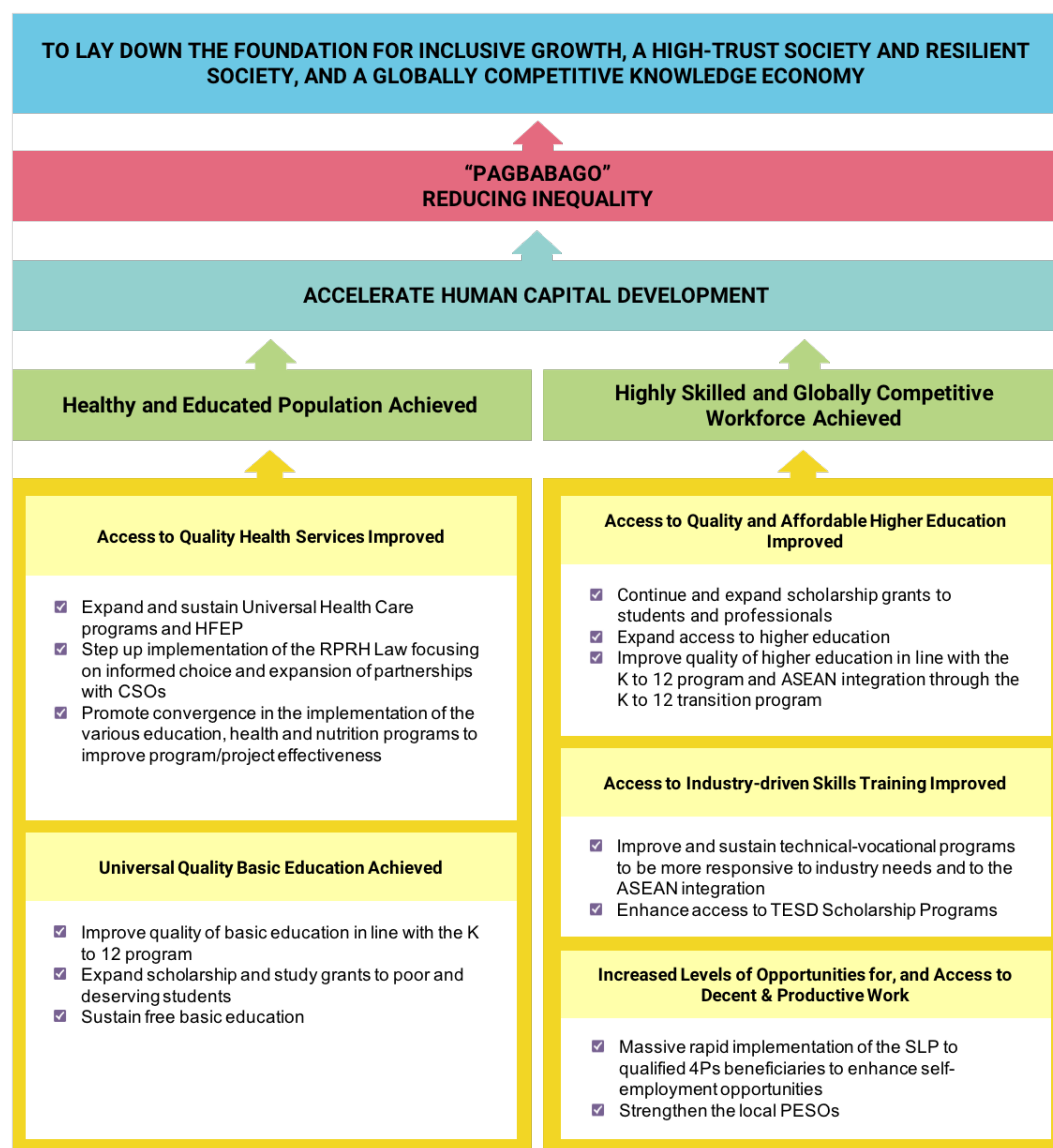
system; d) public financial management reforms to ensure availability and timely delivery of infrastructure and learning resources for formal and non-formal education; and e) a financial management information system to track the status of budget releases and facilitate timely interventions when problems arise.

Expand scholarship and study grants to poor and deserving students. Scholarship

and study grants will be accessible to poor and deserving students through the continued provision of financial assistance.

Sustain free basic education. Since some people lack basic education, this strategy will enable all to acquire literacy, baseline mathematical understanding, and general life skills.

Figure 10.3 Strategic Framework to Accelerate Human Development in Region 1 (2017-2022)



Sector Outcome B: Highly Skilled and Globally Competitive Workforce Achieved

Improve quality of higher education in line with the K to 12 program and ASEAN integration through the K to 12 transition program. This strategy will provide support to higher education institutions and employees through development packages such as scholarships, development grants, and innovation grants. Typology and outcomes-based higher education will also be enforced through quality assurance, monitoring and evaluation across areas of discipline to ensure the production of competent and competitive talents in the region and the country as a whole. While the government is answering the need to provide competent workforce, it also vital to address the competency requirements of the industries in response to job mismatch.

Sub-Sector Outcome 1: Access to quality and affordable higher education improved

Continue and expand scholarship grants to students and professionals. Expanding the scholarship and study grants enable all to have access to higher education.

Expand access to higher education. Higher education will be transformed as a force for social and cultural transformation. To do this, the following strategies will be undertaken: (1) expand access to learners in special circumstances (Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP), Ladderized, Distance Education). This is a mode of acquiring a degree specifically designed for the working class who do not have time to complete their degrees without necessarily attending the formal class inside the classroom and implemented through online learning, and

equivalency and accreditation of trainings and experiences; and (2) maintain access to higher education by poor but deserving students. CHED will ensure that quality higher education is accessible to poor but deserving students by providing financial assistance through the Student Financial Assistance Program (STUFAPs). Culture of research will also be promoted among higher education institutions to contribute in the increase of needed researchers and research outputs that could serve as basis in crafting policy decisions. Research will also contribute to the formulation of new technologies that could steer the realization of the region and the country's development.

Sub-Sector Outcome 2: Access to industry-driven skills training improved

Improve and sustain the technical-vocational programs to be responsive to industry needs and to the ASEAN integration. The regular conduct of audit to TESD-registered programs will ensure compliance to standards per TESDA training regulations, making TESD delivery more relevant, responsive, effective and high quality.

Enhance access to TESD Scholarship Programs. The implementation of various TESD scholarship programs will provide increased access to skills development especially among the members of the marginalized sectors and individuals from vulnerable groups. Individuals interested to avail of TESD Scholarship programs could either enlist themselves through the barangay skills needs survey, apply online or as walk-in applicants.

Sub-Sector Outcome 3: Increased levels of opportunities for, and access to decent & productive work

Massive and rapid implementation of the SLP to qualified 4Ps beneficiaries to enhance self-employment opportunities. The Sustainable Livelihood Program (SLP) is an enhanced program from the previously known as Self-Employment Assistance-Kaunlaran (SEA-K) Integrated Program (2011-2012). The massive and rapid implementation of the SLP will enhance the accessibility of poor

households to help them stay out of poverty.

Strengthen local Public Employment Service Offices (PESOs). The existing employment facilitation service machinery of the government particularly at the local levels will be strengthened and expanded especially those in capital towns, key cities, and other strategic areas to ensure the prompt, timely and efficient delivery of employment service and provision of information on other DOLE programs.

Legislative Agenda

To complement the strategies identified, legislative action will be sought in support of the goal of accelerating human capital development.

Table 10.13 Legislative Agenda to Accelerate Human Development in Region 1 (2017-2022)

LEGISLATIVE AGENDA	RATIONALE
Enhanced Universal Health Care Act	<p>This act shall support the strategies in achieving social insurance coverage for the poor, vulnerable and marginalized.</p> <p>An act expediting universal healthcare through the national health insurance program and improving the Philippine Health Insurance Corporation's (Philhealth) benefit packages, providing funds therefor and for other purposes.</p>
Free Higher Education Act	<p>This act will support the access to quality and affordable higher education.</p>

11

Reducing
Vulnerability of
Individuals and
Families

Reducing Vulnerability of Individuals and Families

Resiliency of individuals and families shall focus on helping individuals and families to positively adjust in light of challenging life events or stressors. This chapter shall provide the plan to strengthen the resilience of the poor and vulnerable population; particularly by improving or providing flexible social safety nets, and cash transfer schemes, which can mitigate damages and limit them to the short term. While policy action in the past has predominantly focused on the provision of post-disaster relief and recovery, action must also be taken ex-ante to build the resilience of the poor.

Assessment and Challenges

Poverty Reduction

The overarching goal of development efforts is the improvement in the quality of life of the people. The Philippines is no exception. As one of the nations that participated in the Millennium Summit in September 2000, it has committed to achieve 48 targets including eradication of poverty. In addition to international commitments, the Philippines has been working toward poverty reduction for decades. It has even included targets on human development and poverty reduction in its development plans.¹ In the region, various poverty reduction programs were implemented such as the “Tatsulo” program of the DSWD in coordination with various government agencies, Local Government Units (LGUs), and basic sectors of society. Institutional structures were put in place in the implementation of the program. The program significantly contributed in

achieving the RDP target of reducing poverty in the region. (See discussion on Social Protection programs)

Poverty among families continued to decrease. The proportion of families living below the poverty line declined faster in the region from 2006 to 2015. Notably in 2015, only 9.6 percent or an estimated 112,233 families in Region 1 were poor. This was way lower than the 2016 target of 11 to 13.4 percent, and even 6.9 percentage points lower than the estimated 16.5 percent poverty incidence of the country. Among the provinces in Region 1, Ilocos Norte recorded the lowest poverty incidence at 3.3 percent or an estimated 4,848 poor families, the lowest recorded magnitude of poor families in all the provinces of the region. On the other hand, Pangasinan had the highest poverty incidence in the same year at 11.2 percent or 71,562 poor families.

Meanwhile, La Union recorded a 6.1 percentage points decline in its poverty incidence among families from 15.3

¹Department of Social Welfare and Development (DSWD). DSWD Programs and Services. Retrieved at: <http://www.dswd.gov.ph/>

percent in 2012 to 9.2 percent in 2015. This was followed by Ilocos Norte and Ilocos Sur with 5.1 percentage points and 4.2 percentage points decline, respectively. Pangasinan recorded the least decrease in poverty incidence with only 3.7 percentage points from 14.9 percent in 2012 to 11.2 percent in 2015.

Poverty situation improved but there is a need to strengthen localization and poverty reduction efforts in the region.

Although the poverty situation in the region is improving through the implementation of various programs and projects, much still needs to be done in strengthening and localizing poverty reduction programs and projects. The Local Poverty Reduction Action Plans (LPRAPs) must work on the premise of responding to the real needs of the poor as well as converging government services and poverty alleviation efforts at the local levels to ensure that no province, city or even municipality is lagging behind. Given the limited resources, there is a need for all LGUs to conduct poverty diagnosis as basis in preparing their poverty reduction action plans. (See also Chapter 15's discussions about poverty)

Social Protection

Sub-Sector Outcome 1: Capability and Competency of Poor and Vulnerable Population in Accessing Social Protection Services Enhanced

Fully attained. The capability and competency of the poor and vulnerable population in accessing social protection services was enhanced. This is evident in the achievement of the National Household Targeting System for Poverty Reduction (NHTS-PR) target coverage and the expanded coverage of the Pantawid Pamilyang Pilipino Program (Pantawid Pamilya).

Social Protection for the Poor and Disadvantaged Individuals

National Household Targeting System for Poverty Reduction (NHTS-PR) target coverage was achieved and the Pantawid Pamilyang Pilipino Program (Pantawid Pamilya) coverage was expanded. A total of 249,883 poor households were identified through the NHTS-PR or Listahanan assessment activities in 2009-2013. Of this, 99.41 percent are already accessing various social protection programs, projects and services of the different stakeholders in Region 1 (Table 11.1).

The programs and projects accessed include the Pantawid Pamilyang Pilipino Program (Pantawid Pamilya). The Pantawid Pamilya beneficiaries served increased by 1,202.6 percent from 15,388 in 2011 to 200,442 in 2016 (Figure 11.2). Increase in the percent coverage of Pantawid Pamilya beneficiaries was also sustained from 2011 to 2016 with an average rate of 119.1 percent per year. Among the provinces, Pangasinan consistently recorded the most number of beneficiaries for the period as it has the highest magnitude of poor families in the region.

Despite the increasing number of the program beneficiaries in the region, most of the Pantawid Pamilya households were still in the subsistence stage. Thus, there is still a need to enhance the program to help the poor families to cross the poverty line and become self-sufficient.

Another program accessed by the poor households is the Sustainable Livelihood Program (SLP) which is an enhanced program from the previously known Self-Employment Assistance-Kaunlaran (SEA-K) Integrated Program (2011-2012). The number of beneficiaries increased by 1,056.15 percent, from 1,496 in 2011 to

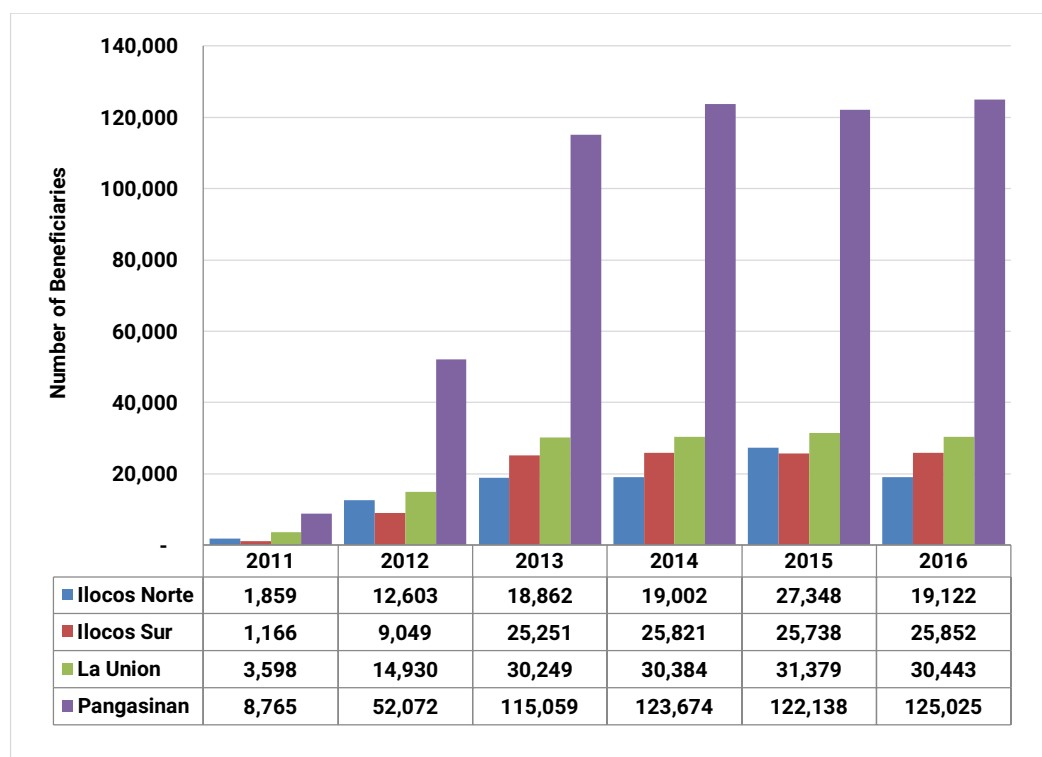
17,296 households in 2016. The DSWD encourages the Listahanan-identified poor families, especially Pantawid Pamilya members, to engage in resource-based and market-driven community micro-enterprises, or explore employment opportunities.

Table 11.1 Percentage of Poor Households Accessing Social Protection Programs/ Projects/Services (2014-2016)

Geographical Area	CY 2014		CY 2015		CY 2016		TOTAL	
	Number	%	Number	%	Number	%	Number	%
Ilocos Norte	845	3.39%	24,050	96.48%	16	0.06%	24,911	99.94%
Ilocos Sur	3,016	8.79%	31,127	90.74%	27	0.08%	34,170	99.61%
La Union	3,424	8.51%	36,236	90.03%	19	0.05%	39,679	98.58%
Pangasinan	13,272	8.82%	136,323	90.64%	52	0.03%	149,647	99.50%
Region 1	20,557	8.23%	227,736	91.14%	114	0.05%	248,407	99.41%

Source: Department of Social Welfare and Development (DSWD)

Figure 11.1 Number of Pantawid Pamilyang Pilipino Program Beneficiaries by Province, Region 1 (2011-2016)



Source: Department of Social Welfare and Development (DSWD)

Table 11.2 Number of Beneficiaries of Other Social Protection Programs, Region 1 (2011-2016)

Programs	Accomplishment					
	2011	2012	2013	2014	2015	2016
Social Pension for Indigent Senior Citizens	-	13,748	16,407	39,763	64,366	91,281
Supplemental Feeding Program beneficiaries (children)	76,074	78,580	83,612	90,910	95,102	99,500
Recovery and Reintegration Program for Trafficked Persons (individual)	-	-	-	51	34	85

Source: Department of Social Welfare and Development, Field Office 1 (DSWD FO1)

Table 11.3 Number of Clients Served in Residential and Community-based Services, Region 1 (2011-2016)

Indicator	2011	2012	2013	2014	2015		2016	
					Male	Female	Male	Female
Total Clients Assisted Served	618	697	757	514	3,543	12,076	13,267	26,691
PWDS	142	148	131	113	95	111	499	396
WEDC and their Dependents	147	149	183	29	7	8,126	19	14,986
CNSP(or CEDC)	329	400	443	372	3,441	3,836	12,749	11,308

Notes: PWDS – Persons with Disabilities, W/MEDC – Women and men in Especially Difficult Circumstances, and CEDC - Children in Especially Difficult Circumstances

Source: Department of Social Welfare and Development, Field Office 1 (DSWD FO1)

Moreover, the Kapit-bisig Laban sa Kahirapan Comprehensive and Integrated Delivery of Social Services – National Community-Driven Development Program (KALAHIDSS – NCDDP) has been implemented in 11 municipalities as of 2016 contributing to the inclusive development of communities. In 2015 and 2016, the beneficiaries of KALAHIDSS – NCDDP implemented 13 (2015) and 59 (2016) different sub-projects based on the needs of the community and benefited a total of 561 and 8,377 households, respectively.

There is still a need to improve the provision of social protection services in the region to eradicate poverty. Despite the improvement of the poverty situation

in the region, there is still a need to improve the provision of social protection services in the region due to the following issues and concerns: 1) fragmented efforts of agencies in addressing poverty particularly in the implementation of various poverty reduction programs; and 2) limited capacity of local social welfare and development offices in implementing poverty reduction programs to address poverty reduction concerns.

There is also a need to expand and improve the Pantawid Pamilya program.

This is to address the urgent concern to prevent the families who have already crossed the poverty line from reverting into poverty and to help the Pantawid

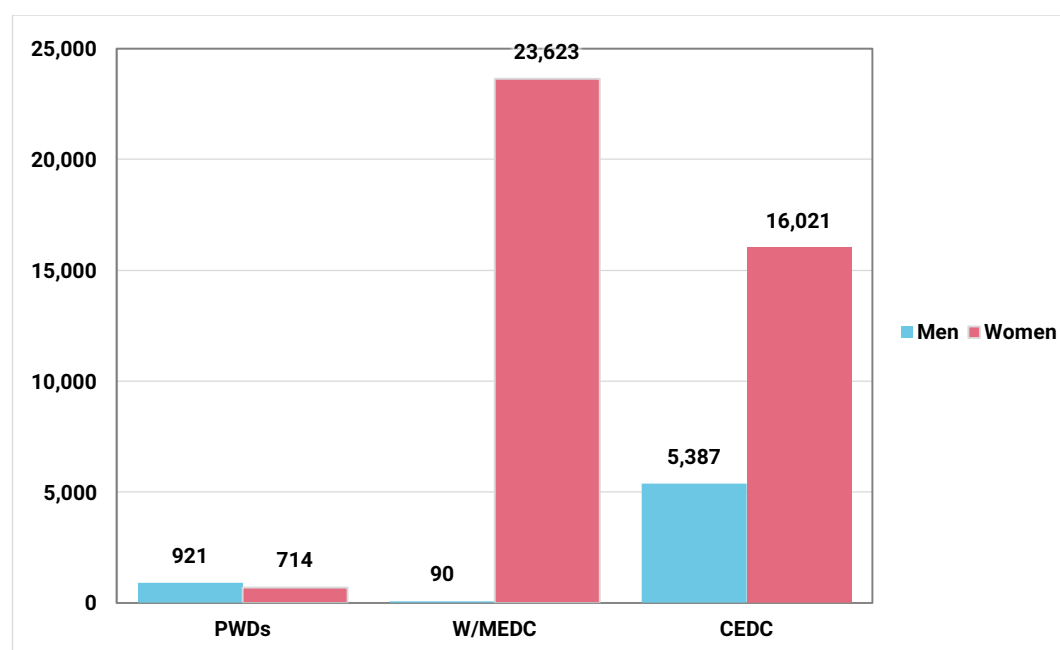
Pamilya beneficiaries and their families become self-sufficient and self-reliant.

Social Protection for the Migrant Workers

Social protection to migrant workers needs to be enhanced. Although migrant workers contribute to our economy, they, particularly undocumented migrant

workers, are also among the most excluded from basic coverage of social protection instruments and schemes. As of October 2016, there were 68,464 registered Filipino emigrants in Region 1. About 42.0 percent of these were from Pangasinan, 28.12 percent were from La Union, 16.09 percent were from Ilocos Sur and 13.79 percent were from Ilocos Norte.

Figure 11.2 Total Number of Clients Served through Residential and Community-based Services, Region 1 (2011-2016)



Source: Department of Social Welfare and Development (DSWD)

Table 11.4 Number of Registered Filipino Emigrants, Region 1 (2013-2016)

Region/ Province	2013	2014	2015	2016*
Region 1	8,322	8,738	27,807	23,597
Ilocos Norte	2,389	2,380	3,040	1,632
Ilocos Sur	1,322	1,408	3,980	4,306
La Union	948	1,265	8,989	8,052
Pangasinan	3,663	3,685	11,798	9,607

NOTE: *January to October only

Source: Philippine Overseas Employment Administration (POEA)

The number of registered Filipino emigrants also increased significantly by 183.55 percent from 8,322 in 2013 to 23,597 in 2016, although, there are still those who are undocumented.

The DOLE through the POEA had been providing pre- and post-employment programs and services to the Overseas Filipino Workers (OFWs) to protect them. These include: pre-employment and pre-departure orientation seminars, establishment of One-Stop-Shop Service Center for OFWs, creation of the Assist – WELL (Welfare, Employment Livelihood and Legal Advice) Program for OFWs repatriated through crisis/emergency and other related situations, institutionalization of the Public Employment Service Office (PESO), massive campaign efforts against anti-illegal recruitment, JobsFit Program, DOLE’s Integrated Livelihood and Emergency Employment Program (DILEEP), and the migration and development initiatives of the provinces of Pangasinan and La Union.

Social Protection During Disasters

Social protection is also needed to be taken ex-ante to build the resilience of the poor, not just during post-disaster relief and recovery. There was an average of eight disaster operations managed on a yearly basis from 2011 to 2015. Moreover, various disaster risk reduction and management programs, projects, and activities were undertaken in the region through the Disaster Response Assistance and Management Bureau (DReAMB) of the DSWD FO1 such as the Humanitarian Relief Assistance (HRA) and Cash-for-Work (CFW)/Food-for-Work (FFW). The HRA program was able to provide Food and Non-Food Items (FNFI) to 70,320 men and women family heads in 2016, while the CFW/FFW programs had a beneficiary of 36,078 men and women family heads during disasters in 2016.

Strategic Framework

Under the pillar “Pagbabago” or reducing inequality, this Plan in line with the PDP 2017-2022 aims to build socioeconomic resilience of families by reducing their vulnerability to various risks/disasters. The Ilocos RDP 2017-2022 also supports the government in achieving universal and transformative social protection for all Filipinos.

Targets

The Plan targets to reduce the resilience of the poor and vulnerable population particularly by improving or providing flexible social safety nets, and cash transfer are provided in Table 11.5.

Strategies

This chapter aims to achieve resilient and adaptive individuals and families. The sub-chapter outcomes are: (1) social insurance coverage for the poor, vulnerable and marginalized achieved, and (2) access to quality and empowering social welfare and safety nets improved.

The following strategies will be pursued to achieve resilient and adaptive individuals and families in the region to reduce their vulnerabilities:

Sub-Sector Outcome 1: Social insurance coverage for the poor, vulnerable and marginalized achieved

Promote convergence of various social protection interventions through strengthened partnership between the LGUs, DSWD, PHIC, and SSS/GSIS. This will address the urgent concern to prevent the families who have already crossed the poverty line from reverting into poverty and to help the Patawid Pamilya families

become self-sufficient and self-reliant. Also, increasing the social insurance coverage for the poor will effectively be done through collaboration and partnership of the LGUs and these agencies.

Improve social pension system. The region will support the review of the Senior Citizen Law to tackle adjustments in social pension and redefine the inclusion criteria to improve coverage.

Table 11.5.a Plan Targets to Reduce Vulnerability of Individuals and Families in Region 1 (2017-2022)

INDICATORS	BASELINE		END OF PLAN TARGET
	YEAR	VALUE	
Sub-Sector Outcome 1: Social Insurance Coverage for the Poor, Vulnerable and Marginalized			
Number of Senior Citizens served through the Social Pension for Indigent Senior Citizens Program	2016	91,281 Senior Citizens	121,622 (2017 only)
Sub-Sector Outcome 2: Access to Quality and Empowering Social Welfare and Safety Nets Improved			
Poverty Incidence Among Families			
Region 1	2015	9.6	To be determined
Ilocos Norte	2015	3.3	To be determined
Ilocos Sur	2015	9.5	To be determined
La Union	2015	9.2	To be determined
Pangasinan	2015	11.2	To be determined
Percent coverage of 4Ps beneficiaries	2016	97.75	To be determined
Increased number of 4Ps families moved up to self-sufficiency level	2016	200,442	202,848 (2017 only)
Improved access of poor households to at least two SWD programs (%) Region 1	2016	82.48	To be determined
Ilocos Norte	2016	96.91	To be determined
Ilocos Sur	2016	83.94	To be determined
La Union	2016	77.04	To be determined
Pangasinan	2016	81.21	To be determined
Number of men and women engaged in microenterprise development	2016	11,525 women 1,856 men	20,749 men/women (2017 only)

Table 11.5.b Plan Targets to Reduce Vulnerability of Individuals and Families in Region 1 (2017-2022) (continuation)

INDICATORS	BASELINE		END OF PLAN TARGET
	YEAR	VALUE	
Number of men and women engaged in employment facilitation activities	2016	2,649 women 2,586 men	5,187 men/women (2017 only)
Number of PWD men and women assisted in AVRC-I	2016	79 men 48 women	60 men/women (2017 only)
Number of children/youth served in Regional Rehabilitation Center for Youth (RRCY)	2016	155 males	100 (2017 only)
Number of girls served in Home for Girls (HFG)	2016	59 girls	70 (2017 only)
Number of Women served in Haven for Women (HFW)	2016	43 women	95 including dependents (2017 only)
Number of children served in Haven for Children (HFC)	2016	40 boys	45 (2017 only)
Number of children served through Supplementary Feeding Program	2016	99,500 children	99,500 (2017 only)
Number of KALAHY-CIDSS NCDDP sub-projects completed	2016	6	11 (2017 only)
Number of victim-survivors served through the Recovery and Reintegration Program for Trafficked Persons (RRPTP)	2016	85	50 (2017 only)
Number of Cash-for-Work (CFW) for CCA beneficiaries	2016	36,078	74,156 (2017 only)

Expand PhilHealth packages through the different health financial programs of the government. All health financial programs of the government agencies will intersect to support a universal health insurance. The target is to increase benefit utilization and adjust case rates to ensure full coverage of cost of care. Benefit packages will continue to expand and cover outpatient diagnostics, medicines, blood, and blood products. National Health Insurance Program (NHIP) will guarantee full support value for the poor and those admitted in basic accommodation. Predictable or fixed co-payment will be given to those admitted in non-basic, private accommodation.²

Strengthen mechanisms to ensure enrolment in the social security systems.

²National Economic and Development Authority (NEDA). Philippine Development Plan 2017-2022.

The government will revisit and assess existing mechanisms to encourage SSS enrolment of people in the informal sector.

Sub-Sector Outcome 2: Access to quality and empowering social welfare and safety nets improved

Promote convergence of various social protection interventions and enhance the Pantawid Pamilya program. This will address the urgent concern to prevent the families who have already crossed the poverty line from reverting into poverty and to help the Pantawid Pamilya families become self-sufficient and self-reliant. The social protection interventions will effectively be done through convergence of programs and projects of the government. Moreover, this will ensure that the rights of poor, women and children are upheld.

Improve implementation of laws and policies on social protection. The region will also support the government to assess resources and capabilities of relevant national government agencies (NGAs).

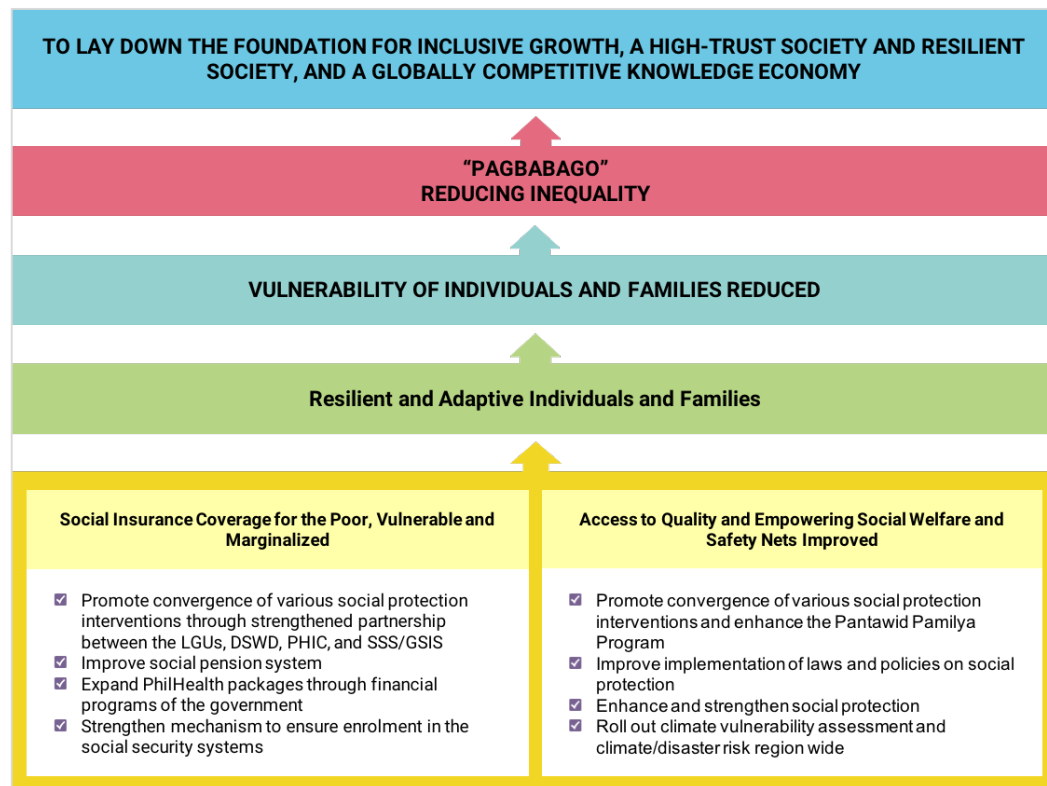
Existing laws such as Batas Pambansa Blg. 344 will undergo review and possible amendments to be more responsive to emerging socioeconomic issues.

Enhance and strengthen social protection. Social protection for the poor and vulnerable sectors will be strengthened in all levels, particularly identifying social risks and vulnerabilities at the local level and addressing them through the utilization and implementation of the Social Protection Handbook and participation of the Provincial/City and

Municipal Social Protection Teams. In addition, the expansion of benefits and social protection services to safeguard workers in the informal economy will also be supported by the region.

Roll out climate vulnerability assessment and climate/disaster risk assessment region wide. The region also deems it necessary to mainstream disaster risk reduction and climate change adaptation (DRR-CCA). The Climate Change Commission (CCC) will craft an enabling policy and provide assistance to local communities in conducting vulnerability and risk assessment. The results of the assessment will form the backbone of local strategies and measures to reduce vulnerabilities.

Figure 11.3 Strategic Framework to Reduce Vulnerability of Individuals and Families in Region 1 (2017-2022)



Legislative Agenda

To complement the strategies identified, legislative action will be sought in support of the goal of achieving resilient and adaptive individuals and families in the region. **Table 11.6**

Table 11. 6 Legislative Agenda to to Reduce Vulnerability of Individuals and Families in Region 1 (2017-2022)

LEGISLATIVE AGENDA	RATIONALE
Social Welfare and Development Agencies (SWDAs) Bill	The bill will enhance the provision of social welfare and development services to the poor, the vulnerable and marginalized, and disadvantaged and underprivileged sectors of society in the region.
Social Security Act Amendments	The amendments aim to increase the SSS pension. SSS pensioners who are mostly senior citizen retirees depend only on their pension to support their basic needs and this would include medical attention. Providing pensioners said increase would ensure the responsiveness of their pensions in availing basic necessities in life. ³
National Disaster Risk Reduction and Management Authority	There is a need to strengthen disaster risk reduction and management in terms of organization, functionality and equipage. See Chapter 5.

³Senate of the Philippines. Senate Bill No. 181: An Act Increasing Pensions and Other Benefits Under the Social Security System, amending for the Purpose Section 12 Of Republic Act No. 1161, as amended, Otherwise Known as the Social Security Law. Retrieved at: <https://www.senate.gov.ph/lisdata/2360320240!.pdf>

12 Building Safe and Secure Communities

Building Safe and Secure Communities

The right to adequate housing is recognized in international legal instruments and its key aspects include the availability of services, facilities, materials and infrastructure; affordability; habitability; accessibility; location; and cultural appropriateness.¹ The government recognizes this right and plans to provide shelter assistance to all those in need. Specifically, this Plan shall improve the access to affordable, disaster resilient, and climate change adaptive housing in order to build safe and secure communities in the region.

Assessment and Challenges

Sub-Sector Outcome 1: Access to Decent, Affordable and Safe Housing Improved

Partly Attained. Access to decent, affordable and safe housing in the region has partly improved through the Affordable Housing Program of the Home Development Mutual Fund (HDMF), the socialized housing assistance of the National Housing Authority (NHA), and shelter assistance of the Department of Social Welfare and Development (DSWD). In 2011 to 2016, Pag-ibig Fund released housing loans to 4,474 households or an average of 746 households annually. The NHA, on the other hand, provided housing assistance in the region through its Resettlement Assistance Program to LGU beneficiaries with 2,338 recipients from 2012 to 2016; Settlement Upgrading project in 2015 with 290 beneficiaries; Housing Materials Assistance Program

with an annual recipient of 4,352 households in 2013 to 2016. A housing program for AFP and PNP was also implemented since 2013 where 3,933 families of military and policemen benefitted from this program. Families displaced from their homes due to disasters were likewise provided with assistance by the Emergency Shelter Assistance (ESA) and the Core Shelter Assistance Program (CSAP) of the DSWD.

Increasing housing backlogs in the region. The magnitude of the housing need in the region (defined as backlog plus new households) has been estimated to reach 200,653 in 2016. As of December 2016, the number of housing backlogs in the region already reached 158,976. These backlogs composed of doubled up households, displacements, and homeless.

Addressing this housing need will require hectares of land if designed to accommodate detached housing units. A higher density housing strategy is needed if the housing deficit is to be effectively addressed, to mention the required open space and utilities for decent, safe and

¹International Federation of Red Cross (IFRC). Minimum Standards in Shelter, Settlement and Non-Food Items. Retrieved from http://www.ifrc.org/PageFiles/95884/D.01.02.a.%20SPHERE%20Chap.%204-%20shelter%20and%20NFIs_%20English.pdf

comfortable living. It was also observed that despite the presence of several government initiatives implementing programs and projects for socialized housing, the housing backlog continued to pile up. Hence, there is a need to converge or harmonize these interventions for more concerted efforts in the delivery of services to target beneficiaries.

Other issues and challenges that need to be addressed to improve the provision of housing assistance, include: (1) Proliferation of squatting or marginalized settlements; (2) Low compliance of Local Government Units (LGUs) on the preparation of Local Shelter Plans (LSPs);

(3) The need for DENR-LMB or PENRO to expedite approval of request for the issuance of Presidential Proclamation for housing purposes; (4) The need for the continued implementation of Executive Order (EO) 48 regardless of change management of Philippine National Railways; (5) The need for all LGUs to establish the Local Housing Boards with an expanded function on Housing and Urban Development (not just demolition and eviction); and (6) The need for LGUs to validate and assess potential and hazard-free lands or sites to address their housing needs and to appropriate funds for housing.

Table 12.1 Total Housing Need (2011-2016)

Area	2011	2012	2013	2014	2015	2016	TOTAL
Philippines	1,380,537	1,173,456	997,438	847,822	720,649	612,552	5,732,454
NCR/MM	418,328	355,579	302,242	256,906	218,370	185,614	1,737,039
CAR	10,035	8,530	7,250	6,163	5,238	4,453	41,669
Region 1	48,323	41,075	34,913	29,676	25,225	21,441	200,653
Region 2	29,582	25,145	21,373	18,167	15,442	13,126	122,834
Region 3	112,675	95,774	81,408	69,197	58,817	49,994	467,865
Region 4A	158,723	134,915	114,677	97,476	82,854	70,426	659,071
Region 4B	27,696	23,542	20,101	17,009	14,457	12,421	275,329
Region 5	66,307	56,361	47,907	40,721	34,613	29,421	275,329
Region 6	90,111	76,594	65,105	55,339	47,039	39,983	374,171
Region 7	78,934	67,094	57,030	48,475	41,204	35,023	327,761
Region 8	44,759	38,045	32,338	27,488	23,364	19,860	185,854
Region 9	30,199	25,669	21,819	18,546	15,764	13,399	125,396
Region 10	54,446	46,279	39,337	33,467	28,421	24,158	226,078
Region 11	67,911	57,724	49,066	41,706	35,450	30,132	281,989
Region 12	47,291	40,197	34,168	29,043	24,686	20,983	196,368
ARMM	57,191	48,612	41,320	35,122	29,854	25,376	237,476
CARAGA	38,025	32,321	27,473	23,352	19,849	16,872	157,893

Source: Housing and Urban Development Coordinating Council (HUDCC)

Strategic Framework

This chapter is in line with the PDP 2017-2022's aims to build socioeconomic resilience by building safe and secure communities. The Ilocos RDP 2017-2022 also supports the government in expanding access to affordable, adequate, safe, and secure shelter in well-planned communities under the development pillar of "Pagbabago" or reducing inequality.

Targets

The Plan targets to build safe and secure communities in the region particularly through the provision of housing are listed in Table 12.2.

Strategies

This chapter aims to build safe and secure communities. The sub-chapter outcome is to improve the access to affordable, disaster resilient, and climate change adaptive housing in the region.

The following strategies will be pursued to improve the access to affordable, disaster resilient, and climate change adaptive housing for safe and secure communities in the region:

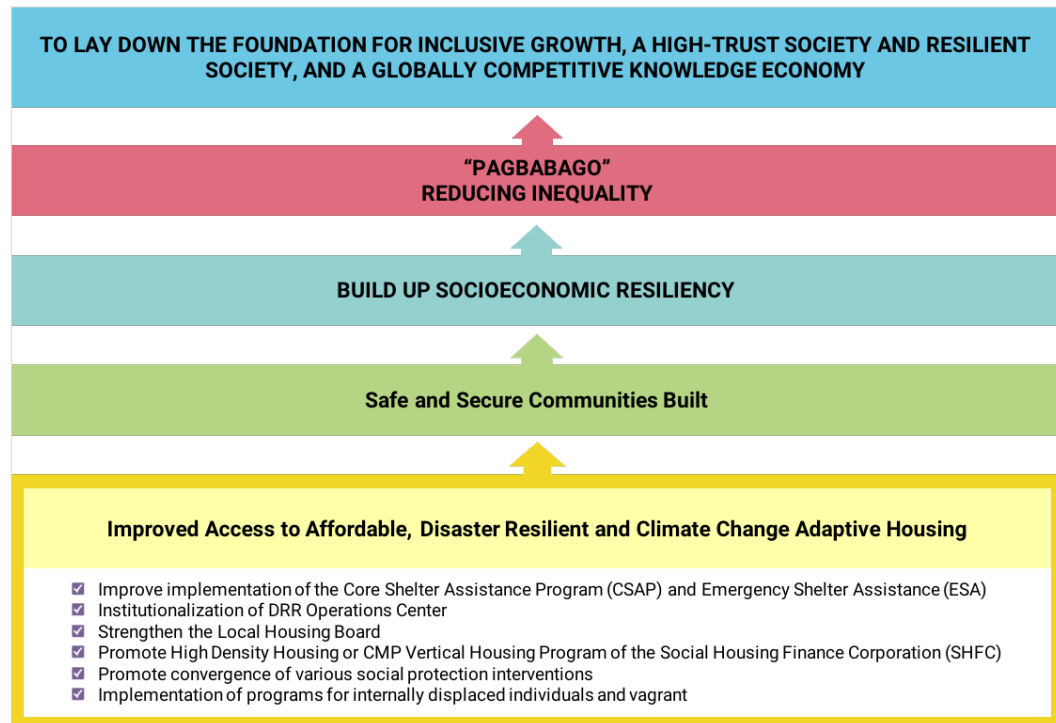
Sub-Sector Outcome 1: Improved access to affordable disaster resilient and climate change adaptive housing

Improve implementation of the Core Shelter Assistance Program (CSAP) and Emergency Shelter Assistance (ESA). The improvements on these programs will expand the provision of financial and/or material assistance to male and female household heads whose houses are either totally or partially damaged due to disasters. The CSAP will also include improved provision of housing or shelter that can withstand disasters.

Table 12.2 Plan Targets to Build Safe and Secure Communities in Region 1 (2017-2022)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	Year	Value	
Sub-Sector Outcome 1: Improved Access to Affordable, Disaster Resilient and Climate Change Adaptive Housing			
Number of LGUs with Local Shelter Plan (LSP)	2016	120	125
Number of displaced households relocated/ assisted	2016	379	450
Number of loan takeout for housing purposes	2016	695	1,231
Number of housing loan borrowers	2016	695	1,231
Total amount of loan takeout (in Php Million)	2016	933.94	To be determined
Number of internally displaced male and female household heads provided with Emergency Shelter Cash Assistance (ESCA)	2016	42,916	To be determined
Number of male and female household heads provided with Core Shelter Assistance (CSA)	2016	557	To be determined

Figure 12.1 Strategic Framework to Build Safe and Secure Communities in Region 1 (2017-2022)



Institutionalization of DRR Operations Center. The institutionalization of a DRR Operations Center will not only provide immediate assistance during disaster, but also include the identification of safe areas for construction of transition houses and permanent resettlement based on the available risk assessment and hazard maps. *See Chapter 11's strategy about DRR+CCA.*

Strengthen the Local Housing Board (LHB). The functions of the LHB will be expanded to include housing and urban development as stipulated in the Urban Development and Housing Act (UDHA) in addition to eviction and demolition and will ensure the implementation of the LSP. The LHBs will have to be institutionalized through an ordinance to ensure continuing implementation of the housing plan.

Promote High Density Housing or Community Mortgage Program (CMP) Vertical Housing Program of the Social

Housing Finance Corporation (SHFC). In 2017, the SHFC will start the provision of high density housing under the CMP. With the high demand for housing as well as the continuing increase in land prices, high-rise housing will be implemented to save expense on land and prevent further conversion of agricultural lands in the region.

Promote convergence of various social protection interventions. This will hopefully address the urgent concern to prevent the families who have already crossed the poverty line from reverting into poverty.

Implementation of programs for internally displaced individuals and vagrants. The expansion of benefits and social protection services will include programs for internally displaced individuals and vagrants.

Legislative Agenda

To complement the strategies identified, legislative action will be sought in support of the goal of improving the access to affordable, disaster resilient, and climate change adaptive housing in the region.

Table 12.3 Legislative Agenda to to Build Safe and Secure Communities in Region 1 (2017-2022)

LEGISLATIVE AGENDA	RATIONALE
Department of Housing and Urban Development Act	This department will be the sole planning and policy-making, regulatory, program coordination, and performance-monitoring entity of the NSP. ² This will address the problem on unresponsive policies and uncoordinated institutions. Thus, the presence of one single body for housing will improve the shelter security of the people and will also improve access to affordable, disaster resilient and climate change adaptive housing.

²National Economic and Development Authority (NEDA). Philippine Development Plan 2017-2022

PART IV

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



13

Reaching for the Demographic Dividend

Reaching for the Demographic Dividend

Reaching for the demographic dividend shall focus on identification of socio-economic policy instruments that yield the optimum out of the demographic dividend since it has a positive impact on economic growth. This shall translate the Philippine's Socio-economic Agenda in stepping-up implementation of Responsible Parenthood and Reproductive Health (RPRH) Law to enable the poor to have informed choice on the number and spacing of children they can properly care and provide for. Priority strategies are along achieving desired family size.

Assessment and Challenges

Several factors associated with changes in the size, structure, and attributes of the country's population affect the prospects for reaping the demographic dividend. These include population growth rates, distribution, health, education, employment, and finances. The country faces a number of challenges in these areas, which need to be addressed.¹ In the region, high population density, increasing adolescent fertility and teenage pregnancy, and high unmet need for family planning were seen as major issues in reaching for the demographic dividend.

Region 1's population density is higher than the population density of the country. The total population of the Region 1 accounted for about five percent of the Philippine population. Region 1's population density was registered at 388 persons per square kilometer which is higher than the 337 population density of the Philippines while Region 1's neighboring region, the Cordillera Administrative Region (CAR), was the least densely populated among the

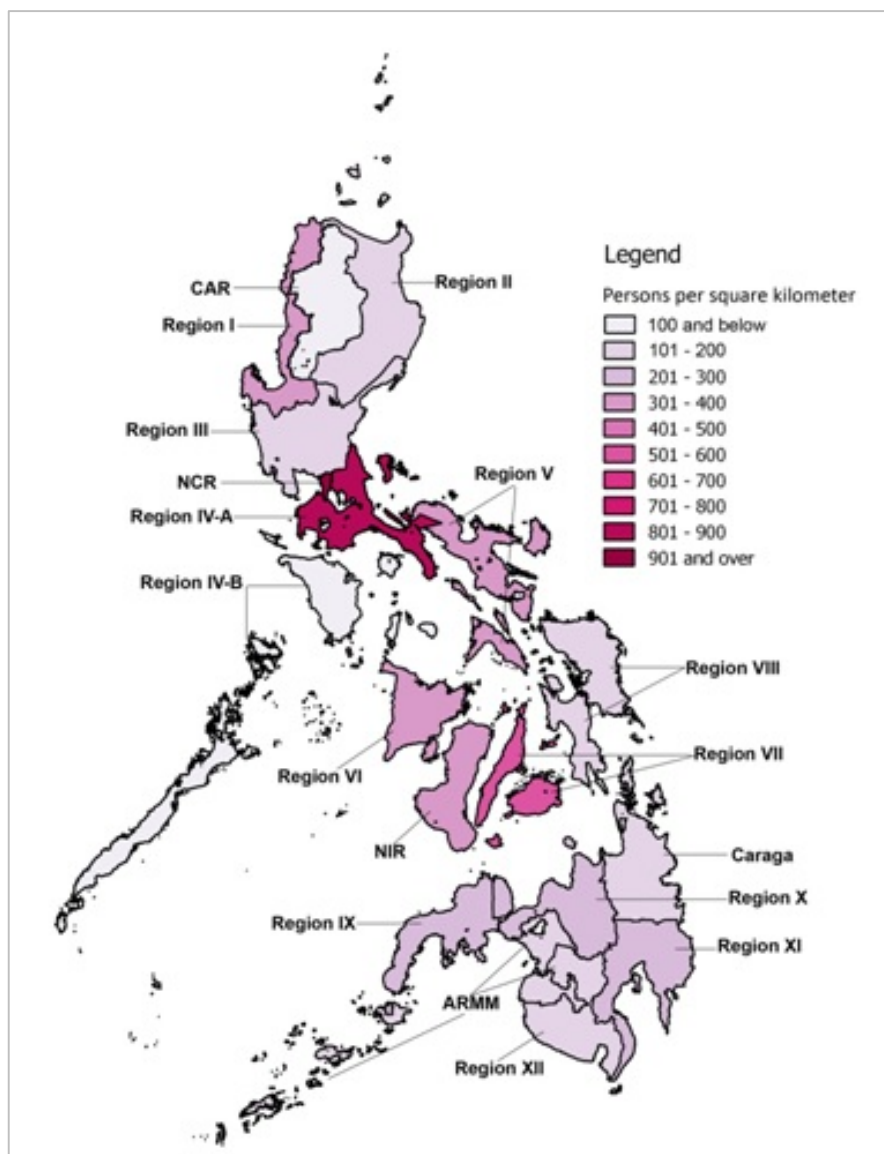
country's 18 administrative regions with 87 persons per square kilometer (Figure 13.1).

Two of the four provinces comprising the region had the biggest population and even belonged to the ten provinces with the highest population density in the country in 2015. Among the country's 81 provinces, Pangasinan and La Union belonged to the ten provinces with the highest population density (Figure 13.2). Pangasinan recorded a population density of 542 residents per square kilometer while La Union had 525 residents per square kilometer of land.

Among the provinces of Region 1, Pangasinan had the biggest population with 2.96 million in 2015 (Table 13.1). It was followed by La Union with 787 thousand and Ilocos Sur with 690 thousand. Ilocos Norte had the smallest population with 593 thousand. Pangasinan was also the fastest growing province in the region with an average annual population growth rate (PGR) of 1.18 percent during the period 2010 to 2015. It was followed by La Union (1.12 %) and Ilocos Sur (0.88 %) while Ilocos Norte posted the lowest PGR of 0.83 percent.

¹National Economic and Development Authority (NEDA). Philippine Development Plan 2017-2022.

Figure 13.1 Philippine Population Density Map, by Region (2015)



Source: Philippine Statistics Authority (PSA) and Department of Environment and Natural Resources-Land Management Bureau (DENR-LMB)

Young girls and boys continued to form the base of the region's population age structure. About 41.47 percent or around 2 million of the region's population in 2010 were below 19 years of age (teenagers and below). Almost half (49.57%) or 2.3 million were between 20 to 59 years of age, and 8.95 percent or 425 thousand were aged 60 and over (senior citizens). This means that the region has a young population that will continue to increase the population due to

the large cohorts of young girls who will soon enter the childbearing years and contribute to fertility level.

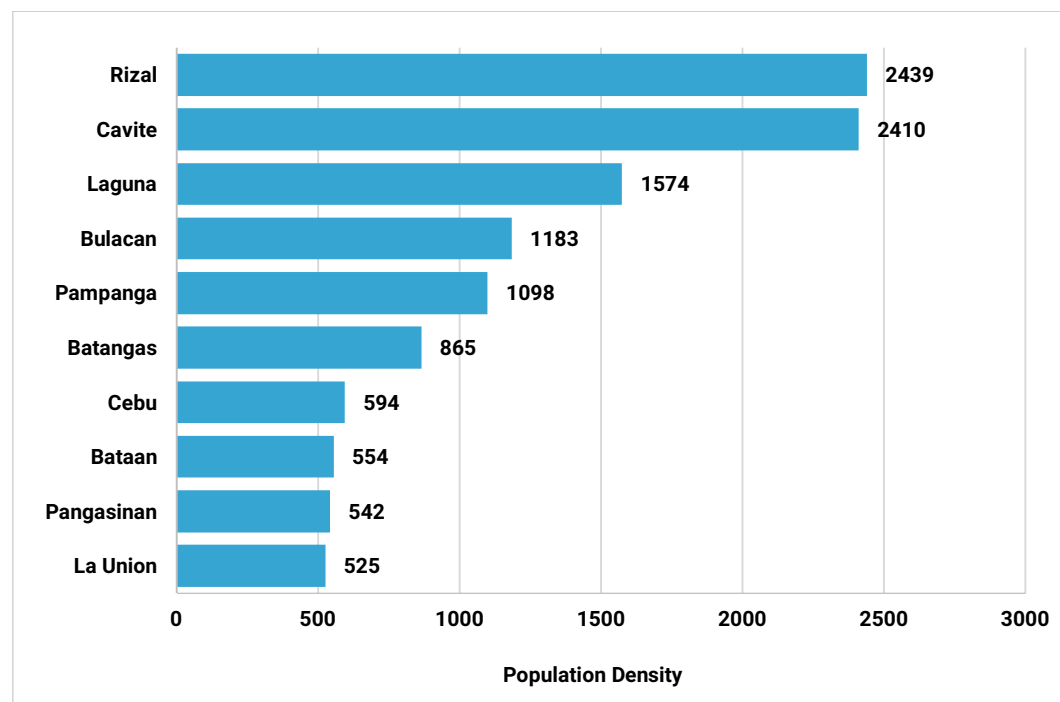
There was a high fertility level in the region. Based on the 2013 National Demographic and Health Survey (NDHS), the region had a Total Fertility Rate (TFR) of 2.8 which is lower than the national level at 3.0. While the TFR is quite high, this has

significantly decreased from 3.4 in 2008 to 2.8 in 2013.

Assuming that the 2.8 TFR of the region remains constant from 2010 to 2060, the population of the region will reach 9.03 million in 2060. However, if the TFR of the

region decline to the replacement fertility level which is at 2.1 percent in 2030 onwards, the population will reach 7.21 million in 2060 which is 1.82 million lower than the projected population at constant rate.

Figure 13.2 Ten Most Densely Populated Provinces (2015)



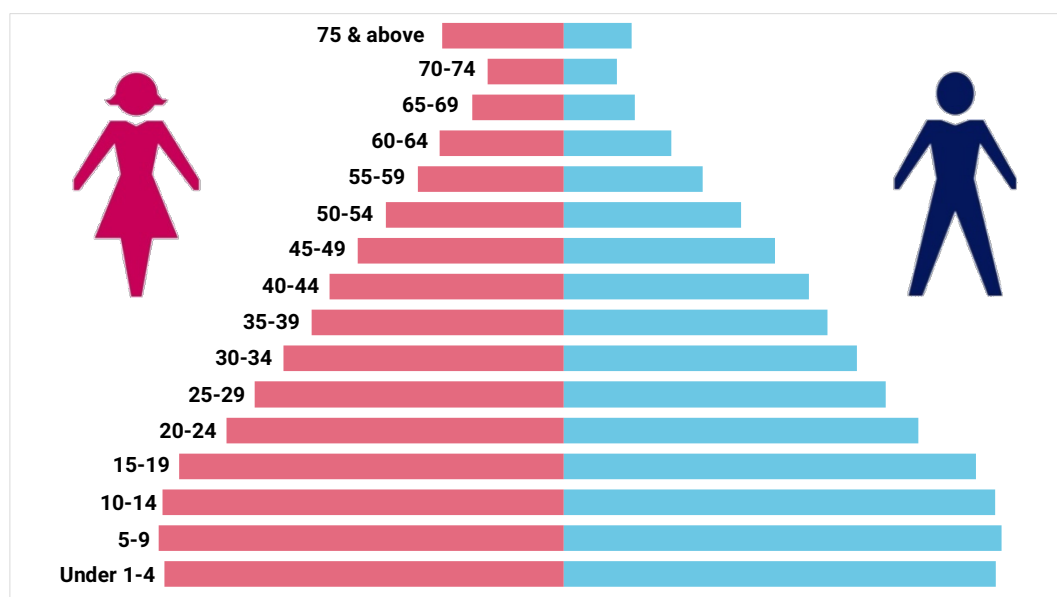
Source: Philippine Statistics Authority (PSA)

Table 13.1. Population, Land Area, Population Density, and Population Growth Rate of Philippines, Ilocos Region and its Provinces (2015)

Region/ Provinces	Population	Land Area (square kilometers)	Population Density (persons per square kilometer)	Population Growth Rate	
				2010-2015	2000-2015
Philippines	100,979,303	300,000.00	337	1.72	1.90
Region 1	5,026,128	12,964.62	388	1.09	1.23
Ilocos Norte	593,081	3,418.75	173	0.83	1.00
Ilocos Sur	689,668	2,596.00	266	0.88	1.03
La Union	786,653	1,499.28	525	1.12	1.21
Pangasinan	2,956,726	5,450.59	542	1.18	1.34

Source: Philippine Statistics Authority (PSA)

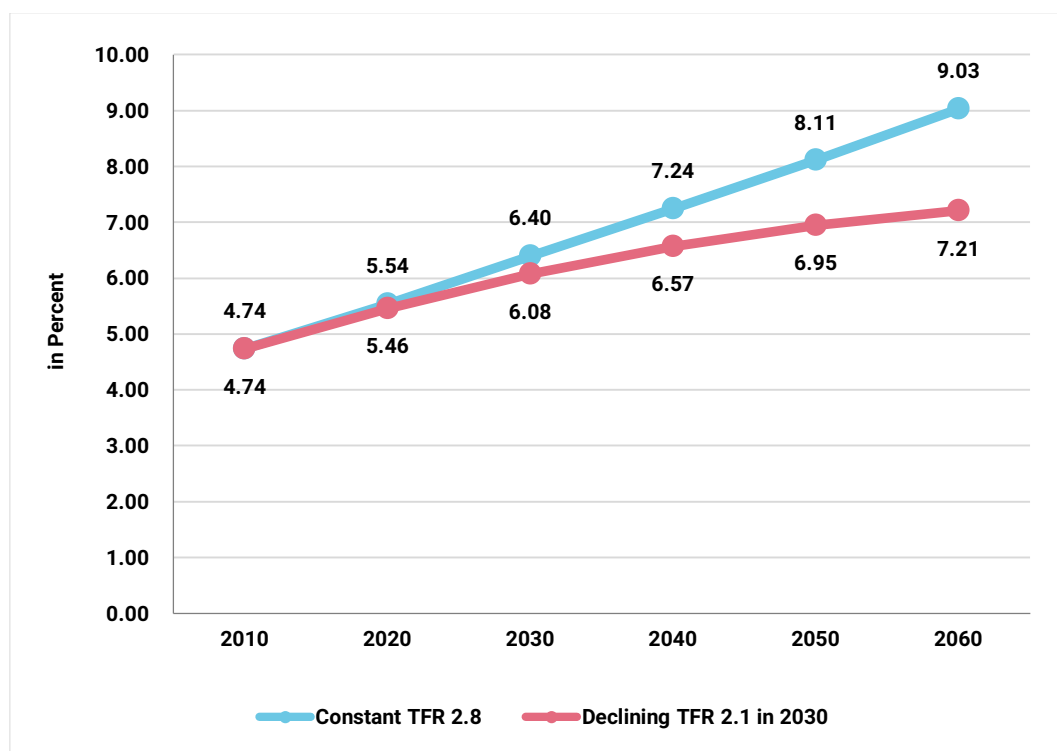
Figure 13.3 Total Population in Ilocos Region, by Sex and Age Group (2010)



Note: Latest available is as of May 2010

Source: Philippine Statistics Authority (PSA)

Figure 13.4 Projected Comparative Population of Region 1 (2010-2060)



Note: Using Assumption of Constant and Declining Fertility Rates

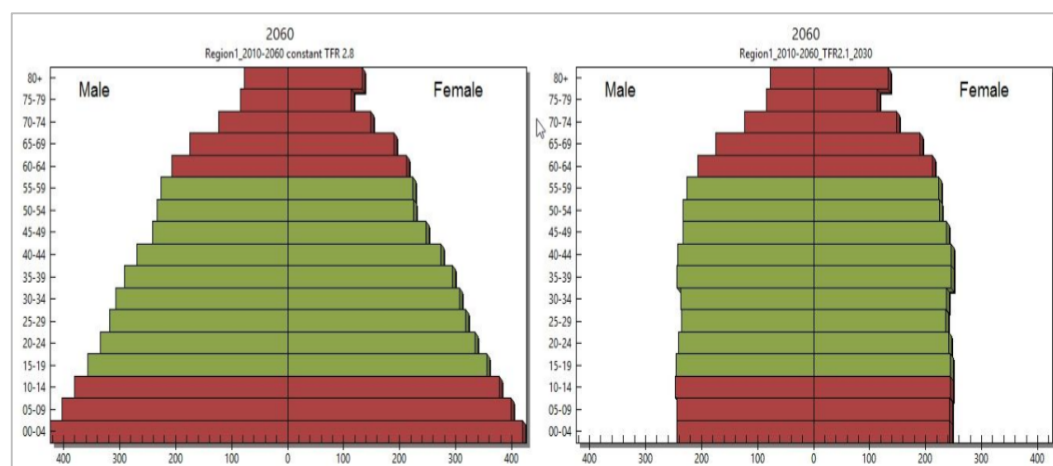
Source: Commission on Population(PopCom)/ Philippine Statistics Authority (PSA)

Should the TFR of the region reach the replacement level (2.1 percent) in 2030 onwards, the projected population pyramid shows different scenario for the region. The population pyramid (Figure 13.4) with a 2.1 TFR shows a narrower base which translates into having lesser young population age (0-14 years old) compared to the population pyramid with a constant 2.8 TFR. On the other hand, the aging population (60 and above years old) remains the same. These mean that a lesser young population and a constant aging population can contribute to lower dependency ratio.

Couples in Region 1 had more children than their desired number of children.

There was still difference between the total fertility and wanted fertility of couples in the region. Based on the latest NDHS, couples in the region only wanted to have an average of two children (Total Wanted Fertility) in 2013. However, in reality, they had an average of 2.8 children (TFR). The desired number of children had been decreasing from three children in 2003 to two children in 2013.

Figure 13.5 Projected Comparative Population of Region 1 by Age-Sex (2010-2060)



NOTE: Using Assumption of Constant and Declining Fertility Rates; Projected using Spectrum 5 - 2010 data
Source: Commission on Population (PopCom)/ Philippine Statistics Authority (PSA)

Increasing adolescent fertility. There was a sharp increase in the proportion of youth who have engaged in early sex (before age 18) based on the 2013 Young Adult Fertility and Sexuality (YAFS4) survey. The increase was more noticeable for females, jumping from 12.6 percent in 1994 to 23.7 percent in 2013. However, there was a slight decline in the proportion of youth who engaged in sex before age 15. Around 3 in every 10 youth in Region 1 have engaged in premarital sex which shows a

sharp rise in the past decade, the same trend as the national.²

Sharp increase in teenage pregnancy/ adolescent birth rate in the region. The increasing adolescent fertility is translated to the sharp increase in the teenage pregnancy/adolescent birth rate in Region 1. The adolescent birth rate³ in

²Commission on Population, (PopCom). The Regional Population Management Program of Region 1 (RPMP), Strategic Plan for 2017-2022

³Adolescent Birth Rate refers to the number of births to women ages 15-19 per 1,000 women ages 15-19 (UNDP, 2013).

2016 was registered at 12.42 percent which is 5.42 percentage points higher than in 2015. Among the four provinces, Ilocos Sur had the highest adolescent birth rate in 2016 at 16.62 percent, followed by Pangasinan at 12.41 percent, La Union at 9.51 percent, and Ilocos Norte at 8.60 percent. Pangasinan had the highest increment in adolescent birth rate at 7.84 percentage points, from 4.57 percent in 2015 to 12.41 percent in 2016.

High unmet need for family planning.

The Contraceptive Prevalence Rate (CPR) of Region 1 increased by 1.75 percentage points from 54.4 percent in 2013 to 56.15 percent in 2015. Among the four provinces, Ilocos Sur had the highest CPR at 70.02 percent in 2015, followed by La Union at 65.96 percent and Ilocos Norte at 53.83. Pangasinan had the lowest CPR at 50.79 percent. The region's unmet need for family planning was recorded at 19.3 percent in 2013 which is higher by 0.6 percentage point compared to the 18.7 percent in

2008 despite the increasing trend in CPR. Nonetheless, this was lower than the national level except in 2013, when it was higher by 1.3 percentage points, based on the results of the NDHS from 1998 to 2013. In line with the Executive Order No. 12 of the Duterte Administration, the Regional Population Office aims to achieve the zero unmet need for modern family planning through the strict implementation of the Responsible Parenthood and Reproductive Health Act, and through the increased effort in both demand generation and service delivery for family planning.

Since reaching demographic dividend will center on enabling the people to have informed choice on the number and spacing of children they can properly care and provide for, the region is now faced with challenges to strengthen advocacy on responsive family planning and also increase investments in family planning.³

Strategic Framework

Under the pillar “*Patuloy na Pag-unlad*” or increasing growth potential, this Plan, in line with the PDP 2017-2022, aims to accelerate demographic transition and reach demographic dividend.

Targets

The plan targets in achieving the desired family size in the region are presented in Table 13.3.

Strategies

This chapter aims to achieve a desired family size in the region. The chapter

outcomes are (1) improved access to adolescent reproductive health services, and (2) responsive family planning and reproductive health information and services achieved.⁴

The following strategies will be pursued to achieve the desired family size in the region to accelerate the demographic transition and to maximize the gains from demographic dividend:

⁴Commission on Population (PopCom). The Regional Population Management Program of Region 1 (RPMP), Strategic Plan for 2017-2022

Sub-Sector Outcome: Improved Access to Adolescent Reproductive Health Services

Ensure functional and efficient networks of health care providers. The region will be supporting the expansion and strengthening of the Service Delivery Networks (SDNs) to allow more men and women, especially the adolescents, to reach health facilities and avail of needed services such as nutrition, reproductive health, and other services related to health emergency response. The SDNs will facilitate access to care, specifically, gatekeeping and continuum of patient-friendly services from primary care level up to the specialty centers. Delivery of services will also be made more accessible with the use of information and communication technology. (See Chapter 10)

Sub-Sector Outcome: Responsive Family Planning and Reproductive Health Information and Services Achieved

Address unmet need for family planning and unwanted pregnancies. The region will be supporting this strategy which aims to attain and sustain

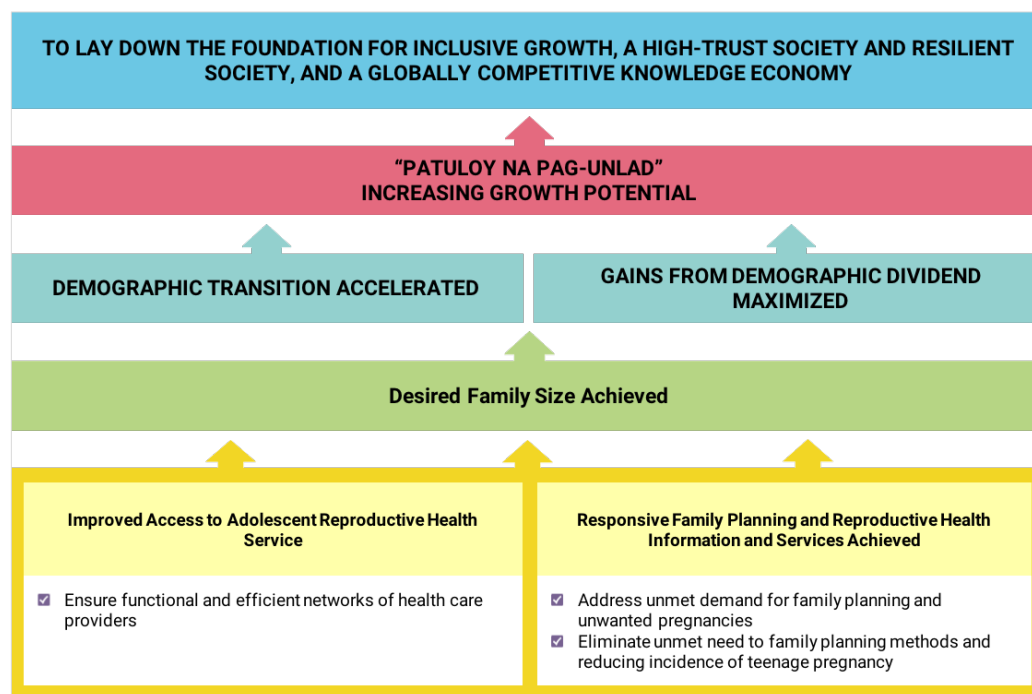
zero unmet need for modern family planning. This will be done mainly through the full implementation of the Responsible Parenthood and Reproductive Health (RPRH) Act or RA 10354, the Magna Carta of Women or RA 9710, the National Population Policy (PD 79, s. 1972) and other relevant national interventions that promote the reproductive rights of all Filipinos.

Eliminate unmet need of family planning methods and reduce the incidence of teenage pregnancy. Infant and maternal mortality rates are currently high especially in cases of teenage pregnancies. Therefore, the region will be supporting the government's effort to aggressively pursue a sustained universal health care program to attain a low rate of mortality to facilitate demographic transition. Accelerating the full implementation of the RPRH law will ensure universal access to quality sexual and reproductive health which will focus on elimination of unmet need of family planning methods and reducing the incidence of teenage pregnancy. Other health strategies such as collaborative interventions will also be done. (See Chapter 10)

Table 13.2 Plan Targets to Reach for Demographic Dividend in Region 1 (2017-2022)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
Increased Contraceptive Prevalence Rate (in percent)	2015	56.16%	85.0%
Adolescent birth rate (aged 10-19 years) per 1,000 women in that age group (in percent)	As of Q3 2016	12.42%	4.0%
Percent decrease in the incidence of teen pregnancy (in percent)	As of Q3 2016	12.42%	4.0%
Proportion of women of reproductive age (aged 15-49 years) who have their need for Family Planning satisfied (provided) with modern methods (in percent)	2013	19.30%	10.0%
Percent decrease in unmet need on Family Planning	2013	19.30%	10.0%

Fig. 13.6 Strategic Framework to Reach for Demographic Dividend in Region 1 (2017-2022)



Legislative Agenda

To complement the strategies identified, legislative action will be sought in support of the goal of achieving desired family size in the region.

Table 13.4 Legislative Agenda to Reach for Demographic Dividend in Region 1, (2017-2022)

LEGISLATIVE AGENDA	RATIONALE
Responsible Parenthood and Reproductive Health (RPRH) Law	The full implementation of the RPRH Law focusing on informed choice and expansion of partnerships with civil society organizations (CSOs) will ensure universal access to quality sexual and reproductive health.
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.
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.

14 Vigorously Advancing Science, Technology, and Innovation

Vigorously Advancing Science, Technology and Innovation

Science, Technology and Innovation (STI) plays a critical role in achieving a robust economic growth. In Region 1, there is a need to intensify the adoption of low-cost but sustainable technologies including mechanization, and technologies that are adaptive to the adverse effects of climate change and other catastrophic events. Higher production and productivity, and significant reduction in labor costs will be realized by the Agriculture, Forestry and Fisheries (AFF), Industry and Services sectors through rapid adoption and promotion of technologies in the region.

Assessment and Challenges

In the previous plan, among the primary strategies to realize a vibrant agribusiness and expand the trade, industry and services sector include the promotion and adoption of modern and sustainable agriculture and fishery facilities and technologies and enhancement of the access of Micro, Small and Medium Enterprises (MSMEs) to technology in the region. However, as per discussion in Chapter 8 and 9, these sub-sector outcomes were only partly attained due to the following challenges that affected the performance of the two sectors from 2011 to 2015:

Need to advocate or promote new technologies among farmers and fisherfolks and MSMEs. Increasing agri-based enterprises was partly attained in the previous plan. In 2015, agri-fishery production losses and damages peaked in the region, from P1.53 billion in 2014 to P2.49 billion in 2015 excluding damage to agri-infrastructure at P1.28 billion, due to the adverse effects of weather and climate-related disasters that hit the region on the said year. Taking into account the vulnerability of the AFF sector to natural

disasters and climate change, there is a need to further intensify the advocacy or promotion of technologies in the region due to weak or slow adoption among farmers and fisherfolks. They have to be encouraged to adopt appropriate production inputs, farming systems and technologies that are adaptive to the negative effects of agri-related disasters (See discussion in Chapter 8).

In relation to the government's advocacy and promotion of new technologies to MSMEs in the region, the Department of Science and Technology (DOST)¹ implemented programs and projects with the vision to transform more MSMEs into competitive enterprises capable of employing more individuals. Among its programs and projects is the Small Enterprise Technology Upgrading Program (SETUP) under its Technology Transfer and Commercialization Program. From 2011-2015, an average of 30 MSMEs were provided with technology and interventions. These interventions

¹DOST Annual Report, CY 2015

included equipment upgrading, training, product packaging and labeling, technical assistance, consultancy services and product testing. Two food innovation centers were also established in 2015 at Mariano Marcos State University (MMSU), Batac City and at the Pangasinan State University (PSU), Bayambang, Pangasinan. In addition, an average of 26 MSMEs were provided with interventions on the same period through its Grants-in-Aid Program. The Community Empowerment through Science and Technology Program (CEST) conducted mobilization activities which resulted to the development of four livelihood projects in identified poor communities in La Union and Pangasinan. In relation to ensuring disaster risk reduction and mitigation in the region, high impact technology solutions which include six more Automated Rain Gauges (ARGs) and Water Level Monitoring Stations (WLMS) were deployed along the minor river basins in La Union and Pangasinan in 2015.

Likewise, agency's services which include laboratory testing, calibration services, technical assistance and consultancy services, packaging and labeling, technology training and technology benefitted 2,362 MSMEs. A total of 7,666 chemical and microbiological laboratory tests were conducted in the Regional Science and Technology (S&T) Laboratory to improve food safety among food processors, the quality of available drinking water and in managing wastewater. Furthermore, 47 MSMEs were assisted under the technical assistance and consultancy services which resulted to reduction in waste generation, savings in raw materials, lower energy cost and compliance to good manufacturing practices that led to higher productivity. Despite the accomplishments of the DOST, there is still a need to further intensify the government's efforts to advocate and promote new technologies to MSMEs.

Table 14.1. Number of Micro, Small and Medium Enterprises (MSMEs) Provided with Technology and Interventions, Region 1 and by Province (2011-2015)

Area	Accomplishments					End-of-Plan Targets
	2011	2012	2013	2014	2015	2016
Region 1 - SETUP	37	59	63	60	61	No end of plan target
CORE	12	32	33	35	36	No end of plan target
Ilocos Norte	5	10	6	7	7	
Ilocos Sur	3	4	6	7	7	
La Union	3	7	6	7	8	
Pangasinan	1	11	15	14	14	
Non-Core	25	27	30	25	25	No end of plan target
Ilocos Norte	5	8	5	5	5	
Ilocos Sur	4	6	5	5	5	
La Union	3	3	5	5	5	
Pangasinan	13	10	15	10	10	

NOTE: SETUP - Small Enterprise Technology Upgrading Program; GIA - Grants-in-Aid

Source: Department of Science and Technology (DOST)

Reports show that technologies are not commonly-used among farmers and fisherfolks as well as to MSMEs due to lack of awareness on the available technologies particularly those that are intended to improve their production and productivity, and enhance the quality of their products.

Lack of investment on local Research and Development (R&D). One of the primary concerns of the STI is the need to increase government investment on local R&D. This is necessary to increase the number of R&D and innovation activities conducted in the region. Likewise, it will support human resources development in the various fields of science and technology (S&T) in Region 1, thus, increasing the

number of human resources engaged in STI and R&D.

Limited linkage among cooperatives and business enterprises. In order to boost the adoption of new technologies among farmers and fisherfolks in the region, there is a need to strengthen the linkage among cooperatives and business enterprises. The government coursed through the cooperatives the provision of technologies to farmers and fisherfolks that are necessary to improve their production and productivity. As a result, the increase in volume in their production and improvement in the quality of their produce will attract business enterprises to buy their products through cooperatives.

Strategic Framework

STI will contribute to the expansion of economic opportunities and increasing of potential growth in the region by ensuring rapid adoption and promotion of new technologies in the region. This will be done by (1) increasing the number of technologies or innovations adopted and promoted, and (2) improving innovation capacities in the region.

Targets

For the next six years, the targets of the region are spelled-out in Table 14.2.

Strategies

In order to guarantee rapid adoption and promotion of new technologies in Region 1, the following strategies will be pursued:

Sub-Sector Outcome 1: New Technologies/ Innovation Adopted and Promoted

Continuous advocacy or promotion of new technologies among farmers, fisherfolks and MSMEs. The government will intensify its efforts to continuously advocate and promote new technologies to women and men farmers and fisherfolks, and MSMEs in the region by disseminating IEC materials and conducting information caravans. Studies revealed that improved adoption of agri-fishery technologies not only boosts the production and productivity of farmers and fisherfolks but also improves the living standards of farming households.

The government will also continue to promote the adoption of risk mitigating technologies that will enhance the region's agricultural resiliency and adaptability to natural disasters.

Expanding the linkage among cooperatives and business enterprises. To expand the linkage among cooperatives and business enterprises, the government will continue to facilitate the provision of technologies to women and men farmers

and fisherfolks through cooperatives and market support. Other services necessary to increase their production and productivity, and improve the quality of their products will also be provided.

Table 14.2. Plan Targets to Ensure Rapid Adoption and Promotion of New Technologies in Region 1 (2017-2022)

INDICATORS		BASELINE		END OF PLAN TARGET 2022
		YEAR	VALUE	
Sub-Sector Outcome 1: New Technologies/Innovation Adopted and Promoted				
1.	Number of technology generated	2016	No data available	To be determined
2.	Number of technology commercialized/adopted	2016	No data available	To be determined
3.	Number of MSMEs provided with technology and interventions Region 1	2016		
	a. SETUP (Core)		61	60
	Ilocos Norte		36	
	Ilocos Sur		7	
	La Union		7	
	Pangasinan		8	
	b. GIA (Non-Core)		14	
	Ilocos Norte		25	
	Ilocos Sur		5	
	La Union		5	
	Pangasinan		5	
			10	
4.	Number Technology Licensing and Business Office established	2016	No data available	To be determined
5.	Number of Technology and Licensing and Business Office established	2016	No data available	To be determined
6.	Number of patents, utility model and industrial design registered with IPO	2016	No data available	To be determined
7.	Number of collaboration with agri-fishery cooperative and business organizations established	2016	No data available	To be determined
8.	Number of STI-based start-ups, enterprises and spin-offs established	2016	No data available	To be determined
Sub-Sector Outcome 2: Innovation Capacities Improved				
1.	Number of patents, inventions and industrial design	2016	No data available	To be determined
2.	Budget in R&D increased	2016	No data available	To be determined
3.	Number of scientific articles published	2016	No data available	To be determined
4.	Number of Balik-Scientist deployed	2016	No data available	To be determined
5.	Number of R&D Centers and innovation hubs established/strengthened	2016	No data available	To be determined
6.	Number of collaboration between SUC-industry-government established	2016	No data available	To be determined

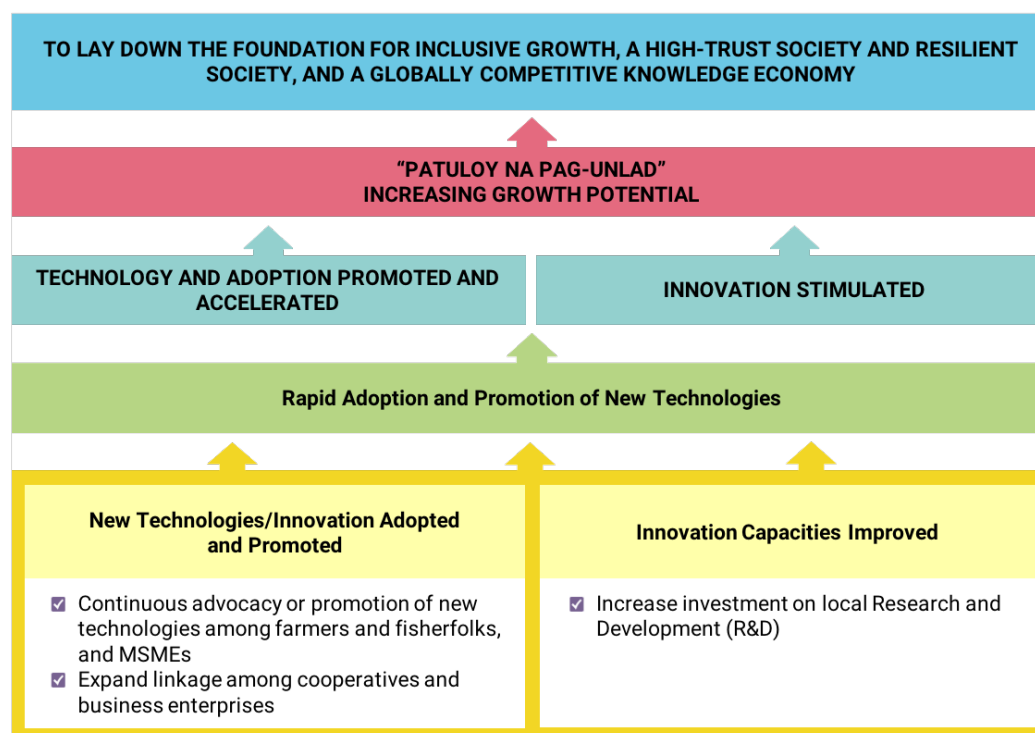
Sub-Sector Outcome 2: Innovation Capacities Improved

Increase investment on local R&D. The government will create a conducive environment that will encourage more human resources to engage in R&D in the region. It will strengthen programs that offer financing to commercially-viable innovation projects to address the gap between R&D and commercialization.

The Small Enterprise Technology Upgrading (SETUP) program will also be expanded in the region to enable more

MSMEs to access government assistance along the following: equipment upgrading, training including farmers' education program, product packaging and labeling, technical assistance and consultancy services, and product testing. These technological interventions will result to increase in productivity, improvement in product quality to conform to local and international standards, and product marketability. Better operational efficiency will enable MSMEs to generate more jobs in the region.²

Fig. 14.1 Strategic Framework to Ensure Rapid Adoption and Promotion of New Technologies in Region 1 (2017-2022)



Legislative Agenda

To strengthen the effectiveness of identified strategies, a legislative action is needed (Table 14.3).

²Adopted from the PDP 2017-2022

Table 14.3 Legislative Agenda to Ensure Rapid Adoption and Promotion of New Technologies in Region 1 (2017-2022)

Legislative Agenda	Rationale
Sub-Sector 1: New Technologies/Innovation Adopted/Promoted	
An Act Establishing the Science for Change Program	Aims to 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	Aims to establish a National Metrology Institute under the DOST; provide capacity building programs through competency training to strengthen the local metrology authorities at the local level; and set up a Metrology Training Program to undertake proficiency testing, advocacy education and training on metrology.
Sub-Chapter 2: Innovation Capacities Improved	
An Act Adopting Innovation as a vital component of the country's development policies to drive inclusive development, promote the growth and competitiveness of MSMEs, and for other purposes	At the regional level, there is also a need to generate and scale up action in education, training, research and development to promote 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	Seeks to 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.

Source: Philippine Development Plan (PDP) 2017-2022

PART V

ENABLING AND SUPPORTIVE ECONOMIC DEVELOPMENT



15

Ensuring Sound Macroeconomic Policy

Ensure Sound Macroeconomic Policy

Sustaining a sound, stable and supportive macroeconomic environment is necessary to expand economic opportunities and increase growth potential of Region 1. This will contribute to the attainment of a robust and globally competitive AFF, industry and services sectors in the region.

The performance of the region's macroeconomy in the medium term is vital to achieving the region's development vision by the end of 2022 which is to become an agribusiness and tourism hub in Northern Philippines with equitable economic opportunities for its globally competitive, resilient, and culturally diverse peoples. Among the primary concerns of the sector include sustaining robust economic growth, maintaining low inflation, increasing export receipts, decreasing unemployment and underemployment rate, and improving poverty situation in the region.

Assessment and Challenges

The Performance of the Region's Economy

Region 1 vs. National Economy and Other Regions

From 2011-2015, the region recorded an average growth of 5.1 percent which was below the average growth of the country at 5.9 percent. This indicates that the region is underperforming when compared to the other regions of the country. As compared to its neighboring regions, Region 2 outperformed the region with an average growth rate of 6.08 percent from 2011-2015. The Cordillera Administrative Region (CAR) recorded the lowest average growth rate at 2.16 percent among the Northern Luzon regions. Among the 17 regions in the country, Region 1 ranked 12th in terms of average growth rate while Region 2 and CAR ranked 9th and 15th, respectively.

In terms of contribution to the country's average growth from 2011-2015, Region 1 registered the biggest contribution among its neighboring regions at 0.18 percentage point. Region 2 and CAR recorded an average contribution of 0.10 percentage point and 0.04 percentage point, respectively.

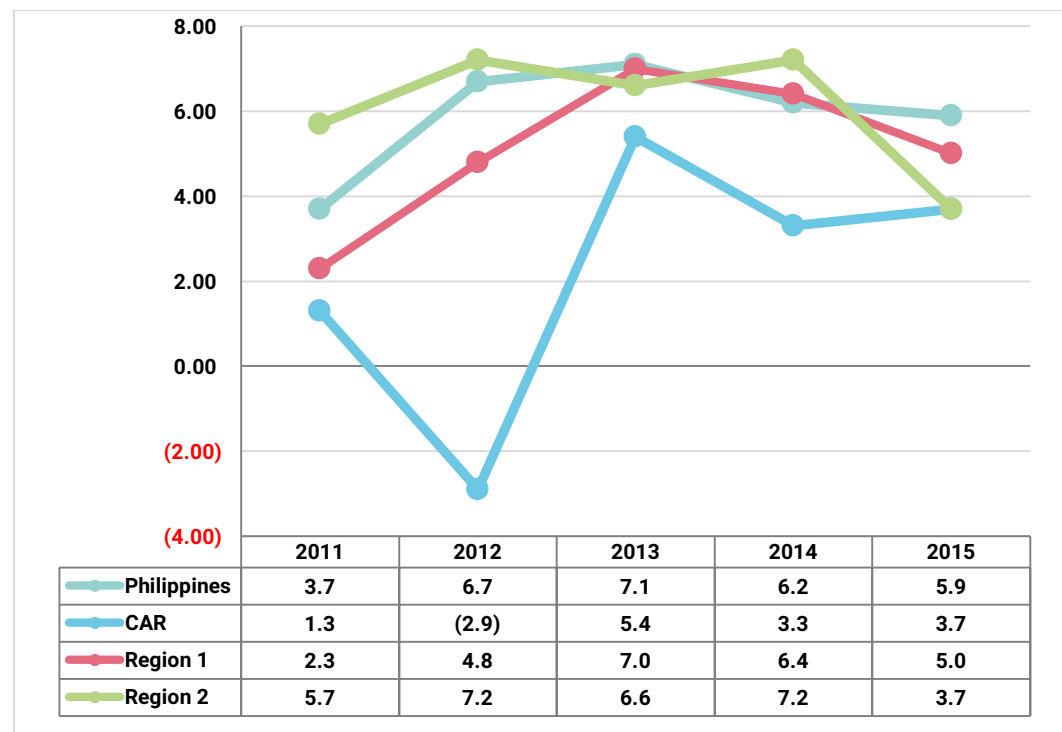
Region 1's Macroeconomic Performance, 2011-2015

Gross Regional Domestic Product (GRDP). The regional economy of Region 1 as measured through the Gross Regional Domestic Product (GRDP) posted an average growth rate of 5.1 percent during the period 2011-2015, behind by 3.1 to 4.1 percentage points when compared to its end-of-plan target which ranges from 8.2 to 9.2 percent. The region's GRDP recorded an accelerated growth from 2.3 percent in 2011 to 7.0 percent in 2013

which was also the highest growth during the five-year period due to the faster growth of the Industry and Service sectors. However, it started to decelerate in 2014 until 2015 as the Services sector slowed down. The low growth in 2011 was mainly

brought about by the decreased output of the Construction industry but this sector rebounded the following year and grew the fastest in 2013, which significantly contributed to the region's highest growth that year.

Figure 15.1 GRDP Growth Rates, Philippines and by Region (2011-2015)



Source: Philippine Statistics Authority (PSA)

Table 15.1 Percent Contribution to GRDP, Philippines and by Region (2011-2015)

Area	2011	2012	2013	2014	2015	Average
Philippines	3.7	6.7	7.1	6.2	5.9	5.90
CAR	0.0	(0.1)	0.1	0.1	0.1	0.04
Region 1	0.1	0.2	0.2	0.2	0.2	0.18
Region 2	0.1	0.1	0.1	0.1	0.1	0.10

Source: Philippine Statistics Authority (PSA)

Sectoral Contribution/GVA

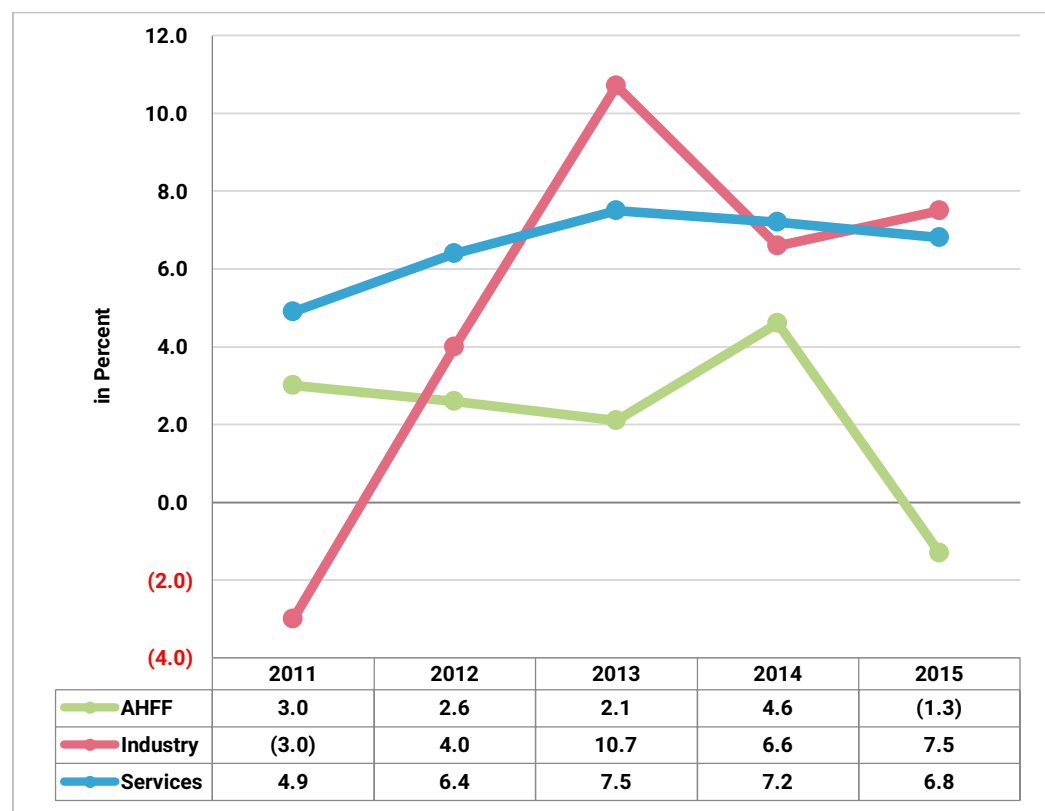
Agriculture, Hunting, Forestry and Fishing (AHFF). From 2011-2015, the AHFF sector, which is the most vulnerable

sector to natural disasters and other agri-related perils, recorded the lowest average growth at 2.2 percent. This figure is significantly lower than the 2016 target for the sector at 6.0 to 7.0 percent. The sector

recorded its highest growth in 2014 at 4.6 percent while its lowest growth was posted in 2015 at negative 1.3 percent. This was the year when agricultural production was affected by the combined effects of El Nino and six typhoons that visited the region. The fishing industry suffered from a 7.0

percent slump in 2015 due to the overflowing of pens caused by the typhoons and the non-stocking of fish farms due to limited water supply. The highest decline was recorded in Aquaculture fishery.

Figure 15.2. Growth Rate by Sector, Region 1 (2011-2015)



Source: Philippine Statistics Authority (PSA)

From 2011-2015, the share of the AHFF sector to GRDP posted a downward trend. It registered an average share of 24.65 percent. From 2014 to 2015, the sector was now the least in terms of percent share to GRDP.

In terms of contribution to the region's growth, the sector contributed an average of 0.6 percent which is the lowest among the sectors. The sector registered its highest contribution in 2011 at 0.8 percent while the lowest was recorded in 2015 at negative 0.3 percent. The negative percent

contribution could be attributed to the P3.77 billion¹ worth of agriculture and fishery production losses and damages due to weather and climate-related disasters.

Industry. From 2011-2015, the Industry sector registered an average growth rate of 5.2 percent, which is lower than the sector's end-of-plan target at 10.0 to 11.0 percent. The sector posted a negative 3.0 percent in 2011 but it recovered in the succeeding years. It recorded the highest

¹This figure includes the P1.28 billion worth of damages to agri-related infrastructures in 2015 (OCD).

growth in 2013 at 10.7 percent. Among its sub-sectors, mining and quarrying posted the highest average growth at 8.3 percent whereas electricity, gas and water supply recorded the least at 3.3 percent.

From 2011-2015, the sector's percent share to GRDP registered an erratic trend. It posted an average percent share of 26.05 percent, overtaking the agriculture sector in second spot in terms of percent share to GRDP. Among its industries, electricity, gas, and water supply recorded the highest average contribution to the sector's share at 11.80 percent, followed by construction at 7.54 percent.

The Industry sector recorded the second highest contribution to the GRDP growth during the period 2011-2015 at 1.3 percentage points. Despite posting a negative contribution in 2011 at negative 0.8 percentage points, the sector managed to recover and register a positive contribution after the said year. Construction, and electricity, gas, and water supply recorded the highest contribution to the GRDP growth at 0.5 percentage points and 0.4 percentage points, respectively.

Services. The services sector registered the highest average growth of 6.6 percent from 2011-2015. However, this figure is below the sector's target for 2016 which ranges from 10.0 to 11.0 percent. Among its

industries, financial intermediation, real estate, renting and business activities, and trade and repair of motor vehicles, motorcycles, personal and household goods posted the highest growth at 9.1 percent, 7.0 percent, and 6.8 percent, respectively.

For the past five years, the sector continued to share more than half of the GRDP, registering an average percent share of 51.17 percent. On the average, other services (OS) which include health, education, hotels and restaurants, recreation and other personal services contributed 12.49 percent followed by transportation, storage and communication at 11.04 percent to the region's economic output.

In terms of contribution to the GRDP growth, the sector consistently shared the highest contribution from 2011-2015. Its contribution ranged from 2.3 percentage points to 3.8 percentage points, posting an average contribution of 3.2 percentage points. Among its industries, OS recorded the highest average contribution to the growth at 0.9 percentage point. This could be attributed to the increasing tourist arrivals in the region (see Chapter 9). In 2013 and 2014, OS recorded the highest contribution to growth among the sector's industries.

Table 15.2.a Percent Share to GRDP by Industry of Origin, Region 1 (2011-2015)

INDUSTRY/YEAR	2011	2012	2013	2014	2015	Average
I. AGRICULTURE, HUNTING, FORESTRY AND FISHERY SECTOR	28.1	25.2	24.0	23.6	22.2	24.65
a. Agriculture and Forestry	22.6	20.5	19.4	18.6	17.8	19.78
b. Fishing	5.5	4.7	4.7	5.0	4.4	4.87
II. INDUSTRY SECTOR	27.4	24.9	25.8	25.8	26.4	26.05

Table 15.2.b Percent Share to GRDP by Industry of Origin, Region 1 (2011-2015)
(continuation)

INDUSTRY/YEAR	2011	2012	2013	2014	2015	Average
a. Mining and Quarrying	1.7	1.7	1.7	1.7	1.7	1.71
b. Manufacturing	5.3	4.8	4.9	5.1	5.0	5.01
c. Construction	7.5	6.7	7.3	7.6	8.6	7.54
d. Electricity, Gas, and Water Supply	13.0	11.8	11.8	11.4	11.1	11.80
III. SERVICES SECTOR	53.8	49.9	50.2	50.6	51.4	51.17
a. Transportation, storage and Communication	11.8	11.0	10.8	10.7	10.9	11.04
b. Trade and Repair of Motor Vehicles, Motorcycles, Personal and Household Goods	8.8	8.3	8.4	8.5	8.6	8.53
c. Financial Intermediation	7.2	6.8	7.2	7.2	7.3	7.14
d. Real Estate, Renting and Business Activities	8.0	7.4	7.6	7.6	7.6	7.64
e. Public Administration and Defense; Compulsory Social Security	4.8	4.4	4.2	4.2	4.0	4.34
f. Other Services	13.2	12.0	12.0	12.4	12.9	12.49
Gross Regional Domestic Product	100.0	100.0	100.0	100.0	100.0	100.00

Source: Philippine Statistics Office (PSA)

Table 15.3.a Percent Contribution to GRDP Growth by Industry of Origin, Region 1 (2011-2015)

INDUSTRY/YEAR	2011	2012	2013	2014	2015	Average
I. AGRICULTURE, HUNTING, FORESTRY AND FISHERY SECTOR	0.8	0.7	0.5	1.1	(0.3)	0.6
a. Agriculture and Forestry	0.2	0.8	0.2	0.4	0.1	0.4
b. Fishing	0.5	(0.1)	0.3	0.7	(0.4)	0.2
II. INDUSTRY SECTOR	(0.8)	1.0	2.7	1.7	1.9	1.3
a. Mining and Quarrying	0.1	0.2	0.1	0.1	0.1	0.1
b. Manufacturing	(0.0)	0.1	0.5	0.4	0.2	0.3
c. Construction	(0.9)	0.2	1.2	0.8	1.4	0.5
d. Electricity, Gas, and Water Supply	0.0	0.5	0.8	0.3	0.3	0.4
III. SERVICES SECTOR	2.3	3.1	3.8	3.6	3.4	3.2
a. Transportation, storage and Communication	0.8	0.6	0.5	0.7	0.4	0.6

Table 15.3.b Percent Contribution to GRDP Growth by Industry of Origin, Region 1 (2011-2015) (continuation)

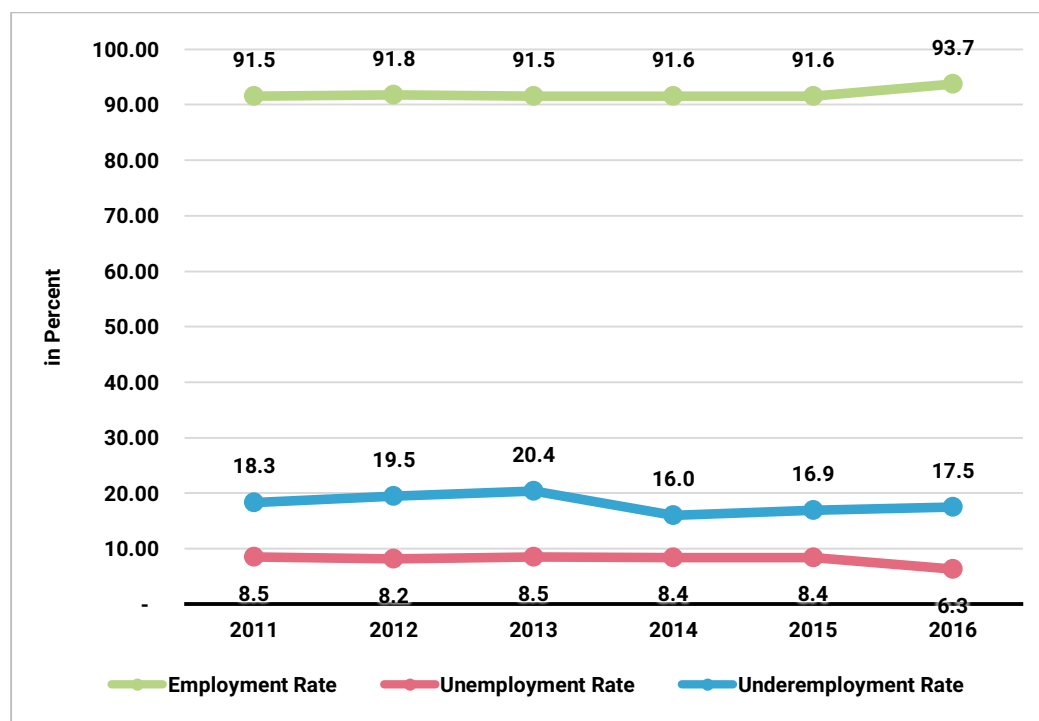
INDUSTRY/YEAR	2011	2012	2013	2014	2015	Average
b. Trade and Repair of Motor Vehicles, Motorcycles, Personal and Household Goods	0.7	0.7	0.6	0.6	0.3	0.6
c. Financial Intermediation	0.5	0.9	0.5	0.4	0.7	0.6
d. Real Estate, Renting and Business Activities	0.5	0.7	0.5	0.4	0.5	0.5
e. Public Administration and Defense; Compulsory Social Security	0.1	0.1	0.2	0.1	(0.2)	0.1
f. Other Services	0.5	0.9	1.2	1.2	0.6	0.9
Gross Regional Domestic Product	4.8	7.0	6.4	5.0	2.3	5.1

Source: Philippine Statistics Authority (PSA)

Employment. In terms of labor and employment situation in the region, the region's productive sector or the total household population aged 15 to 64 years old increased from 3.46 million in 2011 to 3.60 million in 2015. The economically active persons looking for work or those in the labor force decreased by 1.13 percent,

from 2.21 million persons in 2014 to 2.19 million in 2015. From 2011-2015, the region's average labor force participation rate (LFPR) was 61.04 percent. Out of this figure, 78.18 percent are men while the remaining 45.73 percent are women. Gender gap in terms of LFPR remained huge in the region.

Figure 15.3 Labor Statistics, Region 1 (2011-2016)



Source: Philippine Statistics Authority (PSA)

Table. 15.4 Labor Productivity, Region 1 and by Sector (2011-2015 Accomplishments vs. 2016 Targets)

Indicator	Accomplishment					RDP Target
	2011	2012	2013	2014	2015	2016
Labor Productivity, Region 1 and By Sector (in PhP)						
Region 1						
Low						115,319
	88,253.50	103,183.70	107,399.10	110,009.30	115,831.00	
High						115,535
Agriculture						
Low						74,590
	58,576.08	67,902.59	72,194.48	73,582	79,285.73	
High						74,820
Industry						
Low						224,035
	191,383.21	199,903.00	215,199.00	218,967.00	227,618.00	
High						224,212
Services						
Low						116,830
	87,385.78	105,393.00	104,937.00	107,519.00	110,001.00	
High						117,003

Source: Philippine Statistics Authority (PSA)

The average annual employment rate of the region was posted at 91.95 percent from 2011-2016. On the other hand, the average annual unemployment rate was pegged at 8.05 percent, which is lower than the end-of plan target of 6.2 percent to 7.2 percent. Although there were more men in the labor force, the average employment rate of women was higher at 93.22 percent than men at 92.04 percent. The average underemployment rate was 18.10 percent, behind by 5.10 percentage points than the 2016 target of 13.0 percent.

As to the sectoral employment, the services sector absorbed 1.06 million persons or more than half of the total employed in the region in 2014. The AFF and industry sectors hired 722,000 persons (35.29% share) and 265,000 persons (12.95% share), respectively.

Labor Productivity. The region's labor productivity registered an increasing trend from 2011-2015 (Table 15.4). The labor productivity in 2015 was posted at P115,831.00 per worker, slightly higher than the 2016 target range of P115,319.00 to P115,535.00 per worker.

In 2015, the industry sector recorded the highest labor productivity at P227,618.00. The services sector came next at P110,001.00. The agriculture sector registered the lowest labor productivity at P79,285.73. All sectors except the services sector posted higher labor productivity when compared to their 2016 targets.

Poverty. The region's poverty situation improved over the past 10 years. Both the poverty incidence among families and population registered a downward trend from 2006-2015 (Table 15.6). Poverty

incidence among families declined from 19.9 percent in 2006 to 9.6 percent in 2015, surpassing the 2016 target range of 11.0 percent to 13.4 percent. Likewise, poverty

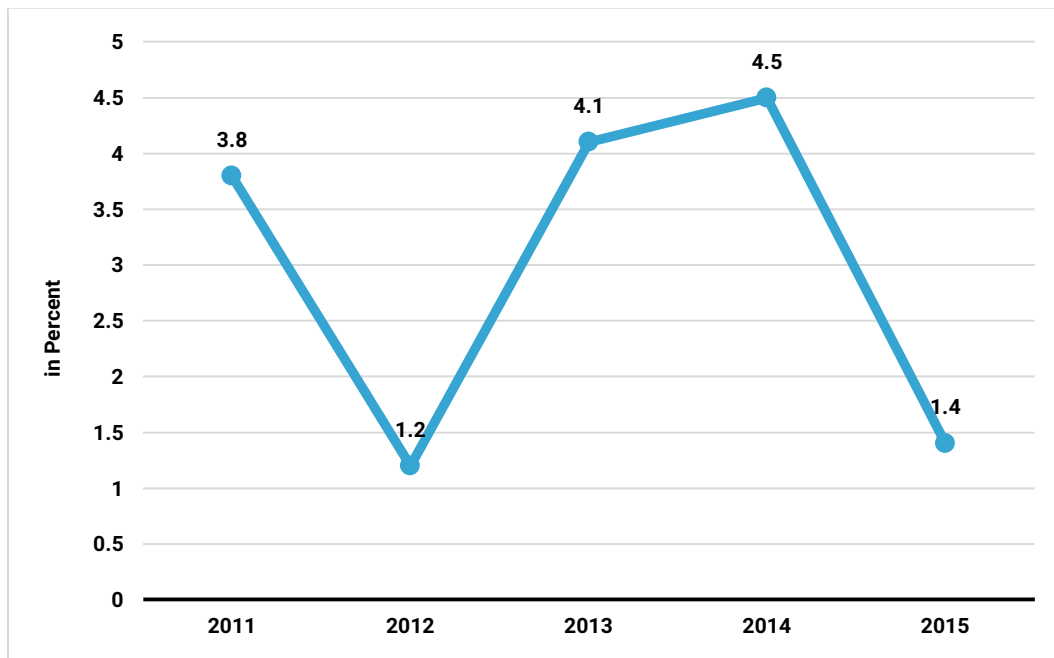
incidence among population reduced to 13.1 percent in 2015 from 25.9 percent in 2006. This figure also surpassed the 2016 target range of 13.6 percent to 16.0 percent.

Table 15.5.a Poverty Incidence and Magnitude of Poor Families and Population, Region 1 and by Province (2006-2015)

Indicator/Province	2006	2009	2012	2015
Poverty Incidence Among Families				
Region 1	19.9	16.8	14.0	9.6
Ilocos Norte	13.7	11.1	8.4	3.3
Ilocos Sur	16.4	13.4	13.7	9.5
La Union	20.8	22.4	15.3	9.2
Pangasinan	21.8	17.2	14.9	11.2
Magnitude of Poor Families				
Region 1	191,326	172,726	154,712	112,233
Ilocos Norte	16,393	14,045	11,211	4,848
Ilocos Sur	22,174	19,256	20,886	15,269
La Union	31,041	35,938	26,506	20,554
Pangasinan	121,718	103,487	96,109	71,562
Poverty Incidence Among Population				
Region 1	25.9	22.0	18.5	13.1
Ilocos Norte	17.7	14.7	9.9	5.3
Ilocos Sur	20.8	18.1	17.3	12.1
La Union	26.0	29.3	18.5	12.2
Pangasinan	28.7	22.3	20.4	15.3
Magnitude of Poor Population				
Region 1	1,165,924	1,005,574	876,650	671,087
Ilocos Norte	94,405	79,794	55,010	32,822
Ilocos Sur	120,162	107,066	105,196	86,612

Source: Philippine Statistics Authority (PSA)

Figure 15.4 Inflation Rate, Region 1 (2011-2015)



Source: Philippine Statistics Authority (PSA)

The poverty situation of all provinces also improved from 2006 to 2015 (Table 15.5). In 2015, all provinces except Pangasinan registered a single digit poverty incidence among families while only Ilocos Norte recorded a single digit poverty incidence among population.

Among the provinces, Ilocos Norte registered the lowest poverty incidence among families and population in 2015 at 3.3 percent and 5.3 percent, respectively. The number of poor families in the province declined by 43.24 percent, from 11,211 families in 2012 to 4,848 families in 2015. Likewise, the magnitude of poor population in the province dropped to 32,822 persons in 2015, from 55,100 persons in 2012.

In terms of magnitude of poor families and population, Pangasinan accounted for the majority of the region's poor families (63.76%) and poor population (65.52%) in 2015. The magnitude of poor families and population in the province has been

declining from 2006 to 2015 but was still high with 71,562 poor families and 439,701 poor population in 2015.

Prices. From 2011-2015, the region's average annual inflation rate was estimated at 3.0 percent. Despite registering an erratic trend over the past five years (Figure 15.4), the region's inflation rate was still within the 2016 target range of 3.0 percent to 5.0 percent. The region managed to sustain a single digit inflation rate despite the erratic movement of world oil prices, onslaught of typhoons, and other agri-related perils in the region.

The performance of region's macro-economy from 2011-2015 was affected by the following challenges that should be taken into account in the medium term.

Building resiliency in the economy to achieve rapid, sustainable and inclusive growth. Given the overall economic performance of the region based on the previous plan, it can be inferred that there

is a need to expand economic opportunities and foster sustained and inclusive growth in the region.

Just like any other economy, the region is not spared from internal and external shocks such as climate change, natural disasters and other related perils as well as global and local economic and political instability, and devaluation of peso. It is therefore necessary to build a resilient and sustainable regional economy. There is a need for the region to achieve both static and dynamic economic resilience² which means that the region needs to have the ability to remain functional when shocked and have the capability to immediately recover from the shock.

Lack of more quality employment opportunities and labor productivity. There is a need to create more quality jobs and improve labor productivity in all sectors in the region. In a study conducted by World Bank wherein they reviewed the Philippine Labor Market³, and relate employment with poverty, it was found out that pervasive in-work poverty⁴ is the main challenge facing labor policy. Poverty could be associated with the low-earning

capacity of the poor and their limited access to regular and productive jobs. It was noted in the study that the two interrelated root causes of in-work poverty include low education of the poor, and the scarcity of productive job opportunities. Thus, the study recommended that the reduction of in-work poverty centers on removing constraints to gainful employment in both supply side – providing better education and skills, and demand side – acquiring better jobs. There is also a need to take this into account at the regional level.

In a policy brief of the Organization for Economic Co-Operation and Development (OECD) on what can governments do to address in-work poverty, it was noted that underemployment appear to be a key determinant of in-work poverty.⁵ Hence, there is a need for the government to also focus on reducing the region's underemployment rate which remained high over the past five years. As recommended in the policy brief, government interventions may include the provision of in-work benefits (IWB) which do not only redistribute resources to low-income families but also make employment more attractive for workers with low earning potentials. Since IWB payment is conditional on having a job, it also strengthens financial incentives to work.

Furthermore, there is also a need to sustain the increasing trend in the region's labor productivity. Details on the needed improvement by sector is provided in Chapter 8 for the AFF Sector and Chapter 9 for the Industry and Services Sector.

Concentration of government programs and projects on relatively low value-adding agri-fishery commodities. To

²In general, static resilience refers to the ability of a system to maintain a high level of functioning when shocked, thus, economic resilience pertains to the efficient use of the remaining resources a given period of time. Basically, it refers to the core economic concept of coping with resource scarcity, which is exacerbated under disaster conditions. Static economic resilience does not restore damaged capacity and is not likely to lead to full recovery. On the other hand, dynamic resilience refers to the ability and speed of a system to recover. Dynamic economic resilience is the efficient use of resources over time for investment in repair and reconstruction. It pertains to the act of setting aside resources that could potentially be used for current consumption in order to re-establish productivity in the future. (Rose, A., 2015)

³World Bank. 2016. Republic of the Philippines Labor Market Review: Employment and Poverty. World Bank, Washington, DC. © World Bank. Retrieved from <https://openknowledge.worldbank.org/handle/10986/24768>
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⁴In-work poverty refers to individuals living in households (HHs) where the HH income is below the poverty threshold despite one member of the HH working either in full or part time. (World Bank, 2016)

⁵OECD. (2009). In-Work Poverty: What Can Governments Do? Retrieved from <https://www.oecd.org/els/43650040.pdf>

improve AFF-based enterprises in the region, there is a need for government programs and projects to be diverted to agri-fishery commodities with high value-adding and market potential such as mango, coffee, and bamboo (see detailed discussion in Chapter 8). Diversifying into these commodities is essential to increasing the region's export receipts which is mainly driven by the earnings from the tobacco. In 2015, export earnings from tobacco was US\$28.06, comprising 91.76 percent of the region's total export receipts at US\$30.58.

Growing market within ASEAN. In order to take advantage of the growing market brought about by the ASEAN which is the third largest market in the world with 622 million people in 2014, there is a need to improve the competitiveness of the agri-fishery commodities, enhance the region's business climate and intensify its tourism promotion activities (See related discussion in Chapter 8, 9 and 16). These are necessary for the region to participate in intra-ASEAN trade, and attract more tourists and investors from ASEAN member countries.

Inability to meet international standards and comply with measures imposed by other countries. There is a need to promote the adoption of the Philippine National Standards particularly the Good Agricultural Practices (GAP) and Good Aquacultural Practices (GAqP) in the region. The details are discussed in Chapters 8 and 16.

There is a need for the farmers and growers, traders and consumers to have a

better understanding of the significance of these standards by launching broader information, education and communication (IEC) campaigns in the region. GAP and GAqP certification is required for commodities entering international markets. Hence, there is a need to widen the certification of strategic agri-fishery commodities in the region, and facilitate their compliance with the GAP or GAqP requirements of trading partners within and outside ASEAN.

Entry/presence of uncertified, fake and substandard imported products. There is a need for the government to strictly enforce and monitor measures or laws such as the Consumer Act of the Philippines (RA 7394) that curb the influx of uncertified, fake and substandard imports in the region. The entry or presence of these substandard and counterfeit goods in the domestic market is detrimental to the health, safety, environment, property and lives of the people, and to the overall regional economy.

Sustainability of poverty reduction efforts in the region. There is a need to sustain the efforts of the government in improving the poverty situation in the region. The government will have to widen the coverage and benefits of its social protection (SP) programs which include but not limited to conditional cash transfer, health insurance, social security system as well as income and livelihood support. The specifics of these concern is provided in Chapter 11 which is focused on reducing vulnerability of individuals and families.

Strategic Framework

A stable and sound macroeconomic environment is a necessary condition to

reducing inequality and increasing potential growth in the region. This will be

attained by achieving the five sub-sector outcomes: (1) sustained robust economic growth; (2) increased exports receipts; (3) maintained low and stable inflation; (4) decreased unemployment and under-employment; and (5) reduced poverty incidence in the region.

Targets

For the period 2017-2022, among the primary targets to realize a stable and sound macro-economic environment in the region is to improve the performance of the agriculture sector and sustain the increasing growth of the industry and services sectors to cater to both domestic and international markets particularly the ASEAN Economic Community (AEC).

Table 15.6 provides the detailed list of key indicators for macroeconomy including their respective targets by the end of 2022.

Strategies

In order to achieve a stable and sound macroeconomic environment, the following strategies will be implemented in the region.

Sub-Sector Outcome 1: Robust Economic Growth Sustained

Increase investment inflow in the region's priority industries. The government will implement necessary interventions that will strengthen the linkage between the AFF and the I&S sector. Specific strategies to sustain a robust economic growth in the region are laid out in Chapter 8 and 9. These chapters are focused on achieving a robust and competitive AFF, and I&S sector.

Sustaining the economic performance of the region will be supported by an enabling

and supportive business environment (Chapter 16), appropriate set of education and skills for its manpower (Chapter 10), adequate, reliable, sustainable and disaster-resilient infrastructure system (Chapter 19), and application of low-cost but sustainable technologies particularly those that are adaptive to the adverse effect of climate change (Chapter 14) in a clean and healthy natural (Chapter 20), and safe and secure societal environment (Chapter 18).

Sub-Sector Outcome 2: Low and Stable Inflation Maintained

Sustain low and stable inflation. Maintaining a low and stable rate of inflation reflects that the region has a stable overall economic climate. A low and stable inflation connotes lesser uncertainty and more savings, and has a positive effect on the region's competitiveness. As per CMCI⁶, inflation rate is among the indicators of economic dynamism. Thus, investors are more attracted to places with low and stable prices of goods and services essentially because it may indicate lower cost of production. In addition, lower cost of good and services may imply that the region has adequate basic resources.

In order to attract more investors and improve its competitiveness, the government will continue its efforts to sustain low and stable inflation in the region and its provinces. This will be done by managing the tax collection and government spending in the region (see detailed discussion in Chapter 5).

Sub-Sector Outcome 3: Export Receipts Increased

Development, promotion and expansion of high value adding products for export. The government will divert its programs

⁶National Competitiveness Council (NCC). (2014). CMCI Manual.

and projects in developing, promoting and expanding to high-value adding commodities for exports such as mango and bangus. Appropriate agro-industrial infrastructure and post-harvest facilities including machineries and equipment will be provided for the high-value agri-fishery commodities in the region. Specific programs and projects are discussed in Chapter 8.

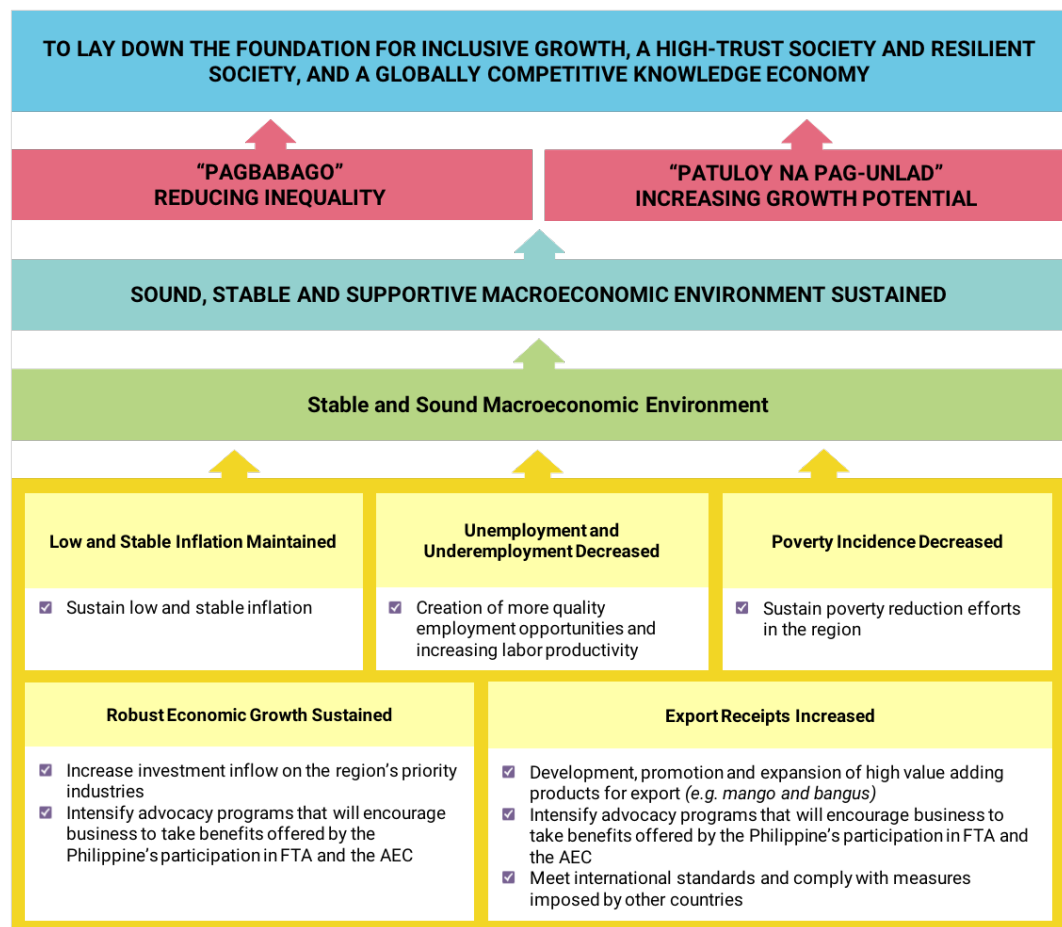
Table 15.6.a Plan Targets to Realize a Stable and Sound Macroeconomic Environment in the Region (2017-2022)

INDICATORS		BASELINE		END OF PLAN TARGET 2022
		YEAR	VALUE	
Sub-Sector Outcome 1: Robust Economic Growth Sustained				
1.	GRDP Growth Rate	2015	5.0	7.2 – 8.0
2.	GRDP Growth by Industry of Origin	2015		
	AFF		(1.3)	5.0 – 5.8
	Industry		7.5	7.6 – 8.4
	Services		6.8	7.8 – 8.6
3.	Percent Contribution to GRDP by Industry of Origin	2015		
	AFF		22.2	To be determined
	Industry		26.4	
	Services		51.4	
4.	Contribution to Growth by Industry of Origin	2015		
	AFF		(0.3)	To be determined
	Industry		1.9	
	Services		3.4	
5.	Labor Productivity	2015		
	Region 1		115,831.00	To be determined
	AFF		79,285.73	
	Industry		227,618.00	
	Services		110,001.00	
Sub-Sector Outcome 2: Low and Stable Inflation Maintained				
6.	Inflation Rate	2016	1.77	To be determined
Sub-Sector Outcome 3: Export Receipts Increased				
7.	Export Receipts (in Million US\$)	2015	30.57	To be determined
Sub-Sector Outcome 4: Unemployment and Underemployment Decreased				
1.	Employment Rate	2015	91.6	To be determined
2.	Unemployment Rate	2015	8.4	
3.	Underemployment Rate	2015	16.9	To be determined
Sub-Sector Outcome 5: Poverty Incidence Decreased				
1.	Poverty Incidence (Among Families)	2015		
	Region 1		9.6	To be determined
	Ilocos Norte		3.3	
	Ilocos Sur		9.5	
	La Union		9.2	
	Pangasinan		11.2	

Table 15.6.b Plan Targets to Realize a Stable and Sound Macroeconomic Environment in the Region (2017-2022) (continuation)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
2. Poverty Incidence (Among Population)	2015		
Region 1		13.1	8.0
Ilocos Norte		5.3	2.9
Ilocos Sur		12.1	8.0
La Union		12.2	8.5
Pangasinan		15.3	9.5

Figure 15.5 Strategic Framework to Achieve a Stable and Sound Macroeconomic Environment in the Region (2017-2022)



Intensify advocacy programs that will encourage businesses to take benefits offered by the Philippine's participation in FTA and the AEC. The government will intensify its information, education and communication (IEC) activities to increase

awareness among businesses in the region on the benefits offered by the country's participation in the ASEAN free trade agreement (FTA) and the ASEAN Economic Community (AEC). Among these benefits include (1) elimination of

intra-ASEAN import tariffs and gradual removal of formal restrictions in the services sector, thus, providing greater opportunities in trading and doing business within the AEC; and (2) reduction of trade cost with the simplification of cross-border trading processes including customs procedures and harmonization of technical regulations and mutual recognition agreements.

Likewise, these broad-based advocacy efforts of the government will also provide guidance to Micro, Small and Medium-Sized Enterprises (MSMEs) to take advantage of the economic opportunities gained from the ASEAN FTAs.

Meet international standards and comply with measures imposed by other countries. One way to improve the region's competitiveness is through the adoption of the Philippine National Standards. These standards will facilitate the access of the region's agri-fishery commodities in both domestic and international market since they are compliant with international standards. Hence, government interventions which are necessary to meet international standards and comply with measures imposed by international trading partners especially from ASEAN member countries are provided in Chapter 16. These interventions are essential for the region to take advantage of the growing market within ASEAN.

Sub-Sector Outcome 4: Unemployment and Underemployment Decreased

Creation of more quality employment opportunities and increasing labor productivity. To improve the region's underemployment rate, the following will have to be undertaken: From the supply-side, the government will have to invest on

providing better education and skills (strategies to be implemented are discussed in Chapter 10), especially among the poor and the women sector, and support for reallocation of labor from less toward more productive activities. On the demand side, the reduction of in-work poverty will require improvement in the access of the poor to more productive jobs.

Among the strategies to be undertaken to improve and sustain farmers/fisherfolks' productivity include the adoption of appropriate production inputs, farming systems and technologies that are adoptive to the adverse effects of natural disasters and other agri-related perils. On the other hand, development and strengthening of human capital through employment facilitation and continuous capacity building as well as prioritization of courses included in the mutual skills recognition mechanism of the AEC will be undertaken to improve the I&S productivity. Details on improving the labor productivity of the AFF sector are discussed in Chapter 8 while the specifics on increasing the labor productivity of the Industry and Services sectors are provided in Chapter 9.

Sub-Sector Outcome 5: Poverty Incidence Decreased

Sustain poverty reduction efforts in the region. The government will continue to provide social protection programs and projects that are necessary to eradicate poverty in the region. The coverage and benefits of said programs will be expanded to ensure that the most vulnerable sectors, including women, are provided with appropriate interventions. The details of this strategy including priority programs and projects are elaborated in Chapter 11.

16

Leveling the
Playing Field
through a National
Competition Policy

Leveling the Playing Field through a National Competition Policy

Creating an enabling environment for private sector development is a necessary condition to achieve economic development. Following the definition of Christy et al. (2009),¹ an enabling business environment requires the presence of a set of policies, institutions, support services and other conditions that lead to the creation of a general business setting where enterprises and business activities can start, develop and thrive. Essentially, the concept of a conducive-enabling environment is referred to a situation wherein both domestic and foreign businesses can operate and grow as a result of the presence, interaction and capacity of different institutions, policies and services (Konig, et al., 2013).

In order to promote investment, attract capital and stimulate economic growth in Region 1, the government recognizes the need to create a conducive business climate for private enterprises. This will allow the region to compete not only domestically but also with other ASEAN-member countries.

Assessment and Challenges

This section provides the general picture of the business climate situation of the region based on the assessment of the previous plan.²

Table 8.1.a Assessment of the Business Climate Situation in Region, Accomplishments versus Targets (2011-2016)

Indicators	Accomplishment					RDP Target
	2011	2012	2013	2014	2015	2016
Sub-Sector Outcome 1: Business Climate Enhanced						
1. Percentage of Compliance to BPLS					100.00%	No end of plan target
2. Percentage of LGUs with Local Investments and Incentives Code (LIIC)					76.80%	No end of plan target

¹Konig, G., da Silva, C.A., & Mhlanga, N. (2013). Enabling environments for agribusiness and agro-industries development: Regional and country perspectives. Food and Agriculture Organization of the United Nations, Retrieved from <http://www.fao.org/docrep/017/i3121e/i3121e00.pdf>

²In the previous RDP 2011-2016, this section is incorporated in the Trade, Industry and Tourism (TIT) Sector.

Table 8.1.b Assessment of the Business Climate Situation in Region, Accomplishments versus Targets (2011-2016) (continuation)

Indicators	Accomplishment					RDP Target
	2011	2012	2013	2014	2015	2016
3. Level of Competitiveness of LGUs in the Region					27.54%	No end of plan target
4. Percentage of LGUs covered/ assessed under CMCI					100.00%	No end of plan target
5. Operationalization of the Philippine Business Registry in the region					100.00%	No end of plan target

Source: Department of Trade and Industry (DTI), Regional Competitiveness Council/National Competitiveness Council (RCC/NCC), Department of Interior and Local Government (DILG)

Sub-Sector Outcome 1: Business Climate Enhanced

Partly attained. The ease of doing business in the region has significantly improved but competitiveness of all local government units (LGUs) must be further enhanced.

As of 2015, the Philippine Business Registry (PBR) was already fully operationalized in the region. PBR facilitates the seamless transactional environment for business registration and development across the application of systems of various government institutions in the region. These include but not limited to the Department of Trade and Industry (DTI), Securities and Exchange Commission (SEC), Bureau of Internal Revenue (BIR), Social Security System (SSS), Philippine Health Insurance Corporation (PHIC), and LGUs. As per CY 2016 PBR Report, registration in the region totaled 23,760, representing 5.0 percent of the 421,769 Business Name (BN) registered in the country. Among the regions, Region 1 ranked sixth in terms of BN registration. Its neighboring regions, Region 2 and Cordillera Administrative Region (CAR), comprised 4.0 percent (8th

place) and 3.0 percent (14th place) of the country's aggregate, respectively.

As per Department of Interior and Local Government (DILG) report, all LGUs in Region 1 were already compliant with the Business Permits and Licensing System (BPLS) in 2015. As a result, the following were streamlined in all LGUs in the region: adoption of a unified form, reduction in the number of signatories, limitation in the number of steps securing permits and licenses, and reduction in the processing time through automation.

In 2016, all LGUs in the region were covered and assessed under the Cities and Municipalities Competitiveness Index (CMCI)³. The CMCI local competitiveness framework⁴ focuses on how a city or municipality knows and uses its resources

³As per National Competitiveness Council (NCC) report, the CMCI Index can be used as a diagnostic tool by local government officials to assess the competitiveness of their city or municipality and identify areas for improvement and collaboration. Data can provide insight for policy making, development planning and investment promotion. Private sector can utilize it as a guide in deciding where to invest. And, since the index provide a general assessment of the competitive of the cities and municipalities, the academe can use it as a take-off point for further research.

⁴Cities and Municipalities Competitiveness Index (CMCI). NCC. Retrieved from <http://www.competitive.org.ph/cmci/index/pages/about%20the%20index/index.php>

to improve standard of living. Hence, with the use of CMCI, cities and municipalities in the country were ranked on their overall competitiveness based on three pillars⁵, which include economic dynamism, government efficiency, and infrastructure.

Based on the CMCI Report in 2016⁶, the competitiveness of LGUs in Region 1 improved from an average score of 30.74 points in 2015 to 26.75 points in 2016. The provinces of La Union, Ilocos Sur and Ilocos Norte ranked 10th to 12th, respectively while Pangasinan ranked 28th among the provinces in the country. The competitiveness of all provinces improved compared to their performance in 2015 (Table 16.2). Ilocos Sur was the most improved province in the region, from 36th spot in 2015 to 11th place in 2016. Among the provinces, only La Union was included in the top 10 most competitive provinces in the country.

Dagupan City ranked 15th, Agoo ranked 20th and Tayug ranked 7th in terms of competitiveness among cities, 1st to 3rd class municipalities, and 4th to 6th class municipalities in the country, respectively. Table 16.3 provides a summary of the national ranking of the top 3 cities, 1st to 3rd class municipalities, and 4th to 6th class municipalities in Region 1 per pillar.

To enhance the competitiveness of the local investment climate, LGUs were mandated to formulate their respective local investment and incentives code

(LIIC)⁷. Out of the 125 cities and municipalities in the region, 76.80 percent already have their respective LIICs in 2015. This code recognizes the role of LGUs in creating a conducive environment that is favorable to the inflow of private investments.

Though the region performed well in enhancing its business climate as per assessment of the previous Plan, still, there is a need to further improve the competitiveness of LGUs to attract more investments in the region. Among the challenges that need to be addressed are as follows:

Non-implementation of Local Investment and Incentives Code (LIIC).

Apart from the need to encourage the remaining 23.2 percent LGUs in preparing their respective LIICs to serve as their guide in enhancing the business climate in their localities, there is also a need to monitor the implementation of the code among those who have already crafted their respective LIICs. Hence, there is a need to strictly monitor the implementation of the LIIC among LGUs to ensure the smooth execution of local investment policies and programs, promotion of Investment Priority Areas (IPAs), and provision of local incentives to domestic and foreign investors including the mechanism on how to avail them.

Disincentives in the establishment of new businesses. Among the disincentives that may affect the establishment of a new business in a particular area include but not limited to the following: growth of the local economy, cost of doing business,

⁵Economic dynamism pillar is associated with activities that create expansion of business and industries and higher employment; government efficiency pertains to the quality and reliability of government services and government support for effective and sustainable productive expansion; and infrastructure refers to the physical building blocks that connect, expand, and sustain a locality and its surroundings to enable the provision of goods and services. NCC. Retrieved from <http://www.competitive.org.ph/cmci/index/pages/indications/index.php>

⁶CMCI 2016 Ranking. NCC. Retrieved from <http://www.competitive.org.ph/cmci/index/pages/about%20the%20index/index.php>

⁷The LIIC is a (a) proactive measure to draw local and foreign investments especially in priority areas/ industries and (b) a tool used to define the development thrust of an LGU that is consistent with its Land Use Plan and zoning regulation. (DTI). Retrieved from http://www.dilg.gov.ph/PDF_File/issuances/joint_circulars/DILG-Joint_Circulars-20111024-8003d265f5.pdf

business registration efficiency, government efficiency, and presence of infrastructure facilities, among others. These factors are being monitored under

the CMCI. Therefore, there is a need to improve the competitiveness of LGUs to address the potential disincentives in establishing new establishments.

Table 16.2 Cities and Municipalities Competitiveness Index (CMCI) Ranking and Rating by Province, Region 1, 2015 versus 2016

Province	2015		2016	
	Rank	Rating	Rank	Rating
Region 1	-	30.74	-	26.98
Ilocos Norte	12	32.33	10	26.98
Ilocos Sur	36	28.69	11	27.32
La Union	14	33.13	12	27.42
Pangasinan	34	28.83	28	25.26

NOTE: Rank 1 as the most competitive city/municipality among the 136 cities and 399 municipalities nationwide

Source: National Competitiveness Council (NCC)

Table 16.3.a Top Three Most Competitive Cities, 1st to 3rd Class Municipalities, and 4th to 6th Class Municipalities by Category and Pillar, Region 1 (2016)

Area	Overall National Rank	Rating	Area	Overall National Rank	Rating
A. PROVINCE			B.3. Infrastructure		
La Union	10	27.42	San Fernando (LU)	23	11.88
Ilocos Sur	11	27.32	Dagupan	28	11.75
Ilocos Norte	12	26.98	Laoag	34	11.37
Pangasinan	28	25.26	C. OVERALL (1ST - 2ND CLASS MUN.)		
B. OVERALL (CITIES)			Agoo	20	32.33
Dagupan	15	41.20	Calasiao	26	31.42
San Fernando (LU)	17	40.97	Mangaldan	38	30.22
Laoag	33	36.80	C.1. Economic Dynamism		
B.1. Economic Dynamism			Rosales	33	9.28
Dagupan	17	13.02	Mangaldan	46	8.97
San Fernando (LU)	18	12.82	Agoo	52	8.89
Urdaneta	29	10.73	C.2. Government Efficiency		
B.2. Government Efficiency			Narvacan	8	14.11
Dagupan	13	16.44	Agoo	16	13.73
San Fernando (LU)	16	16.28	Calasiao	20	13.44
Vigan	22	15.63			

Table 16.3.b Top Three Most Competitive Cities, 1st to 3rd Class Municipalities, and 4th to 6th Class Municipalities by Category and Pillar, Region 1 (2016)
(continuation)

Area	Overall National Rank	Rating	Area	Overall National Rank	Rating
C.3. Infrastructure			Dasol	22	10.15
Balaoan	29	10.10	Sinit	29	9.88
Agoo	44	9.71	D.2. Government Efficiency		
Calasiao	57	9.42	Paoay	2	13.98
D. OVERALL (3RD - 6TH CLASS MUN.)			Pasuquin	3	13.96
Tayug	7	34.42	Dumalneg	4	13.71
Bacarra	9	33.76	D.3. Infrastructure		
Pasuquin	15	32.44	Tayug	8	12.35
D.1. Economic Dynamism			Bacarra	13	12.04
Tayug	10	11.03	Sinit	45	10.44

NOTE: Rank 1 as the most competitive city/municipality among the 136 cities and 399 municipalities nationwide; Including the National Ranking of the Provinces in Region 1

Source: National Competitiveness Council (NCC)

Strategic Framework

To promote competitiveness among LGUs, the government will focus on providing an enabling business environment in the region. Competition levels the playing field for MSMEs and other players in the market by removing the barriers to entry and reducing costs in order for them to actively participate in the market.

Targets

In order to monitor the enhancement of business climate in the region, the following development indicators will be monitored in the medium term (Table 16.4).

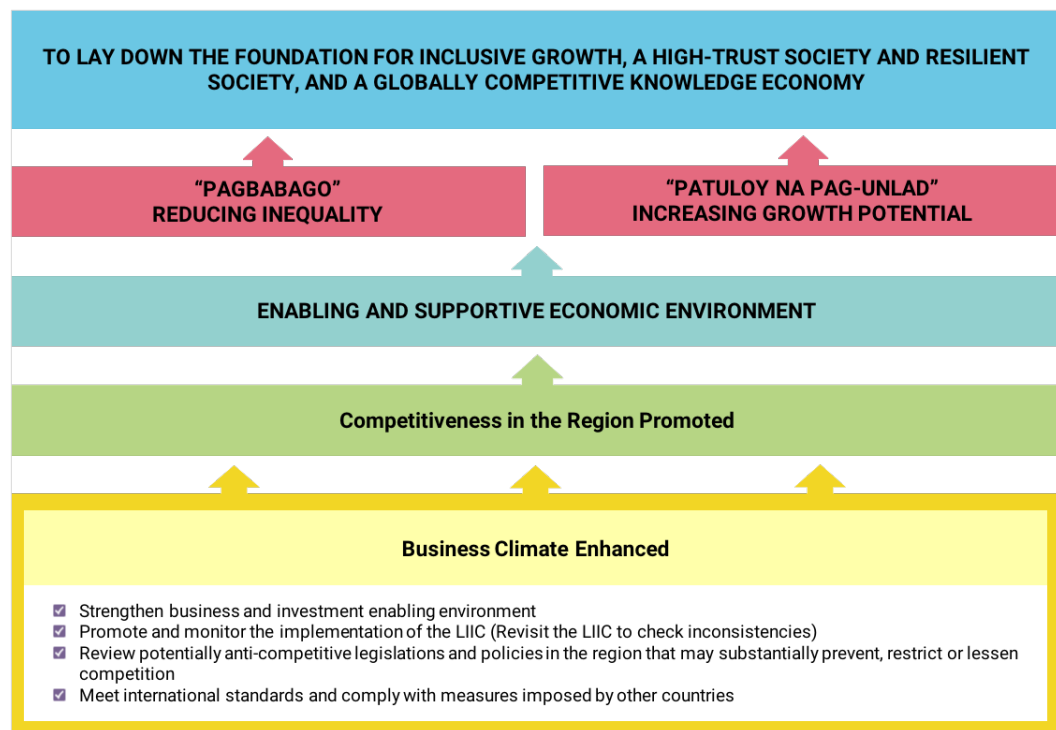
Table 16.4.a Plan Targets to Promote Competitiveness in Region 1 (2017-2022)

INDICATORS		BASELINE	END OF PLAN
		YEAR	TARGET 2022
		VALUE	
Sub-Sector Outcome 1: Business Climate Enhanced			
1. Number of Business Name certificates issued	2016	21,493	To be determined
2. Number of Repair Shops accreditation issued	2016	729	To be determined

Table 16.4.b Plan Targets to Promote Competitiveness in Region 1 (2017-2022)
(continuation)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
3. Number of Bus. Establishments Bagwis certified	2016	763	To be determined
4. Number of Agricultural and Fishery Entities accredited			To be determined
5. Number of Business Name certificates issued	2016	21,493	To be determined
6. Number of Repair Shops accreditation issued	2016	729	To be determined
7. Number of Agricultural and Fishery Entities accredited			To be determined
8. Number of LGUs awarded under the Cities and Municipalities Competitiveness Index (CMCI)	2015	23	To be determined
9. Number of Cities and Provinces with Local Investments and Incentives Code (LIIC)			To be determined
10. Number of investors who availed of incentives			To be determined

Figure 16.1 Strategic Framework to Promote Competitiveness in Region 1 (2017-2022)



Strategies

The following are the strategies to enhance business climate in the region.

Sub-Sector Outcome 1: Business Climate Enhanced

Strengthen business and investment enabling environment. The government will continue its efforts to enhance the business environment in the region by encouraging all LGUs to improve their competitiveness which is necessary to promote investment and attract capital in their localities.

Promote and monitor the implementation of the LIIC. The government, particularly DILG and DTI, will provide the necessary technical assistance to the remaining LGUs in the region without LIICs in the preparation of their respective investment codes including the identification of their priority areas. As highlighted in the guidelines on the formulation of the code⁸, it is essential for the LGUs to craft their own LIICs to attract domestic and foreign investments especially in their identified priority areas or in the industries of development in their locality. And, as stated in the guidelines, the code will help LGUs *“speed economic progress, provide employment opportunities, increase revenues, reduce poverty and improve the quality of life of both women and men in the most proactive way”*.

The government will promote and monitor the implementation of LIICs among LGUs to ensure that local economic development is achieved in the region.

LGUs will also be encouraged to take advantage of the opportunities and incentives that they may obtain from

emerging industries such as the Information Technology and Business Process Management (IT-BMP) industry. This industry has grown to be the second largest source of dollar income for the country's economy. Based on the report of Information Technology and Business Process Association of the Philippines (IBPAP)⁹, this industry was able to generate 1.2 million direct jobs and US\$ 22 billion revenues in 2015. Its contribution to the country's growth is expected to continue to rise.

Review potentially anti-competitive legislations and policies in the region that may substantially prevent, restrict or lessen competition. Existing legislations and policies at the regional level will also be reviewed to ensure that they do not prevent, restrict or lessen competition. This will be undertaken by various government entities as well as LGUs in the region.

Meet international standards and comply with measures imposed by other countries. The government will continuously promote and monitor the adoption of the Philippines National Standards (PNS) for various agri-fishery commodities¹⁰ in the region. This will be implemented to improve the region's competitiveness and facilitate the access of its agri-fishery commodities, both at the domestic and international level. These standards, which are focused on ensuring food safety and assuring produce quality while keeping high regard for environmental protection and that of workers', health, safety and welfare, are compliant with international standards

⁸DILG. Guidelines on the Formulation of the Local Investments and Incentives Code (LIIC)

⁹IT-BPO industry grows as second largest source of income for Philippines. 18 April 2016. Retrieved from <http://business.inquirer.net/209531/bpo-industry-grows-second-largest-source-income-ph>

¹⁰See details on the promotion of Good Agricultural Practices (GAP) and Good Aquacultural Practice (GAQP) in Chapter 8: Expanding Economic Opportunities in the AFF Sector.

such as the ASEAN standards. The PNS were crafted as part of the country's commitment to the goal of ASEAN to enhance its intra-and extra trade and long-term competitiveness of its food, agriculture and forestry products/commodities.

PART VI

FOUNDATIONS FOR SUSTAINABLE DEVELOPMENT



17

Attaining Just and Lasting Peace

Attaining Just and Lasting Peace

Insurgency has a negative impact on the economy. Resolving insurgency will foster a climate conducive to economic growth and development.¹ In response to the government's call to solve insurgency problems, the government adopts and implements the necessary reforms for peace and support peace processes in as many ways as possible. Peace is indeed a continuous aspiration of the Filipino people.²

This chapter shows the assessment of the region's peace situation. The various challenges and priority strategies to address the goal of the present administration in achieving a cohesive, secure, and progressive nation anchored on the vision of attaining just and lasting peace are also discussed.

Assessment and Challenges

Sub-Sector Outcome: Sustained safe and secure environment

Partly attained. The subsector outcome was partly attained based on the assessment of the peace component of the previous Plan which supports the vision of the governance sector to achieve a better quality of life for the people.

Three provinces in the region were not insurgency-free. The Armed Forces of the Philippines (AFP), together with the PNP, continuously conducted suppression of insurgency activities and other serious threats to the region's security. All the provinces of the region were insurgency-free from 2013 to 2014. However, in 2015, the provinces of Ilocos Norte, Ilocos Sur and Pangasinan were not declared insurgency-free despite rigorous civil

military operations undertaken for the past years. The declaration was based on the set of parameters of the AFP and PNP's anti-insurgency mechanisms.

In 2011, the AFP launched the Internal Peace and Security Plan (IPSP) as the counter-insurgency drive. Likewise, the IPSP was formulated to provide the strategic guidance in the performance of the AFP's mandated functions of protecting the state and the people in the attainment of internal peace and security³. The IPSP achieved its target accomplishment to significantly dent the rebels in the region in 2013 as the four provinces were insurgency-free and the situation lasted until 2014. However, in 2015, despite the concerted efforts in implementing the IPSP, only La Union maintained its status as insurgency-free.

¹Executive Order No. 546, s. 2006, Retrieved from <http://www.gov.ph>

²AFP Internal Peace and Security Plan (IPSP), Retrieved from <http://www.afp.mil.ph>, page i

³AFP Internal Peace and Security Plan (IPSP), Retrieved from <http://www.afp.mil.ph>, Page v

This implies the need to revisit the IPSP to determine areas for improvement.

Intensive territorial defense operations and maritime law enforcement operations were undertaken. The territorial defense and internal security operations were conducted in 2016 which had an accomplishment of 22 air operations and 105 internal security operations conducted by the Naval Forces North Luzon (NFNL). On international engagement mission and peace support operations, the NFNL caused the voluntary surrender of two Communist Party of the Philippines (CPP)/New People's Army (NPA)/National Democratic Front (NDF) rebels and the arrest of eight personalities involved in criminalities⁴.

Also, the NFNL conducted intensive maritime law enforcement from 2011 to 2016 that apprehended illegal fishing

activities. As part of the implementation of RA 8550 or the Fisheries Code of the Philippines, the Bureau of Fisheries and Aquatic Resources (BFAR), through their Quick Response Team (QRT), conducted visibility campaign against illegal fishing practice along the Lingayen Gulf⁵. Despite the above accomplishments, there is a need to intensify maritime law enforcement operations as shown by the high report of violations.

There is a need to professionalize and modernize the AFP. The protective equipment of the AFP in the region have already reached their maximum useful life due to wear and tear affecting the defense capabilities of the armed men. There is a need to upgrade the capability of the AFP in the region and to upgrade and modernize their equipment to further strengthen defense capabilities.

STRATEGIC FRAMEWORK

Targets

For the Plan period, this chapter's target will focus on attaining just and lasting peace.

The region targets a 100 percent insurgency-free declaration for all its provinces to help contribute in attaining a just and lasting peace by 2022.

Strategies

In order to attain just and lasting peace, the following priority strategies will be pursued in the region:

Sub-Sector Outcome: Internal Stability and Public Safety ensured

Strengthen the IPSP. To ensure internal stability and public safety, the IPSP will be revisited and strengthened. The improvement will cover two strategic approaches: the whole-of-nation⁶ and the people-centered security/human security approaches. It will focus on the

⁴Significant Accomplishment of the NFNL, 2016 BFAR

⁵BFAR Regional Office I, Retrieved from <http://region1.bfar.gov.ph>

⁶The "whole-of-nation approach" is the framework that shall guide how the AFP will implement the IPSP. It is based on the recognition that the AFP cannot single-handedly solve the internal peace and security concerns of the country. The comprehensive definition of security, with focus on the well-being of the people, entails a multi-faceted and multi-pronged approach. This can only be attained through a sustained multi-stakeholder effort borne out of partnerships with different government institution, non-government stakeholders as NGOs and CSO, and the local communities.

engagement of more stakeholders to include national government agencies and local government agencies, CSOs, and community-based groups.

Modernization and professionalization of the law enforcement entities. The revised AFP and PNP modernization program will be implemented to equip the soldiers and police with adequate equipment responsive to the challenges of the prevailing peace

and security situations. The program will focus on the upgrading of protective equipment for soldiers like helmets and vests and acquisition of more night-fighting systems for the Philippine Army (PA), additional fast crafts for the NFNL, additional helicopters capable of night flight for the NFNL and Philippine Air Force (PAF) and more communications equipment to further strengthen defense capabilities.

Figure 17.1 Strategic Framework to Attain a Just and Lasting Peace in Region 1 (2017-2022)



18

Ensuring Security, Public Order, and Safety

Ensuring Security, Public Order, and Safety

Economic development arises when security and public order is no longer an issue of the region. Well-secured and disciplined community can be a key for sustainable development as it will attract investments and create employment opportunities. The government recognizes the vital role of internal security in building a great nation, thus ensuring security, public order and safety is included in the 0 to 10-point socioeconomic agenda of the Duterte administration.

Assessment and Challenges

The assessment of the peace, order and security sub-sector of the previous Plan which supports the vision of the governance sector was partly attained.

Sub-Sector Outcome 1: Safe and secure environment sustained

Partly attained. Region 1 remained to be a relatively safe and secure environment as the government intensified its anti-criminality and anti-drug efforts.

Due to better reporting system and with the improved confidence of the people on the police force, reported crimes increased from 35,810 crimes in 2014 to 40,429 in 2015, or an increase of 12.90 percent. The increase in crime volume was also attributed to the increase of vehicular traffic incidents (VTIs). However, in 2016, crimes decreased to 31,333 because of the sustained efforts on the maximization of operational capabilities of the police force and increased awareness of the community through the anti-criminality drive and relentless campaign against illegal drugs.

Crime prevention efforts were successfully implemented in partnership with all stakeholders, through more extensive

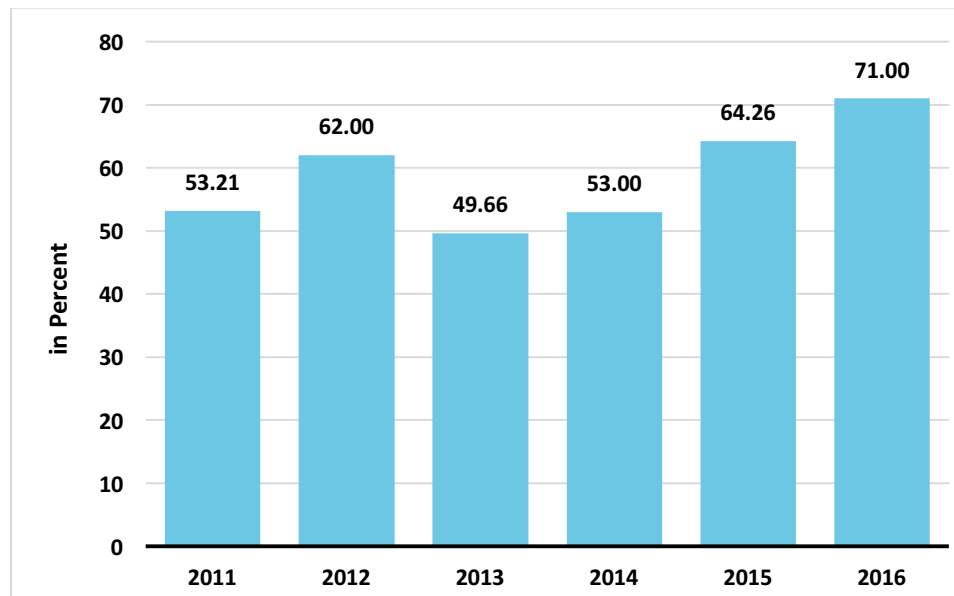
consultations, inter-faith and multi-cultural dialogues. As a result, Crime Solution Efficiency (CSE) rate in 2016 was recorded at 71.0 percent, which was 6.0 percentage points higher than the 2016 target of 65.00 percent. Although, on the average, from 2011 to 2016, CSE rate was recorded at 58.86 percent, short by 6.14 percentage points to the 65.00 percent target by the end of the Plan period.

The higher than target CSE rate in 2016 was attributed to the effective investigation management, supervision and monitoring of PNP Region 1 as embodied in the Peace and Order Agenda for Transformation and Upholding of the Rule of Law (PATROL) Plan 2030.¹

Among the provinces, La Union posted the highest CSE rate in 2016 at 85.0 percent followed by Ilocos Norte at 75.0 percent and Pangasinan at 68.0 percent. Ilocos Sur posted the lowest CSE rate at 59.00 percent. Despite the attainment of good CSE rates in the region, the challenge is on how to sustain this level.

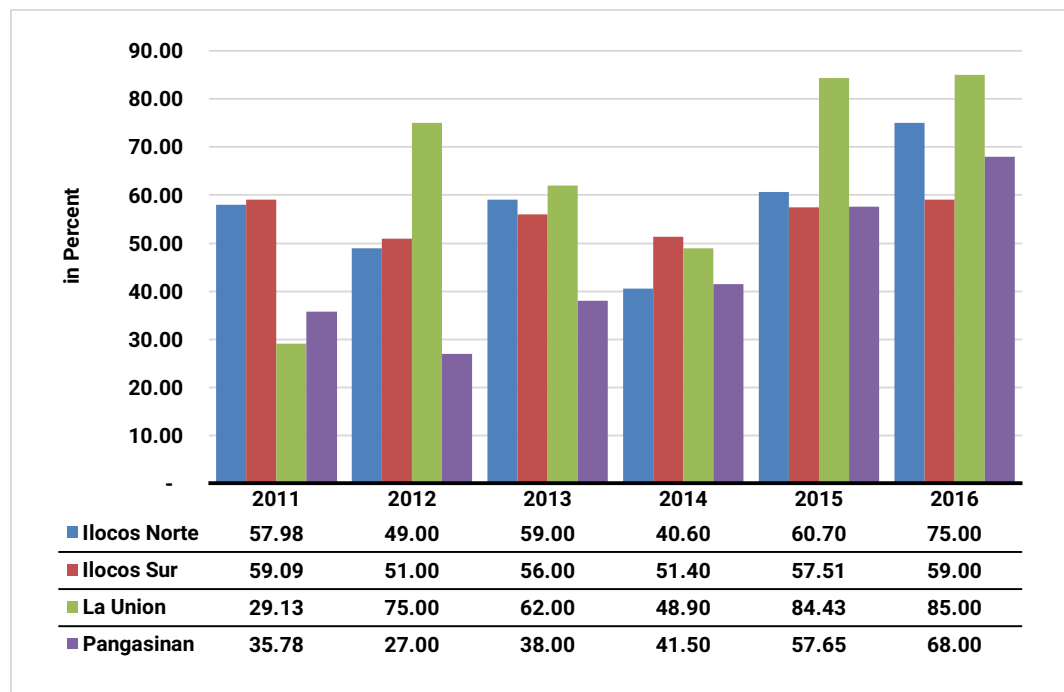
¹PNP Performance Governance Report, PATROL Plan 2030, March 2013

Figure 18.1 Crime Solution Efficiency Rate (CSER), Region 1 (2011-2016)



Source: Philippine National Police (PNP)

Figure 18.2 Crime Solution Efficiency Rate (CSER), by Province, Region 1 (2011-2016)



Source: Philippine National Police (PNP)

Non-index crimes (NICs) which are violations of special laws and not crimes against persons posted the highest occurrence in 2014 and 2015. NICs also

represented a higher percentage of the total crime volume at an average of 67.58 percent in 2011-2016.

With the positive levels of CSE, it can be said that the police force has successfully implemented their programs through strong partnership with local governments.

The police to population ratio reached an average of 1:704 in 2016 which is better than the standard ratio of 1:800 for provinces, cities and municipalities. This means that the region's police force

complement can cover the population required to be protected and it can already address criminality.

However, some LGUs in the region do not provide administrative support in the implementation of police programs. This is identified as one of the sub-criteria in the essential areas of the SGLG on peace and security.

Table 18.1 Index and Non-Index Crimes, by Province, Region 1 (2011-2016)

Region/ Province	2013	2014	2015	2016
Index Crime				
Region 1	20,399	10,985	9,426	4,868
Ilocos Norte	4,367	1,864	1,465	556
Ilocos Sur	2,500	580	990	623
La Union	2,170	1,051	812	491
Pangasinan	11,362	7,490	6,159	3,198
Non-Index Crime				
Region 1	17,549	24,825	31,003	24,465
Ilocos Norte	4,899	4,958	4,846	4,559
Ilocos Sur	2,283	1,883	2,460	2,374
Ilocos Sur	1,641	3,158	7,211	5,204
La Union	8,726	14,826	16,486	14,328
Pangasinan				
Total Crime Volume				
Region 1	37,948	35,810	40,429	31,333
Ilocos Norte	9,266	6,822	6,311	5,115
Ilocos Sur	4,783	2,463	3,450	2,997
La Union	3,811	4,209	8,023	5,695
Pangasinan	20,088	22,316	22,645	17,526

Source: Philippine National Police (PNP)

There is a need to intensify campaign against drugs and criminality. The present administration's "war on drugs" campaign served as an eye-opener that Region 1 is not spared from this problem. The PNP recorded a total of 39,381 men and women drug surrenderers from July 1 to December 31, 2016. This only shows

that there is a need to support the campaign against drug in the region.

There is a need for a stronger commitment to functional security efforts in times of disasters and civil defense. The commitment of the functional security groups was very

significant in times of disasters and civil defense, thereby, showing a decline in the casualties in the region. Typhoon Lando was the strongest typhoon that visited the region leaving behind vast destruction on agricultural products and properties. With

the security efforts and civil defense mechanisms, the region proved resilient during the onslaught of Super Typhoon Lawin in 2016 that caused massive devastation but left no deaths in the region.

Strategic Framework

Targets

For the Plan period, this chapter's target will focus on ensuring security, public order and safety, specifically on ensuring internal security.

Table 18.2 presents the detailed list of major indicators for the chapter with their corresponding end-of-plan targets.

Strategies

Sub-Sector Outcome: Internal Security Ensured

Enhance anti-criminality and anti-drug prevention and control programs. The fight against criminality and illegal drugs in the region through the implementation of PATROL Plan 2030 was sustained as reflected in the CSE levels. To ensure internal security in the region as contained in the PATROL Plan, the programs will be maintained and enhanced through the following capability building activities: Crime Investigation Course (CIC), Special Weapon and Tactics (SWAT), Special Counter-Insurgency Operation Unit Training (SCOUT).

Maximize operational capabilities. The police force will continue its police visibility mechanisms for crime prevention and speedy police response to crime incidents. This will be done through the implementation of a 12-hour shift,

increasing patrolling activities and sustained utilization of communication channels.

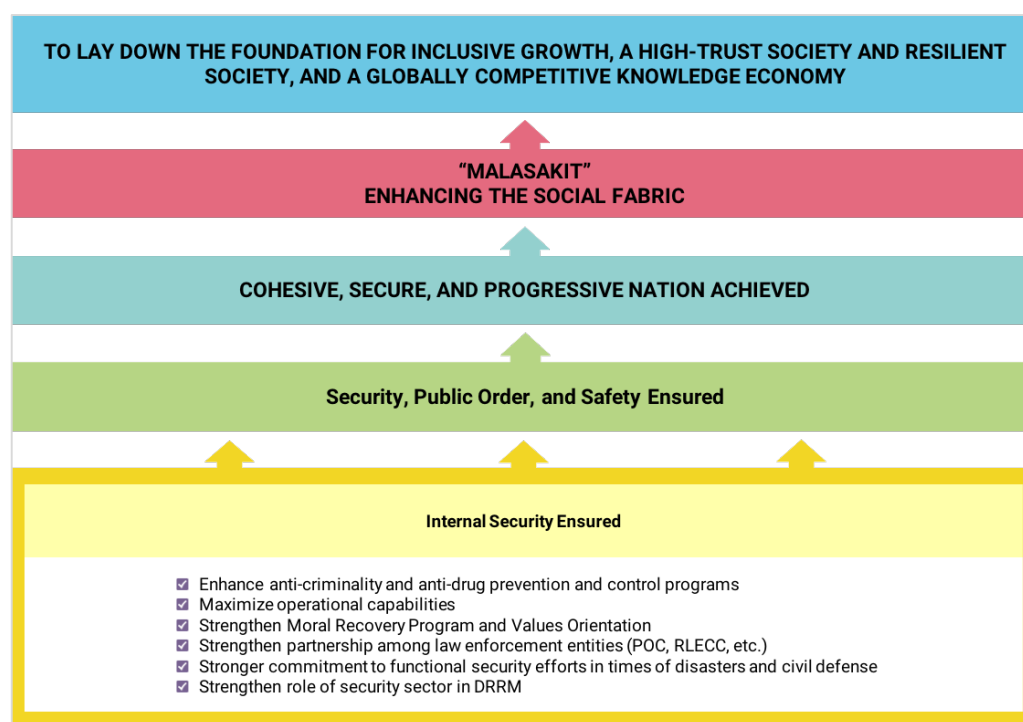
Strengthen Moral Recovery Program and Values Orientation. Residents in the region will be encouraged to get involved in the Moral Recovery Program and Values Orientation (MRPVO) which promotes morally upright ways of living. In addition, the program will focus on rebuilding a 'people nation' and retaining a sense of community spirit. The MRPVO will be strengthened and spiritually adopted or integrated by the law enforcement entities in their plans to reduce crime levels and to develop good moral character among people.

Strengthen partnership among law enforcement entities. The Inter-Agency Committee on Anti-Illegal Drugs (ICAD) that will integrate efforts and strengthen the partnership of all public and private agencies including LGUs in fighting anti-narcotics campaign will be created. The Regional Law Enforcement Coordinating Committee (RLECC) and Regional Peace and Order Council (RPOC) will be strengthened in terms of execution of anti-drugs, crime and corruption campaigns, monitoring compliance with all policies, laws and issuances, and conduct of high impact programs and projects.

Table 18.2 Plan Targets to Ensure Security, Public Order, and Safety in Region 1 (2017-2022)

INDICATORS	BASELINE		END-OF-PLAN TARGET 2022
	YEAR	VALUE	
Sub-Sector Outcome: Internal security ensured			
Crime Solution Efficiency Rate	2016	71.00	68
Percentage decrease in Total Crime Volume	2016	22.50	3
Percentage decrease in Non-index Crimes	2016	21.09	3
Percentage decrease in Index Crimes	2016	48.36	3
Crime Clearance Efficiency Rate	2016	79.00	97
Percentage increase in Crime Clearance Efficiency	2016	2.06	3
Police to Population Ratio	2016	1:704	1:600

Figure 18.3 Strategic Framework to Ensure Security, Public Order, and Safety in Region 1 (2017-2022)



Stronger commitment to functional security efforts in times of disasters and civil defense. The security sector will strictly implement policies with its corresponding plans and programs: RA

10121 of 2010 (NDRRMP 2011-2028), RA 10349 of 2013 (the Revised Modernization Program) and IPSP.

Strengthen role of security sector in DRRM. The Plan will be implemented until 2022 to have safer, adaptive and disaster resilient Filipino communities.

This will include the continuing capability-building of the security sector on proper basic and advance skills as first responders.

Legislative Agenda

Table 18.3 Legislative Agenda to Ensure Security, Public Order, and Safety in Region 1 (2017-2022)

LEGISLATIVE AGENDA	RATIONALE
Sub-Chapter Outcome: Internal Security ensured	
Passage of a Peace and Order Act	Peaceful and safe communities is a key for regional development. Thus, the need to enact or the passage of the Peace and Order Act will sustain the gains the region had for the previous years.

19

Accerelating
Infrastructure
Development

Accelerating Infrastructure Development

Infrastructure development is one of the region's major strategies to support its vision of becoming the agribusiness and tourism hub in Northern Philippines. As the region's population grows and urbanization expands, the sector needs to build more and better infrastructure facilities. An adequate, reliable, sustainable and disaster-resilient infrastructure system is critical in optimizing opportunities for economic and social advancement.

The infrastructure development roadmap of Region 1 envisions an efficient and affordable inter-modal transport system providing reliable linkage among the region's airports, seaports and network of roads and bridges. The Manila North Road (MNR) traversing the four provinces of Pangasinan, La Union, Ilocos Sur and Ilocos Norte will continue as the main economic backbone of the region. It shall also continue as the main alternate link of the region to areas south of the region such as Region 3 and the Metro Manila Area, the main link being the Tarlac-Pangasinan-La Union Toll Expressway or TPLEX. The Laoag-Allacapan Road will of course remain as the main link of Region 1 to Region 2. Connectivity to the Cordillera Administrative Region will still be through the Bauang-Baguio Road (Naguilian Road), the Marcos Highway, Kennon Road and the Tagudin-Cervantes-Mankayan Road. By-pass roads will be built particularly along the MNR to address the increasing traffic congestion in key urban centers.

The region's airports and seaports will remain as the main links of the region to the rest of the country and the ASEAN Region through the Laoag International Airport and the San Fernando Seaport.

Adequate irrigation systems and flood-mitigating structures will be constructed to increase agricultural production. The region will also have high speed internet to enhance the link among government agencies for faster and improved public services, and boost business competitiveness. In terms of social infrastructure, the region will have enough schools complemented with competent teachers and adequate textbooks and computers. Hospitals will continue to be enhanced with modern and reliable health facilities.

Assessment and Challenges

The infrastructure development sector partly achieved the outcomes it set in the previous Plan. All sub-sector outcomes which include (1) travel time reduced, (2) transportation costs reduced, (3) access to information improved, (4) productivity increased, and (5) access to social facilities increased, were partly attained.

Sub-Sector Outcome 1 and 2: Travel Time Reduced and Transportation and Production Costs Reduced

Partly attained. While the region's road network increased in length by 78.80 kilometers and bridge length by 7,306.07 lineal meters in 2011-2016¹, bottlenecks remained in key urban centers. Traffic in the Bauang - San Fernando -San Juan stretch in La Union slowed down during peak hours in the morning and in the afternoon. Urdaneta, Candon and Laoag City also experienced traffic problems within their Central Business Districts. To address this concern, the construction of by-pass or diversion roads in known traffic choke points needs to be hastened.

The continuing widening works along the MNR likewise contributed to slower travel time from Pangasinan to Ilocos Norte particularly in sections where the relocation of affected trees and utility lines, and acquisition of right-of-way (ROW) were delayed. On the cutting of trees, delays can be attributed to the long process adopted in the issuance of permits where DENR Secretary himself approved the request. For the affected utility lines, it was still not clear who should shoulder the relocation expenses.

The on-going widening of bridges into four lanes also affected the smooth flow of traffic in affected sections. The challenge is to accelerate the completion of the road and bridge widening works to improve the flow of traffic region-wide. Both the concerned LGUs and the Department of Public Works and Highways (DPWH) need to strengthen collaboration in addressing the issues of ROW acquisition, and the relocation of affected trees and utility lines.

¹Department of Public Works and Highways (DPWH) Region 1

Another issue worth looking into, which has affected the smooth flow of traffic, was the continued use of some widened road sections as parking areas and solar drying for palay and other agricultural products. Again, this would need the close coordination between the concerned LGUs and the DPWH to ensure the enforcement of appropriate measures to address this.

Nevertheless, several major roads were constructed from 2011-2016. The Tarlac-Pangasinan-La Union Toll Expressway (TPLEX) has already been extended up to Binalonan in Pangasinan paving the way for improved access to the Manaoag Shrine, a major tourist attraction for religious pilgrims. Construction of by-pass or diversion roads were also already on-going in Urdaneta, Candon and Laoag as 2016 ended.

The Department of Tourism (DOT) and DPWH Region 1 Offices completed several roads leading to tourist destinations in the region (Figure 19.1). Beneficiary LGUs contributed their share by way of facilitating road ROW acquisition and by completing all required documents. However, the implementation of quite a few of these projects was also stymied by ROW acquisition issues (Figure 19.2).

Another key challenge remained though, that of improving road condition. As of March 2016, the quality of roads in the region only earned a 'fair' condition mark using the International Roughness Index (IRI) with a score of 4.10 which was slightly above the national average mark of 4.62. However, even if the region has paved about 98.82 percent of all its national roads by the end of 2016², many of the connecting provincial, municipal and most especially barangay roads remained unpaved. Worse, many of the region's

²Department of Public Works and Highways (DPWH) Region 1

roads lacked adequate drainage facilities resulting in flooded sections during the rainy season. The slow release of calamity funds for the repair and rehabilitation of roads damaged during typhoons also

contributed to the deterioration of affected sections. Proper and regular road maintenance is also critical to maintaining the good quality of the region's network of roads and bridges.

Figure 19.1 Major Tourist Destinations, Region 1

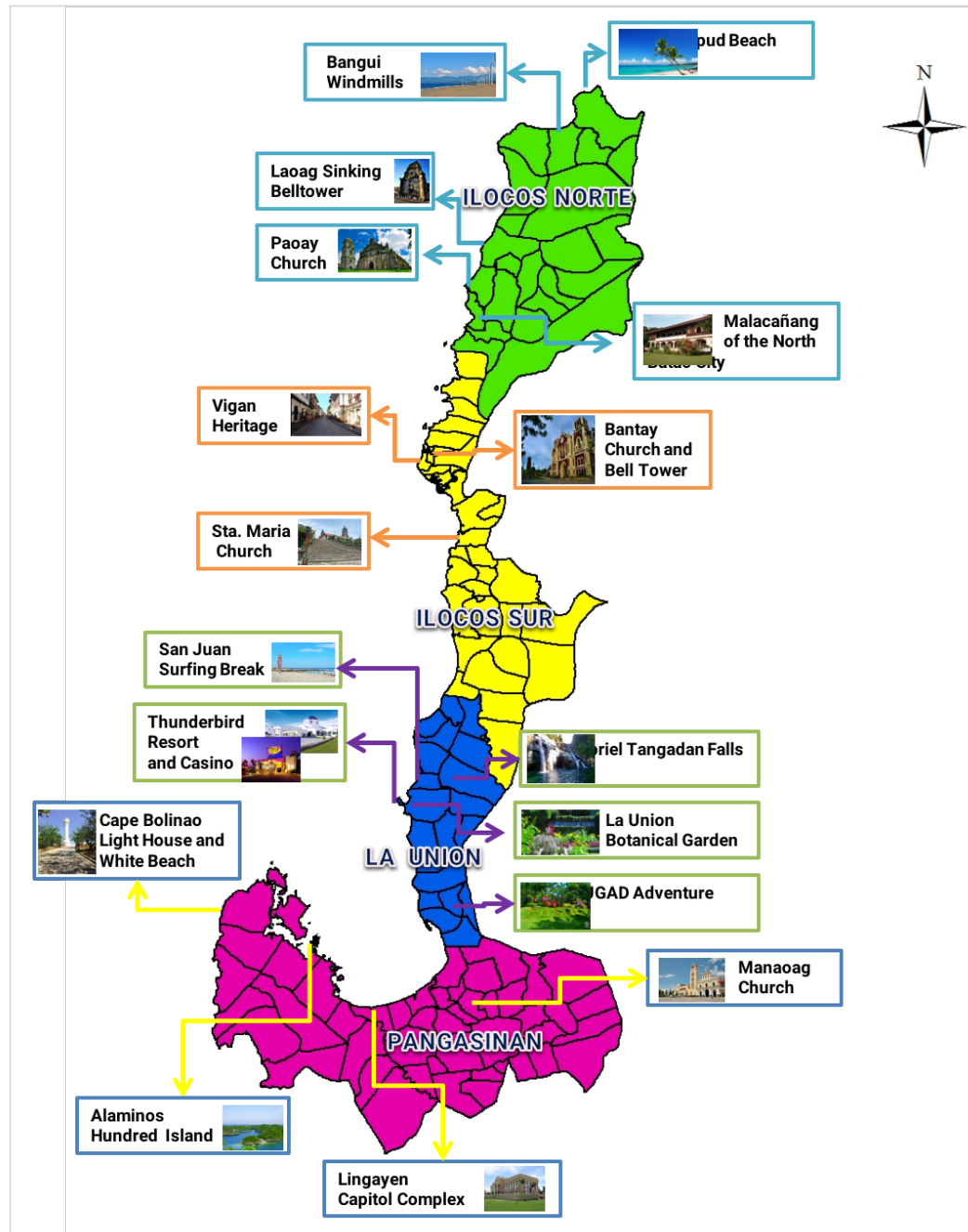
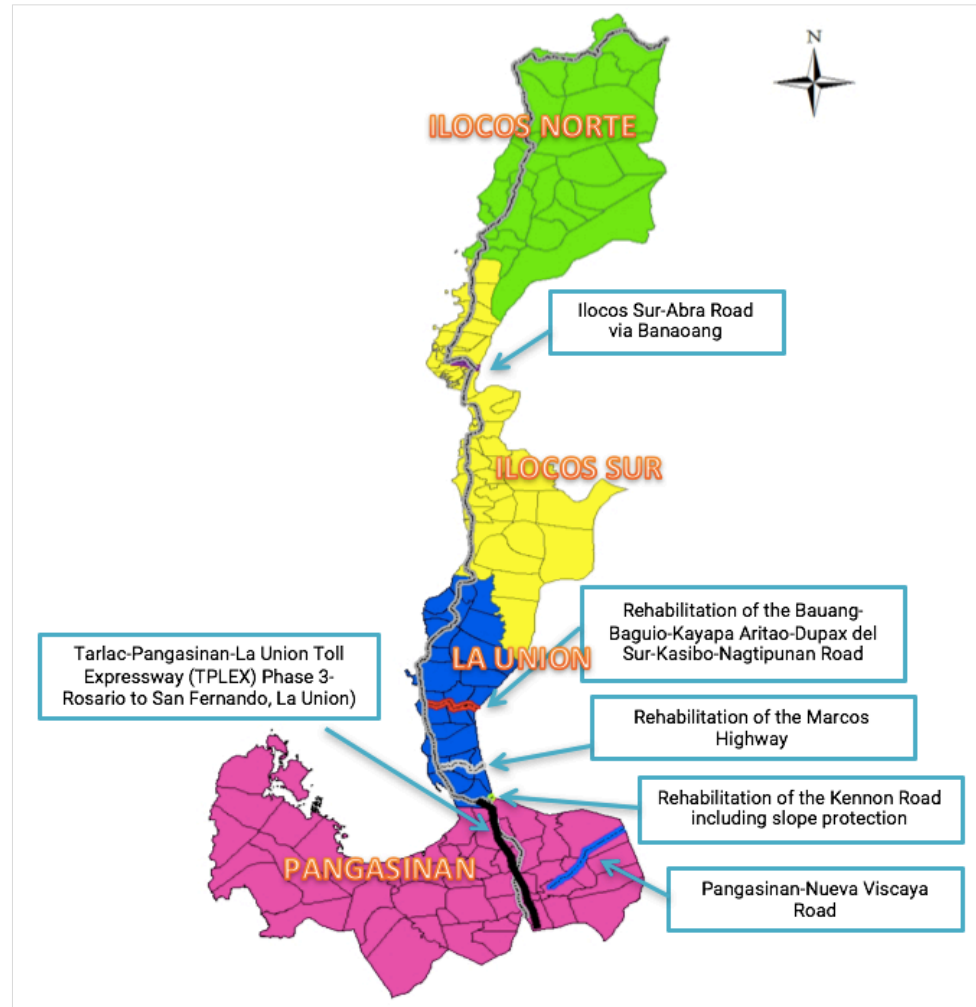


Figure 19.2 Proposed Connectivity Network, Region 1



On the number of motor vehicles registered, records showed that it increased by 156,533 units, from 384,161 units in 2011 to 540,694 units in 2015³. Private vehicles outnumbered “for-hire” vehicles at 5:1. The increasing number of private vehicles contributed to traffic congestion particularly in the urban areas. The increasing number of tricycles and motor bikes likewise affected traffic flow and road safety. The observed seeming disregard by many motorbike users for traffic rules and regulations, weaving in and out of traffic, has not only slowed

down traffic but has contributed to more vehicular accidents as well.

Efforts, however, were undertaken to ensure the safety of both motorists and pedestrians. Road worthiness tests were conducted by the Land Transportation Office (LTO) under the agency’s Registration of Road Worthy and Emission Compliant Motor Vehicles Program. Under this program, relatively older public buses have been phased out. The anti-smoke belching campaign also ensured less polluted air. Many LGUs contributed their share by adopting better traffic management measures.

³Land Transportation Office (LTO) Region 1

With regard to airport development, the five airports operating in the region, namely, the Laoag International Airport in Ilocos Norte, Vigan Airport in Ilocos Sur, Lingayen Airport and Rosales Airport in Pangasinan, and San Fernando City Airport in La Union continued to cater to the region's airport requirements (Figure 19.2). Passenger traffic averaged 192,396 per year over the six-year period from 2011 to 2016. Flights averaged 1,012 yearly over the same period⁴. Cargoes, on the other hand, averaged roughly 2,774 metric tons annually. However, only the Laoag International Airport catered to commercial passenger traffic. The rest of the airports were used mainly by flying schools since commercial operation was not profitable. The challenge is to make air travel more affordable for travelers and profitable for commercial operators.

For seaport development, the seaports in the region were not fully utilized for passenger movement despite their potential as an alternative mode of transport (Figure 19.2). A cruise ship berth was constructed at the Currimao Port in Ilocos Norte but it has not been used ever since the only ship transporting passengers to Batanes sank during a typhoon. Prospects, however, are bright considering the recent news on the inclusion of the Currimao Port as port of entry in Northern Luzon for Star Cruises.

The ports in Salomague in Cabugao, Ilocos Sur and Sual in Pangasinan have not been fully developed, just limited to fishing and cargo transport. The San Fernando Port in La Union also is used mainly for cargoes. The San Fernando Port has the potential to be a major passenger and transshipment port but plans fizzled out due to lack of support.

From 2011 to 2016, the number of ship calls in the region's ports recorded a downward trend. From a high of 1,383 shipcalls in 2013, this went down to 924 in 2015 and further down to 861 in 2016⁵, still above the targeted 786 shipcalls by the end of the Plan period. The challenge is to arrest the steady decline in the next planning period.

The provision of a reliable inter-modal transport system was also partly achieved. While access roads to the region's airport and seaports were constructed, regular bus transport was still lacking. The planned railway extension to San Fernando City, La Union also did not materialize due to changes in the priorities of the Department of Transportation and Communications (DOTC). A feasibility study needs to be prepared if this is still needed in the region considering the nearing completion of the TPLEX up to Rosario, La Union. Deserving a second look also would be the Alaminos Airport Development to support the Hundred Islands National Park in Western Pangasinan and the Tri-Ferry System. The latter envisions linking the cities of Alaminos, Dagupan and San Fernando as a major tourist hub.

Sub-Sector Outcome 3: Access to information improved

Partly attained. Plans to roll out more cell sites were implemented during the Plan period. From only 771 in 2014, this went up to 887 in 2015.⁶ In the process, the number of mobile phone users was observed to have increased during this time. This was very evident in the urban areas where almost all households possessed one or more cell phones. This could not be said, however, in the region's remote upland areas and hinterlands.

⁴Civil Aviation Authority of the Philippines (CAAP) Region 1

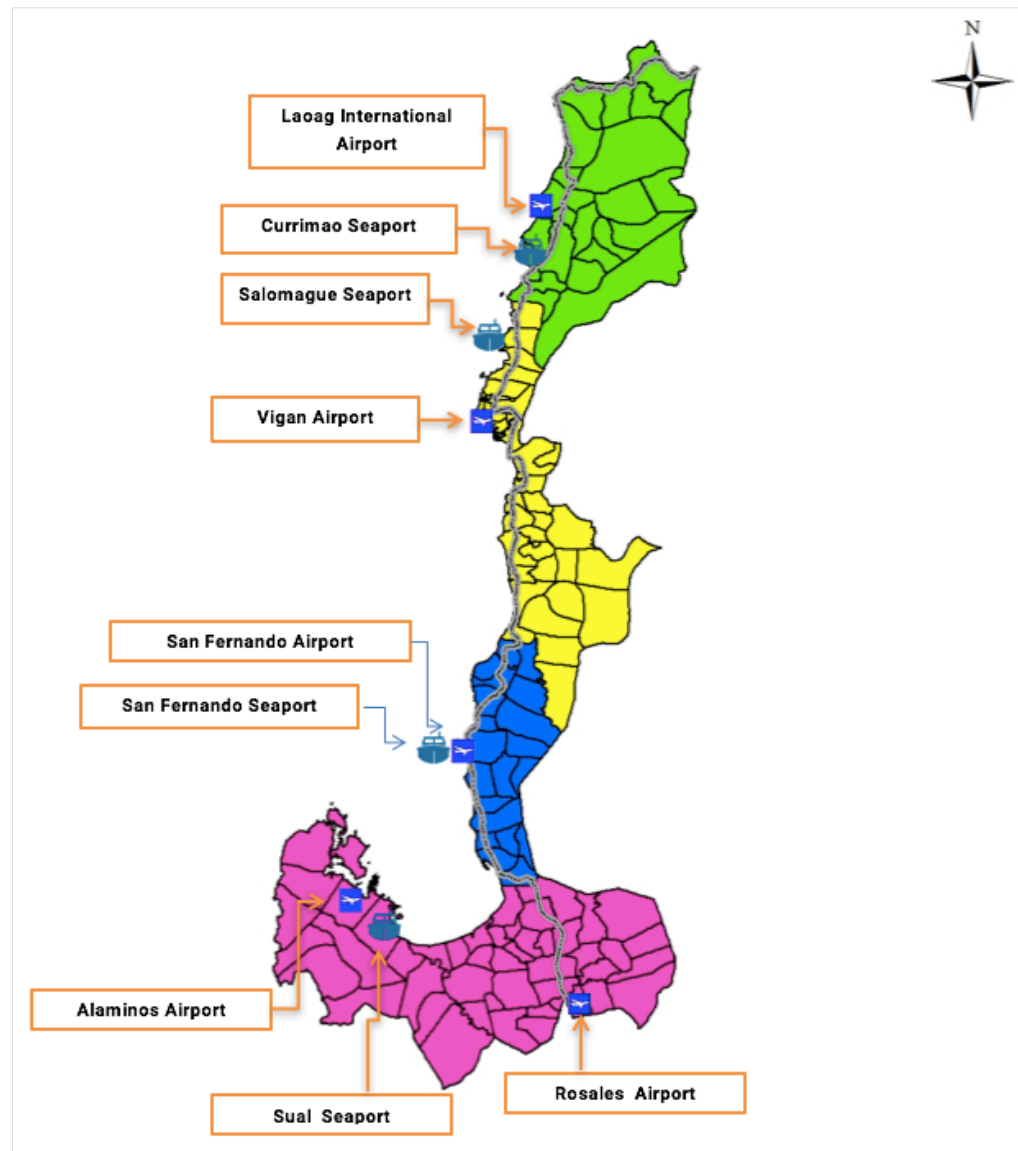
⁵Philippine Ports Authority (PPA) Region 1

⁶National Telecommunications Commission (NTC) Region 1

Cable television also was only limited in the urban centers, albeit, the more well-off families in the rural areas had satellite dishes. This apparent neglect to provide

adequate communication facilities in the rural areas contributed in part to their slower economic development in contrast to the urban areas.

Figure 19.3 Existing Airports and Seaports, Region 1



Any national broadband project therefore, by government will have to prioritize the rural areas. As of 2010, only 17.70 percent of households in the region had access to the internet.⁷

While mails could already be sent electronically, the number of mails sent through the region's postal offices and couriers remained high at 6,950,772 mails in 2015.⁸

⁷National Telecommunications Commission (NTC) Region 1

⁸Philippine Postal Corporation (PhilPost) Region 1

Sub-Sector Outcome 4: Productivity Increased

Partly attained. Agricultural production has been stymied by erratic water availability for irrigation purposes. In several occasions, there has been too much water during the rainy season and too little during the dry months. Irrigation coverage was within the target of 60.75 percent for the Plan period, expanding from 37.47 percent in 2011 to 58.90 percent in 2015, growing by 21.43 percentage points. The irrigation situation, however, may further improve with the targeted completion of the Agno River Irrigation Extension Project in 2017.

Irrigation coverage could have been further improved if not for the slow rehabilitation and repair works of irrigation canals damaged by typhoons which hit the region successively during the 5-year period. Two big irrigation projects proposed for implementation during the Plan period also did not push through. These were the Gregorio del Pilar Irrigation Project and Banaoang Pump Irrigation Projects (both in Ilocos Sur).

The completion of many approved irrigation projects has also been delayed due to late releases of funds as reported during several problem-solving sessions conducted by the Regional Project Monitoring Committee of Region I. The problem cited was the centralized release of project funds for regional irrigation projects. Approved funds are not released directly by the DBM to the NIA regional office but to the NIA-CO first.

The inadequacy of the supporting flood control structures likewise affected agricultural production. Agricultural areas in the region's four provinces generally got flooded during the rainy and typhoon season. The most affected provinces were Ilocos Norte and Pangasinan, 2 of the 10

provinces nationwide which are most prone to flooding.

Further increasing irrigation coverage and mitigating the negative effects of flooding are two concerns which need addressing in the next Plan period if the region were to increase agricultural production. The problem of droughts also need equal attention. Constructing more water harvesting facilities will have to be explored. The Amburayan River Convergence Project covering both irrigation and flood control, which was not implemented, may warrant revisiting, so with the Agno Flood Control Project, Phase 3 to complement Phases 1 & 2 which were completed earlier. The Agno River Irrigation System Extension Project (ARISEP) should be completed as programmed in 2017.

Other economic activities in the region were also affected, not just from flooding, but from other factors as well.

Access to potable water in the region has been consistently high, reaching 93.50 percent of households in 2011 and increasing to 96.49 percent in 2015⁹, higher than the national average of 85.50 percent. Majority of the water sources, however, came from artesian wells and springs (Level 1 source), and communal faucets (Level 2 source). Piped water systems (level 3) only served the urban areas. Among the provinces, only the province of Ilocos Norte already achieved a 100 percent household coverage in 2015.

More than half of households derived their water from deep and artesian wells. Since these water sources lacked proper treatment, most were unsafe for drinking.

Sanitation is another facility important to health to allow one to work productively.

⁹Department of Health (DOH) Region 1

Region 1 performed well in the provision of said facility. By the end of 2015, 93.17 percent of households had sanitary toilet facilities¹⁰, slightly lower than the national average of 94.10 percent. Among the poorer members of society, however, sanitation remained an unfulfilled need. The proper disposal of waste needs to be advocated among the poor especially those living along the region's river system and coastal areas.

Electrification coverage increased but the high costs of electricity affected the profitability of economic activities. In 2011, only 89.30 percent of households were provided with electricity but increased to 94.40 percent in 2015. This was above the national coverage of 89.62 percent. For sitios, 98.00 percent already had electricity in 2015¹¹. Remote areas, however, were not reached by the grid since electric cooperatives and private electric companies considered these investments not viable.

The region is host to several power plants. Two of the biggest are in Pangasinan - the San Roque Hydropower Plant in the municipality of San Manuel and the Sual Coal-Fired Power Plant in Sual. The others are in La Union (Bauang Diesel Powered Plant) and Ilocos Sur (Bakun Hydroelectric Power Plant). Three wind farms are in Ilocos Norte (Bangui, Burgos and Pagudpud towns) and one solar farm in Burgos, also in Ilocos Norte. In spite of these power plants, however, the costs of electricity in the region remained high. Host regions can lobby for lower electricity costs.

Sub-Sector Outcome 5: Access to Social Facilities Increased

Partly attained. Additional classrooms

were constructed in 2011 – 2016. The implementation of the PPP – funded School Infrastructure Program (PPP-SIP 1 & 2) of the DepEd complemented the regular school building program of the agency, which was implemented in partnership with the DPWH. Both tacks contributed to addressing the classroom needs of the region. The elementary classroom to pupil ratio was 1:24 in 2015, well within the standard of 1:25 and better than the national ratio of 1:34.

Many of the existing classrooms, however, were not yet typhoon-proofed, getting flooded during the rainy season. Some issues have also been raised regarding the design of the school buildings constructed under the PPP-SIP 1, which were made of stainless steel. Considering the hot weather during the summer months, the design was considered as inappropriate for the region. Observations were raised that better coordination should have been done relative to the design of said classrooms. Many of the region's tertiary schools are located in high traffic areas posing problems on the safety of students. While some overpasses have been constructed to address this concern, more needs to be provided to cover all other affected schools.

Amidst the increase in the number of Barangay Health Stations (BHS) and Rural Health Units (RHUs), there is still a wide gap in providing access to health facilities. Under the Health Facilities Enhancement Program (HFEP) of the Department of Health (DOH), the number of BHS increased to 1,307 in 2015 compared to 1,044 in 2010.¹² This translated to a ratio of 1 BHS per 4,000 population. On the other hand, several of the RHUs were already equipped with basic emergency, obstetric and neonatal care facilities. One big problem, however,

¹⁰Ibid.

¹¹National Electrification Administration (NEA)

¹²Department of Health (DOH) Region 1

confronting LGUs was operation and maintenance of the facilities especially provision of adequate manpower and facilities to make these health units fully functional.

Compliance of LGUs with the Solid Waste Management Act (RA 9003) was very low, hence, waste management remain to be a big challenge in the region. As of 2016, out of the 125 LGUs in the region, there were only 68 who submitted their Local Solid Waste Management Plan (LSWMP); 34 were approved, 6 were implemented while the 28 remaining plans still need to submit additional requirements to be approved. Lack of financial and technical capacities and the high costs of establishing and operating SWM facilities are the primary reasons that hamper LGUs in crafting and implementing their SWMP (Source: PDP Chapter 19, p. 13). On the other hand, as of 2016, there were still 26 open dumpsites operating in the region but DENR intends to close all of them by 2017. Nevertheless, it can be observed that many of the barangays in the region had already started to establish and operate their Materials Recovery Facilities (MRF) and implement waste segregation accordingly.

Other challenges include the following:

Low resistance of infrastructure facilities to disasters. Majority of the infrastructure facilities in the region were not designed to withstand intense rains and typhoons. Retrofitting these and constructing new calamity-resistant ones will entail huge investments. Thus, there is a need to rally both the public and private sectors to work together to improve the quality of the region's infrastructures.

Limited funds for the implementation of all needed infrastructure facilities. The regional implementing agencies in the region relied heavily on the GAA for funding support, where the region competed with the other regions in the country for funds allotted to their agencies. Always, funds were not enough to cover all identified infrastructure projects.

LGUs, on the other hand, relied heavily on the Internal Revenue Allotments (IRA) for local development. The allocation, however, was not enough to cover a multitude of devolved LGU infrastructures covering local roads and bridges, irrigation, flood control, school buildings, water supply, flood control, health facilities and other public buildings, all capital-intensive in nature. Most affected were the 4th and 5th class municipalities.

Strategic Framework

The sector's intermediate goal is to accelerate and develop all needed infrastructure in the region to help lay down the foundation for inclusive growth, a high trust society and a globally competitive knowledge economy. To achieve this, the sector envisions the following sector outcomes by the end of the Plan period: (1) reduced travel time; (2) reduced production costs; (3) improved access to information and technology; (4)

increased productivity; and (5) increased access to social facilities as shown in Table 19.1.

Strategies

To have a quality, adequate, affordable, reliable and climate-resilient infrastructure facilities and system in the region, the following specific strategies will be implemented.

Table 19.1 Plan Targets to Accelerate Infrastructure Development in Region 1 (2017-2022)

INDICATORS	BASELINE		END OF PLAN TARGET 2022
	YEAR	VALUE	
Sub-Sector Outcome 1 and 2: Travel Time Reduced, and Transportation and Production Costs Reduced			
Number of Road widening projects	2016	36	102
Number of By-passes and diversion roads	2016	7	28
Number of Access roads constructed	2016	17	140
Number of registered vehicles	2016	540,694	583,700
Sub-Sector Outcome 3: Access to Information Improved			
Number of Cell Sites	2015	887	To be determined
Sub-Sector Outcome 4: Productivity Increased			
Irrigation coverage	2015	58.90%	80.62%
Percentage of Households with Access to Potable Water	2015	96.49%	98.00%
Percentage of Households provided with Electricity	2016	95.00%	To be determined
Percentage of Households with Access to sanitary toilet facility	2015	93.17%	96.00%
Sub-Sector Outcome 5: Access to Social Facilities			
Increased Number of new classrooms constructed	2016	2,644	3,215
Number of existing classrooms upgraded and rehabilitated	2016	505	691
Number of new BHS/RHUs, District Hospitals upgraded and rehabilitated	2016	1,382	1,502

Sub-Sector Outcome 1 and 2: Travel Time Reduced/ Transportation and Production Costs Reduced

Fasttrack completion of road widening projects. Road widening projects especially along the MNR and other national roads, especially those connecting Region 1 with the other regions will be fast-tracked. This will include the widening of all traversed bridges into 4-lanes. Better coordination will be forged between affected LGUs and

concerned agencies in the acquisition of right-of-way (ROW) and relocation of affected trees and utility lines. This can be done with proper and regular consultation among all stakeholders.

In the issuance of permits to cut trees affected by road widening projects, a review will be done to look into the possibility of streamlining the process so that approval need not reach the Secretary of the DENR himself.

For the Plan period, the DPWH-1 targets to implement 102 road widening projects.

Construction of by-pass roads in key traffic choke points. Priority will be the completion of on-going by-pass road projects in the cities of Urdueta in Pangasinan, Candon in Ilocos Sur and Laoag in Ilocos Norte. Another diversion road in La Union will be constructed linking the currently heavily congested Bauang – San Fernando City – San Juan

area. These projects when completed will significantly improve traffic flow along the MNR.

The identification of emerging traffic choke points will be done so that the needed feasibility studies can be undertaken to ensure the most viable road alignments. In all, the DPWH-1 targets to implement 28 by-pass road projects region-wide during the Plan period.

Figure 19.1 Strategic Framework to Accelerate Infrastructure Development in Region 1 (2017-2022)



Improvement of overall road quality. The LGUs can contribute to improving the quality of the region's road network by allotting more funds for the construction of all-weather local roads to complement the mostly paved national road system. Better road maintenance works will also be undertaken to ensure the continued efficiency of existing roads and bridges.

Better drainage systems will also be constructed to minimize flooding in affected road sections. Less flooding means slower deterioration of the affected road surface.

Institution of better traffic management. LGUs can assist in improving traffic management through the strict enforcement of traffic rules and regulations. They will ensure that widened sections will not be used for illegal parking and drying purposes. This will complement DPWH Order No. 73, series of 2014, which prohibits certain uses within the ROW of national roads.

Bike and motorbike riders will be encouraged to use only the outer lanes of widened roads for smoother traffic flow and ensure the safety of motorists. The LTO can also contribute through the adoption of policies to rationalize the number of vehicles using the road system at any given time. The phasing out of older vehicles as one measure of addressing the increasing number of motor vehicles will be reviewed in consultation with all affected stakeholders. The target is to register roughly 583,700 motor vehicles in 2022, up by just about 8.0 percent over the 2016 figure.

Construction of major transport projects and preparation of feasibility studies for proposed transport projects

1. Completion of the Tarlac-Pangasinan-La Union Expressway up to Rosario,

La Union and possible extension up to San Fernando City

The extension of the expressway up to Rosario, La Union is targeted for completion in 2018. The feasibility of extending this up to San Fernando City will be studied to ensure the most viable road alignment. With the cooperation of all stakeholders, especially the affected population and the allocation of adequate funds for ROW acquisition, the extension of the expressway can be started during the Plan period.

2. Completion of identified roads leading to the region's tourism destination areas

Several projects have been identified under the DOT-DPWH Tourism Road Convergence Program. For the Plan period, several projects have already been lined-up for completion and construction in 2017 and 2018. The participating LGUs can contribute to the smooth implementation of said projects by ensuring that the needed ROW are acquired on time. The completion of these tourism roads will improve their access by both local and foreign tourists.

3. Provision of adequate vehicle transport system going to and from the region's airports and seaports

The upgrading of the region's ports and seaports will need a reliable transport vehicle support to ferry passengers to and from the airport. Priority will be the Laoag International Airport, Currimao Port and the San Fernando Airport and Seaport.

4. Upgrading of the region's airports and seaports

Priority for airport upgrading will be the Laoag International Airport, the main port of entry to Region 1 from the rest of the country and the ASEAN Region.

A review will be made to enhance the viability of the other airports in the region for commercial operation. Plans for their continued upgrading will be implemented during the Plan period. The feasibility of continuing the construction of the Alaminos airport will be studied in light of the development of the Hundred Islands National Park as a major tourist destination area in Region 1.

For seaports, the upgrading of the Currimaos Port in Ilocos Norte will be undertaken to better respond to the requirements of Star Cruises having identified the port as its port of entry in Northern Luzon. The feasibility of transforming the San Fernando seaport into a major transshipment and passenger port will be studied. The Sual port in Pangasinan and Salomague port in Ilocos Sur will continue to be developed.

The feasibility of the long proposed tri-ferry system to connect the cities of Alaminos, Dagupan and San Fernando will be determined including how to best fund its implementation. A proposal to construct a network of RoRo ports in the region will also be revisited to determine its viability.

5. The extension of the railway system as another alternate mode of transport to Region 1 will be studied during the Plan period. Feasibility studies have been undertaken in the past and these will need revisiting and updating to determine the railway's viability.

Improving the connectivity of the region's various modes of transport will be a critical criterion in the identification of projects. For the Plan period, the DPWH-1 targets the implementation of 140 access roads in all the provinces of the region.

Sub-Sector Outcome 3: Access to Information Improved

Mindful of the importance of ICT in building a competitive economy, needed infrastructure and institutional reforms will be implemented in the region.

Foremost will be the provision of additional cell sites in the region's uplands and remote areas. It is very important that the region take advantage of the planned implementation of the national broadband project, by lobbying for its inclusion in the project at the earliest time within the Plan period. Under the program, free wifi areas will be designated in each municipality to benefit public buildings, schools, public markets and large barangays. The LGUs will craft their own local ICT development plans which will be aligned with the national ICT plan and will serve as the basis in the deployment of all needed ICT infrastructures.

The use of radio frequency spectrum as an alternate and supportive mode to other wireless ICT application and services will also be explored.

Sub-Sector Outcome 4: Productivity Increased

To support agricultural production, the NIA-1 and the LGUs will construct more irrigation projects to increase the irrigation service area in the region. The efficiency of existing national, communal and pump irrigation systems will be improved through the immediate repair and rehabilitation of damaged structures and

implementation of regular maintenance works. The target is to increase the irrigation coverage in the region to 80.62 percent by 2022.

The following major irrigation projects will be undertaken:

1. Agno River Irrigation System Extension Project (ARISEP) in Pangasinan. This project has a service area of 12,894 hectares;
2. Lower Agno River Irrigation System Improvement Project (LARISIP) in Pangasinan. This project has a service area of 12,650 hectares;
3. Construction, rehabilitation and repair of various national and communal irrigation systems; and
4. Provision of pump irrigation systems.

The region will also revisit the proposed Gregorio del Pilar Irrigation Project, the Banaoang Pump Irrigation Project, Phase 2 in Ilocos Sur and the Ilocos Norte Irrigation Project if these are still feasible to undertake during the Plan period.

Any institutional reforms to be instituted at the NIA will be supported at the regional level especially in the area of funds release, which has delayed the completion of various irrigation projects in the region.

To protect the region's production areas, the DPWH and the LGUs will construct adequate flood control structures in identified flood prone-areas to mitigate damages to the region's agricultural crops, fisheries, commercial establishments and private properties, and prevent the loss of lives. The region will push for the updating of the feasibility studies of the Agno River Flood Control Project, Phase 3 and the Allied Rivers Improvement Project (ARIP)

so that funds can be sourced out for their implementation. To address the problem of droughts, more water harvesting facilities will be constructed.

LGUs will also be capacitated to control and manage flooding in their localities. Adequate and easily accessible evacuation centers will be constructed in flood-safe areas.

To ensure the region's sustained productivity of its workforce, adequate potable water supply and sanitary toilet facilities will continue to be provided. Regular monitoring of water point sources like artesian wells, springs and creeks, will be done to ensure their safety. The same will be undertaken for Level 2 and 3 systems. Water Districts will be encouraged to increase their service area to cover more households with piped system. The target is to cover 98.00 percent of the households in the region with potable water supply and 96.00 percent with sanitation facilities.

For the needed power support, institutional reforms to lower the cost of electricity will be supported. The region will also lobby for better incentives for regions hosting power plants. The use of renewable energy will likewise be pushed during the Plan period. Plans are already underway for the construction of a 132-MW wind facility in Burgos, Ilocos Norte and a 100-MW solar plant in Pasuquin, Ilocos Norte¹³. These will augment the wind and solar farms already existing in the province.

Private electric companies and electric cooperatives will be enjoined to expand their service area to cover areas currently unserved.

¹³Flores, Alena Mae S. (2017, March 23). 232-MW solar, wind project launched. Manila Standard, Retrieved from <http://manilastandard.net/business/power-technology/232-519/232-mw-solar-wind-project-launched.html>

Sub-Sector Outcome 5. Access to Social Facilities Increased

a. Education

To cope with the increasing number of pupils, a total of 571 new classrooms will have been constructed by 2022 and 186 existing classrooms upgraded.

The focus during the Plan period will be the retrofitting of the region's school buildings for these to be able to withstand stronger typhoons and heavier rainfall and flooding. New constructions will consider climate-change responsive designs. Additional projects to be funded by the private sector will be implemented in close coordination with the DepEd Region-1 Office to ensure that designs appropriate to the region will be adopted. The DepEd will also ensure that the school buildings in the region will be designed to meet the specific needs of both male and female pupils and teachers.

High-population schools located in city centers will be provided with overpass to ensure the safety of students and teachers and at the same time allow for the smooth flow of traffic. Appropriate designs will again be adopted to allow both male and female students and teachers to safely use the facilities.

b. Health

Under the Health Facilities Enhancement Program and the Philippine Hospital Development Plan of DOH, additional provincial, community and specialized hospitals will be provided complete with the needed facilities. Improved health facilities will be designed to suit the needs of PWDs, women and children.

Birthing clinic will be constructed in each municipality to reduce incidence of

maternal deaths. Specifically, Rural Health Units will be provided with Basic Emergency Obstetric and Newborn Care facilities to better respond to the needs of the rural areas.

c. Solid Waste Management

To address the low compliance of LGUs, amendment to the Ecological Solid Waste Management Act (ESWMA) or Republic Act 9003 will be supported to institutionalize establishment of MENRO and SWMP Focal unit at the municipal level. Relatedly, they will be enjoined to include SWM programs and activities in their Annual Investment Plans (AIPs). Accordingly, DENR-EMB will also organize capacity building trainings and seminars for LGUs in each province to impart techniques on planning and implementing SWMP. Municipalities will also be encouraged to cluster and pool their resources to address inadequacy of funds for establishing SWM facilities.

Information and education campaigns will be conducted to communities to promote proper waste management. Recycling industries will be provided with incentives to encourage them to continuously engage in SWM activities. (Refer to Chapter 20)

Other Strategies

On the low resistance of infra-structure facilities to disasters

All implementing entities in the region will be required to design proposed projects to take into account the ill effects of climate change. All infrastructure projects to be implemented will conform to the DPWH Design Guidelines, Criteria and Standards 2015, which incorporates resilient design, to ensure their adaptability to the impact of climate change.

Additionally, to further strengthen mechanisms in mitigating the effects of climate change, a regional master plan, aligned with the national master plan, for flood and drainage systems, will be crafted to establish inter-LGU coordination and delineation of responsibilities and identify appropriate infrastructure design that will be implemented.

On funding the infrastructure requirements of the region

To fully fund all the infrastructure projects of the region, **the private sector will be encouraged to participate to augment the**

funds coming from the national government through the GAA and the IRA allocation of LGUs. Loans from both foreign and domestic funding institutions will also be sought to fund selected projects.

To prepare all concerned implementing entities, the region will **undertake capacity-building trainings on the BOT Law including the process in availing private sector funds.** Trainings will also focus on strengthening capabilities for project identification and project feasibility preparation for the better preparedness of projects for fund sourcing.

Legislative Agenda

The following legislative agenda is proposed to address certain setbacks and weaknesses in the organizational and institutional linkages that affect the smooth implementation of infrastructure projects.

Table 9.2 Legislative Agenda to Accelerate Infrastructure Development in Region 1 (2017-2022)

Proposed Legislation	Purpose
Cross-cutting	
Amendment to the Build-Operate-Transfer Law and its IRR	Reforms to address issues in PPP that constrain implementation of projects and address the changing business environment. This is in line with the national strategy.
Transport	
Enactment of National Transport Policy	A comprehensive transport policy will enhance connectivity, optimize utilization and integrate planning of infrastructure and transport systems in line with the national plan.
Energy	
Provision of incentives to regions hosting green power plants	Renewable energy is good for the environment and regions hosting these should be given incentives by way of lower electricity rates

20

Ensuring
Ecological Integrity,
Clean and Healthy
Environment

Ensuring Ecological Integrity, Clean and Healthy Environment

The environment and natural resources play a crucial role in the country's development. It provides raw materials for the production of goods and services. It regulates conditions that cause environmental degradation that adversely affects other forms of life. The environment and its natural resources is an indispensable support for the growth and sustainable development of resource-dependent sectors such as agriculture, fisheries and industries.

Recognizing the importance of ensuring ecological integrity, clean and healthy environment for sustainable development, Region I will pursue strategies that will restore and rehabilitate degraded natural resources, protect and maintain those healthy and improve the welfare of the resource-dependent communities.

Assessment and Challenges

Management of the environment and natural resources improved for the period 2011-2016 supporting the economic development of the region. Various activities and programs were implemented to protect the green environment, particularly the forests. Programs to control smoke-belching and industrial fumes were instituted to reduce air pollution under the brown environment. Protected Areas (PAs) were designated to preserve and conserve their natural state, while Marine Protected Areas (MPAs) were established to ensure a healthier aquatic environment. Communities within the forests and hinterlands were the beneficiaries of implemented livelihood projects.

For the period 2011-2016, the overall quality of environment in the region improved but efforts still need to be sustained to attain a clean and healthy environment. Intensified reforestation and patrolling activities improved forest

management and biodiversity through the National Greening Program (NGP). More communities benefitted from forest-related jobs. On the other hand, community resilience to disasters improved as recorded human casualties and damages to properties were minimized. Air quality in the monitored areas was determined to be at good or fair level. Likewise, the quality of water in two Water Quality Management Areas (WQMAs), the Sinocalan-Dagupan River System (SDRS) and Naguilian River System (NRS), registered a significant improvement.

Sub-Sector Outcome 1: Resilience of Local Communities to Disaster Enhanced

A well-managed environment protects people from the ill-effects of disasters. Trees prevent soil erosion and hold water that could cause flashfloods while forested mountain ranges shield lowlands from strong winds brought by typhoons.

Partly attained. Improvement was noted in the resilience to disasters of communities but this still needs to be further strengthened.

Overall, a decrease in the number of casualties and damages to properties of calamities and disasters since 2011 was noted. The high number of casualties and damages recorded in 2014 and 2015 was due to more and stronger typhoons. This highlighted the need for enhanced disaster responsiveness.

Disaster preparedness and responsiveness in the region was enhanced. Protection of

the forests by patrolling Protected Areas (PAs) was intensified to preserve existing trees and natural resources. Reforestation efforts were stepped up to restore denuded and degraded mountains. Anti-*kaingin* system and anti-illegal logging drives were continuously enforced. All these improved the protection of the environment and people from the effects of natural disasters and calamities in the medium-term but more importantly in the long run as the intensity and frequency of natural hazards increases.

Table 20.1 Number of Casualties/ from Natural Hazards during Disasters, Region 1 (2011-2016)

By Type	2011	2012	2013	2014	2015	2016
Dead	66	24	13	10	26	0
Injured	81	18	4	15	15	6
Missing	11	5	4	1	237	0

Source: Office of the Civil Defense (OCD)

Table 20.2 Value of Damages to Properties from Natural Hazards during Disasters, Region 1 (2011-2016)

By Type	2011	2012	2013	2014	2015	2016
Infrastructure (in Million PhP)	742.24	136.63	29.36	555.63	5,415.35	3,305.85
No. of damaged houses	29,105	191	1,217	16,225	81,089	30,207

Source: Office of the Civil Defense (OCD)

Sub-Sector Outcome 2: Better Health Condition of the People in Region Achieved and Sustained

A clean environment contributes to the overall human well-being. A pollution-free air, water and land promote better health of the people. However, increasing

population and rapid urbanization could strain the quality of the environment.

Partly attained. Despite the improvement in air and water quality in the region, there is a need to continue and intensify efforts to attain better air and water quality which will consequently promote better health of the people in the region.

Air Quality

To measure air quality in the region, Air Quality Monitoring Stations (AQMS) were established. From only two AQMS set up in 2011, there are already six AQMS located in the busy cities of Urdaneta, Dagupan and San Carlos in Pangasinan; San Fernando City in La Union; Vigan City in Ilocos Sur and Batac City in Ilocos Norte.

Over the past 6 years, the level of air quality in all monitored areas was consistently classified as good to fair. This can be attributed to the intensified operations of the Land Transportation Office (LTO) in monitoring and apprehending smoke-belching vehicles, and the phasing-out of old buses as mentioned in Chapter 19. Also, stricter monitoring of the Environment Management Bureau (EMB) on other sources of air pollution such as commercial, industrial, power generating plants and rice mills have greatly contributed to the improvement of air quality.

However, the challenge is the increasing number of private vehicles and establishment of industries that aggravate the air condition in the region. Hence, the government plays a big role in the campaign for better air quality through the strict implementation of pertinent laws on

air pollution such as the Clean Air Act. Furthermore, there is a need to provide a faster and reliable internet bandwidth to ensure accuracy of data since the air monitoring equipment is internet - dependent.

Water Quality

Another environmental concern that needs attention is the water quality in the region. During the plan period, efforts have been made to ensure safe and clean water specifically for large water bodies. In 2011, the Sinocalan Dagupan River System (SDRS) was designated as the first Water Quality Management Area (WQMA) in Luzon which became the barometer of water quality in the region. WQMAs are bodies of water deemed to have an important developmental value but was observed to have been affected by economic development thereby needing rehabilitation and restoration. To oversee the management of water quality in WQMA designated water body, a multi-sectoral governing board was set-up. In 2014, another WQMA was designated – the Naguilian River System (NRS). Table 20.4 shows that both WQMAs registered a BOD level below the standard level since 2011 for SDRS and 2014 for NRS which means that they are relatively in good state. Water quality in both WQMAs registered an improvement from 2015 to 2016.

Table 20.3 Air Quality in Selected Stations, Region 1 (2012-2016)

Area	2012 (TSP)	2013 PM10	2014 PM10	2015 PM10	2016 PM10	2016 Air Quality Indices
San Fernando City	138	45	59	66	60	Fair
Urdaneta City	94	51	59	47	63	Fair
Dagupan City		46	59	68	83	Fair
San Carlos City		57	83	75	88	Fair
Vigan City (TSP)		120(TSP)	127(TSP)	145(TSP)	73	Fair
Batac City				23	25	Good

NOTE: Total Suspended Particulates (TSP)

Source: Environmental Management Bureau (EMB)

Table 20.4 Water Quality (BOD) in SDRS and NRS, Region 1 (2011-2016)

Type	2011	2012	2013	2014	2015	2016
SDRS	4.42	-	3.84	4.89	5.16	3.53
NRS				3.45	2.91	2.27

Note: (The standard set in Region I for BOD level is 7; lower number means less polluted and higher means more polluted. BOD tells of the amount of air in the water required for living things to survive).

Source: Environmental Management Bureau (EMB)

Despite the relatively good state of water quality in the region as indicated by the water quality in SDRS and NRS, sustaining it remains a challenge. The increasing population and rapid urbanization will lead to generation of more wastewater from domestic, agriculture and livestock, and industrial sources which could potentially worsen water pollution.

Land Quality

To prevent land degradation, RA 9003, also known as the Ecological Solid Waste Management Act, was enacted into law in 2000. Under the Act, LGUs were given the responsibility to become the frontliners in promoting better land quality by handling solid waste management in their respective localities. As a tool in managing solid wastes, LGUs were required to formulate and implement their 10-year Local Solid Waste Management Plan (LSWMP). There was, however, low compliance among the LGUs. Out of the 125 LGUs in the region, there were only 68 who submitted their LSWMPs; 34 were approved, 6 were implemented while the 28 remaining plans still need to submit additional requirements prior to approval. Having only a handful of LGUs which complied with RA 9003 could mean that solid waste management in the region is not given much attention. This implies that there is still a lot of work to be done as far as promoting better land quality is concerned. In addition, there seems a lack of public awareness on environment and natural resources policies and concerns as

shown by massive littering, open burning, and garbage dumping, among others. Also, very few households and organizations practice the 3Rs (reduce, reuse and recycle) as a waste management strategy.

Only a few LGUs had set up solid waste management infrastructure facilities such as sanitary landfills and needed equipment due to insufficient budget allotted to environment programs and projects.

The challenge now is how to get majority of the LGUs to formulate and eventually implement their LSWMP and enjoin the public to cooperate in maintaining clean surroundings.

Sub-Sector Outcome 3: Income of Beneficiaries Increased

Fully attained. Forest-related industries such as contract tree planting, wood harvesting and mining generated significant number of jobs for upland communities but need to be sustained.

Intensified tree planting activities under the National Greening Program (NGP) generated more jobs in the region from 18,217 in 2012 to 104,062 in 2016. The number of livelihood beneficiaries was almost maintained all through the plan period. However, jobs in the mining industry recorded an erratic trend which could be attributed to slow down in mining activities during the period 2011-2015.

Moreover, it can be noted that forest-related jobs promote gender-responsiveness by employing both men and women. Jobs in the Community-Based Forest Management Agreement (CBFMA) in Region I increased from 2013 to 2015. Beneficiaries included upland and

indigenous communities. Men beneficiaries dominated the CBFMA. However, there has been a gradual and steady increase in the number of women beneficiaries starting from 29.88 percent in 2013 to 34.72 percent in 2016.

Table 20.5 Jobs Generated from Forests and Mining Activities, Region 1 (2011-2016)

Indicator	2011	2012	2013	2014	2015	2016
Jobs generated in NGP		18,217	50,501	55,475	90,032	104,062
No. of beneficiaries of livelihood implemented		20	38	64	35	55
No. of jobs generated in the mining industry	4,574	3,466	2,985	3,179	3,650	-

Source: Department of Environment and Natural Resources (DENR)

Table 20.6 Comparative Number of Beneficiaries of the Community-Based Forest Management Agreement (CBFMA) by Sex, Region 1 (2013-2016)

By Sex	2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%
Men	5,367	70.12	9,537	69.58	9,446	67.59	4,882	65.28
Women	2,287	29.88	4,170	30.42	4,530	32.41	2,596	34.72
Total	7,654		13,707		13,976		7,478	

Source: Department of Environment and Natural Resources (DENR)

Table 20.7 Members of Protected Area Management Board (2015) and Patentees by Sex, Region 1 (2014)

By Sex	Members of Protected Area Management Board	%	Number of Patentees	%
Men	130	85.00%	8,722	58.00%
Women	23	15.00%	6,306	42.00%
Total	153	100%	15,028	100%

Source: Department of Environment and Natural Resources (DENR)

Furthermore, men dominated the Protected Area Management Board (PAMB) in the region. There were only 15.0 percent women compared to 85.0 percent men who were members of the PAMB in the region in 2015. As to patentees or those who were given

property rights to public lands, the number of women patentees was at 42.00 percent compared to 58.00 percent of men. This proportion of women patentees was much higher than the proportion of women beneficiaries of CBFMA relative to men (Table 20.7).

Sub-Sector Outcome 4: Biodiversity Protected

From 2011 to 2016, the region exceeded its target of 50,000 hectares planted with both fruit-bearing and forest trees by 52.83 percent resulting to a total of 76,416 hectares planted in 2016. Also, the DENR intensified its forest patrol program by fielding additional forest rangers supported by *bantay-gubat* volunteers, communities and indigenous peoples. It has also enlisted the help of the Philippine National Police (PNP) in enforcing ENR laws including apprehending of illegal and undocumented forest products. Moreover, DENR has set up checkpoints in strategic places to monitor wood shipments to verify if these have permits.

The ratio of area protected to maintain biodiversity to total surface area remained low at 1.55 percent both in 2014 and 2015 and slightly increased to 2.34 percent in 2016. The target ratio of 7.00 percent was

not achieved as some areas were still pending to be designated by Congress as Protected Areas.

There were some setbacks and challenges that adversely affected the sustainable management of forests. These include: 1) increasing number of inhabitants; 2) forest fires, and; 3) illegal cutting of trees.

Needed institutional reforms have not yet been fully implemented by LGUs which play a vital role in promoting clean and healthy environment. Only a few of them have an organized Municipal Environment and Natural Resources Office (MENRO) to formulate plans and programs on environmental concerns and ensure their implementation. Also, only a few LGUs have appointed SWM Focal person who will take charge of the solid waste management at the local level.

Strategic Framework

The objectives and strategies under this chapter will ensure the attainment of ecological integrity and improvement in the lives of resource-dependent communities.

Targets

For the next six years, the ENR sector aims to further improve the quality of environment in the region. The quality of water in the region as indicated in BOD levels in the two WQMA's will be improved. The number of WQMA's in the region will be increased. Air quality in the monitored areas will be maintained at good level. The number of Protected Areas (PAs) and Marine Protected Areas (MPAs)

will be increased. Forest cover will be expanded. On human health, the Plan targets zero incidence of pollution-induced illnesses.

Strategies

Overall, significant improvement in the quality of environment in the region is noted due to sound management practices. However, efforts need to be sustained to fully attain ecological integrity, clean and healthy environment that will consequently result in strengthened resilience to disasters of communities as well as higher socio-economic growth of the region.

Table 20.8.a Plan Targets to Maintain Ecological Integrity in Region 1 (2017-2022)

Indicator	Baseline		End-of-Plan Target 2022
	Year	Value	
Sub-Sector Outcome 1: Environmental Quality Improved			
Water pollution in the ff. parameters in SDRS	2016 (1 st semester) <i>Std. Val.</i>		
Biochemical Oxygen Demand (BOD)	7	4	4
Fecal Coliform (FC)	200	2,598	200
Water pollution in the ff. parameters in NRS	2016 (1 st semester) <i>Std. Val.</i>		
BOD	7	2	2
FC	200	646	200
FC in the ff. beaches	2016 <i>Std. Val.</i> 100		
IN-11 stations		207	100
IS- 5 stations		97	-
LU- 3 stations		28	28
PA-10 stations		199	100
Increase in WQMAs	2016	2	-
Air quality in the ff. areas	0-150: Good to Fair		
Ilocos Norte: Batac (PM10)	2015	25	Good
Ilocos Sur: Vigan (PM10)	2016	73	Good
La Union: SFC (PM10)	2016	17	Good
Pangasinan: (PM10)			
Urdaneta (PM10)	2016	63	Good
Dagupan (PM 2.5)	2016	83	Good
San Carlos (PM10)	2016	88	Good
Number of LGUs with open dumpsite	2016	26	0
Sub-Sector Outcome 2: Biodiversity Protected			
Number of patrolled hectares within untenured areas	2016	334,050	334,050
Number of patrolled areas under Protected areas	2016	17,887.74	17,887.74
Number of LGUs with drafted FLIPs	2016	16	73
Area reforested/planted	2016	5495	63761
Survival rate of seedlings planted	2016	85%	85%

Table 20.8.b Plan Targets to Maintain Ecological Integrity in Region 1 (2017-2022)
(continuation)

Indicator	Baseline		End-of-Plan Target 2022
	Year	Value	
Number of caves assessed	2016	6	42
Number of caves with Cave Mgmt. Plans (CMP) prepared	2016	6	38
Number of LGUs provided with Technical Assistance in the Implementation of CMP	2016	-	34
Number of LGUs for partnership thru MOA for the Preservation, development and management of caves in their respective territorial jurisdiction	2016	-	34
Number of inland wetlands assessed	2016	2	22
Number of inland wetlands prepared with Wetland Mgmt. Plans (WMP) (for the inland wetlands assessed)	2016	2	20
Sub-Sector Outcome 3: Human well-being ensured			
Zero incidence of cholera in the region	2015	0	0
Incidence of amoebiasis in the region	ND	ND	0
Zero casualties due to climate-induced disasters	2016	-	0

Strategies outlined in this chapter aim to (a) enhance quality of environment, (b) protect biodiversity and (c) ensure human well-being. These outcomes will ultimately redound to the improvement of the socio-economic condition of resource-dependent communities.

Sub-Sector Outcome 1: Environment Quality Improved

Water Quality

Although water quality in the region is within standard, i.e., less polluted as indicated in SDRS and NRS being the designated benchmarks, rapid urbanization and increasing population will generate more wastewater over the next six years. To contain this, the following strategies will be implemented:

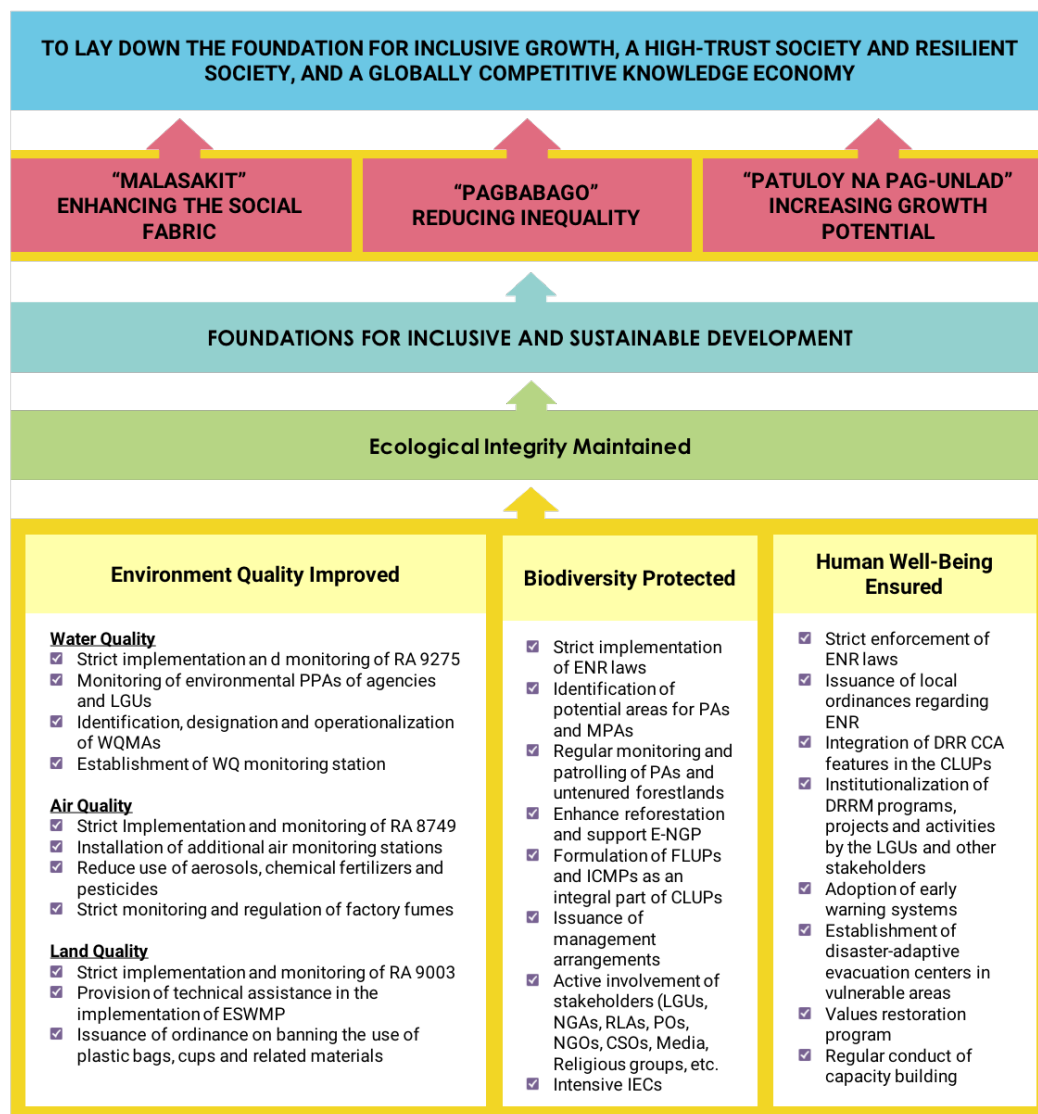
Strict implementation and monitoring of RA 9275 (Clean Water Act). The Clean Water Act aims to protect the bodies of water from pollution sources such as

industrial, agricultural, commercial establishments, community and household activities. EMB will strengthen and strictly enforce ENR laws governing wastewater discharge from factories and manufacturing companies to control water pollution. Big, heavy-fuming industries will be monitored and encouraged to establish wastewater treatment facilities. Technical assistance (TA) will be provided by EMB as part of their mandate.

Wet markets and slaughter houses are sources of high wastewater volume hence, the LGUs should construct proper sewerage systems to prevent pollution caused by these sources.

Canals and drainages will be maintained regularly to remove trashes that impede flow of wastewater. LGUs will construct separate drainage system that will re-direct run-off water and flood water to avoid overflow of canals and drainages in the urban centers.

Figure 20.1 Strategic Framework to Ensure Ecological Integrity, Clean and Healthy Environment in Region 1, 2017-2022



Communities living along river systems and coastal areas will be provided with basic sanitation facilities as they can potentially pollute bodies of water by their human and domestic wastes (Please refer to discussion on Chapter 19).

Monitoring of environmental PPAs of agencies and LGUs. Monitoring is an important process in carrying out programs, projects and activities (PPAs) to ensure proper and efficient implementation. Concerned agencies and

LGUS will periodically monitor implemented programs and projects using appropriate monitoring tools. Existing Water Quality Monitoring Stations (WQMS), the SDRS and the NRS WQMs will continue to be monitored and maintained. Solid Waste Management Programs of LGUs will strictly be enforced, as compliance to RA 9003 will be strengthened.

Identification, designation and operationalization of Water Quality

Management Areas (WQMAS). WQMAS are bodies of water that are being maintained or restored to improve or regain its developmental and environmental values. Adding more WQMAS will mean wider coverage of protected and maintained bodies of water. In addition to SDRS and NRS, EMB will identify major bodies of water in the region that are important not only to maintain a clean environment but also important to attain development. The EMB is targeting to add two more WQMAS in the region within the Plan period.

Establishment of Water Quality Monitoring Station (WQMS). As a proactive measure to enable to evaluate and implement appropriate programs, EMB will set up more Water Quality Monitoring Stations (WQMS) in identified important bodies of water in addition to the existing ones. More monitoring stations means more bodies of water maintained or restored which will generally improve water quality in the region.

Air Quality

Among the areas being monitored in Region 1, only Batac City obtained a 'good' level of air quality; Vigan, San Fernando City, Urdaneta, Dagupan and San Carlos City all registered a 'fair' air quality. For this Plan period, the target is to make those areas with 'fair' air quality achieve a 'good' level quality.

Strict implementation and monitoring of RA 8749. The Clean Air Act aims to ensure clean and healthy air in the environment. Vehicles and factories are established high pollutant sources. To control smoke emission, LTO will continue to periodically monitor and apprehend smoke belching vehicles. LTO will also monitor if accredited private Emission Testing Centers (ETC) are carrying out

their functions properly and fairly. Its program of phasing out public buses fifteen years old and above which are usually heavy smoke belchers will continue to be implemented. Moreover, vehicles which are not compliant to the international standard on fuel/ engine efficiency will also be phased out.

Additionally, compliance of existing manufacturing companies and commercial establishments to smoke-emission standards will be strictly monitored. Rules and standards on environmental compliance will be strictly applied to new companies and commercial establishments by conducting on-site checking of air-pollution containment mechanisms and practices.

Installation of additional air monitoring stations. AQMS is an important tool to determine air quality in selected areas on which appropriate programs and activities to control air pollution can be formulated. Hence, the EMB seeks to pursue the installation of additional AQMS in other urban and commercial centers such as Alaminos in Pangasinan, Agoo and Bauang in La Union and Laoag City in Ilocos Norte.

Reduce use of aerosols, chemical fertilizers and pesticides. Chemical fertilizers and pesticides produce air, water and land pollution as do aerosols which are used at home and offices. They contain toxic substances that cause poisoning to humans and pollution to the environment. These are major sources of man-made greenhouse gases which cause the warming of our planet. As such, their use will be regulated, if not totally phased out.

DENR, in coordination with Department of Agriculture (DA), will formulate policies regarding the use of chemical fertilizers and pesticides. DA will conduct information and education campaign

regarding the ill-effects to the environment of the chemicals and encourage the gradual shifting to organic farming. Also, policies and guidelines regarding the disposal of residuals of chemicals and pesticides will be provided by DENR in coordination with DA.

On the other hand, EMB and DTI will jointly formulate guidelines for manufacturers to use alternative, environment-friendly ingredients and minimize use of hazardous chemicals used to manufacture aerosols. Manufacturers will likewise be encouraged to come up with a buy-back mechanism to collect metal and bottle containers. To minimize use among households and offices, an information drive will be conducted to educate the public on ill-effects of aerosols to human health and the environment.

Strict monitoring and regulation of factory fumes. Factories are one of heavy sources of air pollution. EMB will be strict in issuing environmental clearance to new commercial and industrial establishments ensuring that they have proper air pollution control mechanism in place. It will also regularly monitor on-site big factories and commercial establishments to check the level of smoke they emit. EMB will also conduct on-site regular and spot-checking of commercial and industrial establishments to ensure compliance to environmental laws.

Land Quality

Land pollution is caused by solid wastes from domestic and industrial sources. Non-biodegradable materials are not only unsightly but are detrimental to the environment. Only six (or 4.80%) of LGUs are presently implementing their LSWMP which is quite negligible a number. Aggravating the low compliance of LGUs is the seemingly lack of awareness and

concern of the public to do their share in promoting a clean environment.

Strict implementation and monitoring of RA 9003. The Ecological Solid Waste Management Act provides the legal framework to control pollution from solid wastes, ensuring public and environmental health. The ESWM Act does not provide for the mandatory preparation by LGUs of their 10-year LSWMP and designation of LSWM Focal Person. Amendment to the ESWM Act will be lobbied to make it legally binding for LGUs to formulate their 10-year SWMP and designate SWMP Focal Person in each municipality who will oversee the planning and implementation of SWM programs. It will also include time-line for compliance. Non-compliance will have legal repercussions as per the proposed amendment to the ESWM Act.

One of the most observable pollutant sources are the litters. Most of these are used plastics, cups, bags, plastic wrappers, etc. which are non-biodegradable materials. Part of the legislative agenda of the LSWMP will be the passing of anti-littering and segregation-at-source ordinances. Also, ordinances prohibiting households from open burning of hazardous wastes and materials will be strictly enforced. Incentives to establishments that will collect and properly dispose of these types of wastes and materials or implement buy-back mechanisms may also be provided.

At the barangay level, anti-littering ordinances will also be strictly enforced. Domestic waste segregation will be carried out with the use of the Materials Recovery Facilities (MRF) located in strategic drop-off points. Municipalities will provide adequate vehicles and manpower to collect and dispose wastes. Moreover, municipalities will be encouraged to cluster to set up a combined infrastructure for sanitary landfill and even recycling

facility to address their problem of inadequate fund.

Provision of technical assistance in crafting and implementing Ecological Solid Waste Management Program (ESWMP). One of the perceived reasons for non-compliance of LGUs to draft their 10-year local SWMP is lack of data and technical knowledge to prepare the Waste Analysis and Characterization Study (WACS) as part of the SWM Plan. To assist the LGUs, EMB will conduct seminars, workshops and trainings to capacitate LGU personnel to craft and implement their LSWMPs. Orientation on the requirements for the approval of SWMPs will also be conducted especially to those who have already submitted their plans but pending approval due to some requirements not complied with. It will also include technical assistance on setting up sanitary landfills and solid waste treatment facilities and other alternative ways of solid waste disposal. Benchmarking initiatives will also be conducted to provide LGUs insights and best practices of model LGUs on solid waste management.

Furthermore, DENR will provide LGUs and NGOs with incentives and recognitions to encourage them to implement effective solid waste management programs (refer to details in Chapter 5)

Issuance of ordinance on banning the use of plastic bags, cups and related materials. Plastic materials do not decompose by themselves – these are non-biodegradable materials. If not properly disposed, these will be in their raw form for years which will pile up and cause harmful effects to the environment. The use of these non-biodegradable materials needs to be prohibited. LGUs should issue corresponding ordinances and strictly implement these. Anti-littering campaign

of LGUs will be intensified. Adequate trash bins will be provided to encourage proper waste disposal.

In addition, retailers of plastic bags, cups, straws and related materials such as supermarkets will be required to encourage their customers to practice 3Rs (reduce, reuse, recycle) by charging additional fees for every plastic bag requested. The proceeds of the extra charges will go to an environmental program in the locality. Institutional users of plastic bags and cups such as fast food chains will be encouraged to use a more environment-friendly material for food packaging.

Sub-Sector Outcome 2: Biodiversity protected

The Philippines is considered a mega-diverse country being host of about 70 to 80 percent of the world's biodiversity which provide habitat to some of endangered species. It is therefore important to protect the forest and coastal ecosystems to attain a balanced ecology for a clean and healthy environment.

Strict implementation of ENR laws. Provisions under ENR laws protecting the water bodies (RA 9275), the air (RA 8749), and the land (RA 9003) from pollution and degradation will be strictly enforced by DENR, EMB, and MGB to ensure the conservation of biodiversity (refer to detailed discussions above).

Identification of potential areas for PAs and MPAs. To protect biodiversity, Protected Areas (PAs) and Marine Protected Areas (MPAs) are designated which will limit human activity in these areas to prevent altering and using their resources in favor of development. PAs and MPAs will certainly retain their natural state which is beneficial to biodiversity. Existing PAs and MPAs

(there are a total of 15) in the region will continue to be protected and preserved. Those submitted to Congress to be designated PAs will be followed up to increase the scope of PAs and MPAs in the region. The DENR, as the lead entity on environmental protection in the region, will continue to identify and propose additional areas for Congress to declare as PAs.

Regular monitoring and patrolling of PAs and untenured forestlands. DENR will hire additional forest rangers to increase coverage of patrolled areas including PAs and untenured forestlands. It will also sustain the provision of incentives such as livelihood to communities of indigenous peoples who will assist in protecting and rehabilitating PAs. DENR will coordinate with the Philippine Coast Guard (PCG) to assist in patrolling waters including MPAs and will provide patrol boats for MPA patrollers to effectively carry out their tasks.

Enhance reforestation and support E-NGP. Forests are considered the most diverse ecosystems on land; hence, forest biodiversity will be promoted and protected. Delineation of coastal and forest coverage of LGUs will be carried out to encourage LGU efforts in protecting and restoring forest and coastal areas. The Expanded National Greening Program (ENGP) will continue to be supported in Region I to increase the area planted with fruit-bearing, wood and forest trees. A total of 63,761 hectares will be planted with trees within the Plan period.

Formulation of FLUPs and ICMPs as an integral part of CLUPs. Comprehensive Land Use Plan (CLUP) of LGUs provides direction for zoning of lands according to their appropriate uses. Lands are usually classified according to their uses such as residential, commercial and industrial use. In order to ensure protection of

biodiversity in the localities, Forest Land Use Plan (FLUP) and Integrated Coastal Management Plan (ICMP) will be integrated in the CLUP being implemented by LGUs so that forest lands and coastal areas will be explicitly protected and will not be used for other developmental purposes.

Issuance of management arrangements.

Assigning responsible groups or entities to be responsible in managing a portion of the forest and coastal areas will ensure protection and enrichment of the assigned area. The EMB and the LGUs will engage the participation of the peoples organizations (PO) and non-government organizations through the issuance of management arrangements to bestow upon these organized groups the primary responsibility of forest and coastal management.

Active involvement of stakeholders (LGUs, NGAs, RLAs, POs, NGOs, CSOs, Media, Religious groups etc.). Tree planting activities and safeguarding of PAs and MPAs in localities will be intensified by engaging participation and support of schools, government agencies, community organizations and the public. Media, CSOs, NGOs and religious groups will be tapped to support advocacies for the protection and conservation of specified biodiversity. This endeavor will heighten awareness and social mobilization among various stakeholders in the conservation, protection, and rehabilitation of the environment.

Intensive IECs. Intensive information drives aimed to promote environmental awareness and to encourage the public to do their share in maintaining a clean and healthy environment will be done during the Environment Month. Culminating activities to drum up support to environment at the municipal level will be conducted such as:

- (a) Lectures and film showing on environmental issues in schools, offices and communities to instill pro-environment orientation of students and the community at large;
- (b) Advocacy campaigns and activities promoting environmental protection will be conducted using the social media; and
- (c) Meetings, public hearings and fora on environmental issues in the locality.

Sub-Sector Outcome 3: Human Well-being Ensured

Protection of the environment is tantamount to ensuring human well-being. Humans need clean air to breathe, clean water to drink, fertile and productive land and a dynamic ecosystem to live a healthy comfortable and productive life.

Strict enforcement of ENR laws. ENR laws such as anti-smoke belching and disposal and treatment of industrial waste will be strictly implemented to control environmental pollution which is detrimental to human health. Protection of PAs and MPAs will be undertaken to ensure dynamic ecosystem which provides resources for humans and protection against calamities and disasters. Reforestation will be intensified to restore denuded forests which prevent soil erosion and flooding, thus, ultimately protecting humans from catastrophes.

Issuance of local ordinances regarding ENR. LGUs, through their MENRO, will promulgate, implement and monitor ordinances that will protect and preserve the environment. Ordinances on anti-littering, anti-smoke belching, waste segregation and disposal, among others will be issued, strictly implemented and continuously monitored by LGUs and

barangays. Ordinances supporting the participation in the activities during the Environment Month and the ENGP will also be promulgated.

Integration of DRR CCA features in the CLUPs. The CLUP of LGUs provides proper guidance for land use planning and development. It identifies areas suited for urban development, residential, commercial, and environmental purposes. DRR and CCA, on the other hand, provide guidance in reducing risks to areas and communities caused by disasters and adaptation to climate change. It is therefore important that assessments on vulnerabilities of land areas and communities be considered in land use zoning so that appropriate use of lands will be matched with identified disaster-associated risks. This is to prevent or minimize casualties to humans and damages to properties caused by disasters.

Institutionalization of DRRM programs, projects and activities by the LGUs and other stakeholders. Disaster-preparedness is very important so that people will know what to do before, during and after disasters to minimize, if not prevent, any damages to properties and casualties to human lives. To enhance disaster-preparedness, the following programs and activities will be implemented:

- (a) Information and education campaigns will be conducted to provide school children and communities the knowledge on what disasters their locality is vulnerable to and what damages they can do inflict.
- (b) Typhoon and flood drills will also be carried out in schools, offices and communities during rainy season. Earthquake and fire drills will also be regularly conducted during summer months.

- (c) Consultations to solicit ideas and involve communities in planning for disaster-preparedness will also be regularly done.
- (d) To remind the communities that the best way to prepare for disasters is to take care of the environment. As such, tree planting and greening activities in the locality will be done annually. Clean up to rivers and brooks will also be carried out regularly.
- (e) Conduct of search for cleanest and greenest barangay to involve communities in caring for the welfare of the environment.
- (f) Encourage schools to develop and implement a solid waste management program.

Adoption of early warning systems.

Municipal and Barangay Disaster Risk Reduction and Management Councils will enhance communication links with government agencies such as PAGASA and Philippine Institute of Volcanology and Seismology (PHILVOLCS) for quick and early warnings to their constituents in the event of calamities. Early warning devices and equipment will be established in strategic areas in every LGU in the region.

Establishment of disaster-adaptive evacuation centers in vulnerable areas.

Evacuation centers serve as the temporary refuge of people in times of calamities. It is therefore imperative for LGUs to construct disaster-adaptive evacuation centers to provide safe shelters during calamities. The centers will be provided with basic facilities such as toilets for men and women, and water (water pump or artesian well) for sanitation purposes.

Values restoration program. To increase awareness and concern for the

environment, and the importance of environment to survival and safety of humans, LGUs will have a regular schedule of the following: (a) awareness campaign on environmental issues in schools and institutions, (b) disaster, evacuation and fire drills, (c) tree planting activities, (d) clean-up drive of coastal areas and surroundings, (e) provision of incentives to exemplary constituents, establishments and organizations actively doing, and promoting environmental practices.

Regular conduct of capacity building.

Trainings, seminars and workshops on disaster management will be conducted among MENROs, SWMP Focal Persons, MDRRMCOs, RHU workers, firemen and other concerned government and private personnel to equip them with knowledge and experience to plan and implement programs to mitigate effects of disasters and manage people during disasters.

LEGISLATIVE AGENDA

The following legislative agenda is proposed to maintain ecological integrity in the region.

Table 20.9 Legislative Agenda to Maintain Ecological Integrity in Region 1, 2017-2022

Proposed Legislation	Justification
Amendments to RA 9003, the Ecological Solid Waste Management Act	To mandate LGUs to create Environment and Natural Resources Office and Solid Waste Management units with clear organizational structure, powers and functions to facilitate and give focus to the implementation of ENR programs and activities at the local level.
Designation of additional PAs, MPAs and WQMAs	This is needed to widen the scope of protected areas in the region

PART VII

PLAN IMPLEMENTATION AND MONITORING



21

Plan
Implementation
and Monitoring

Plan Implementation and Monitoring

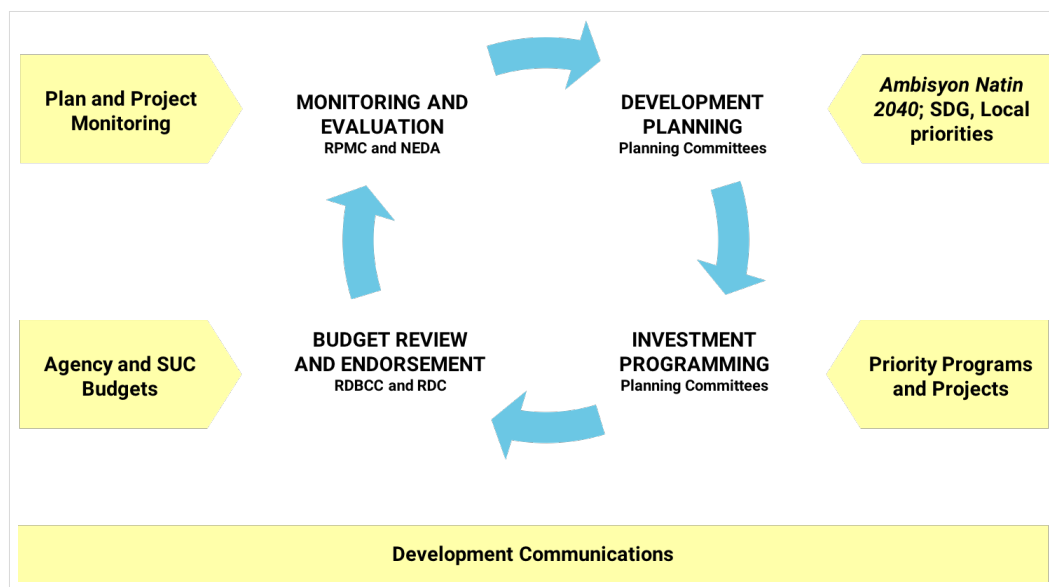
The Regional Development Plan of Region 1 plays a major role in laying down the foundation in achieving the *Ambisyon Natin 2040*. In implementing the plan, the Ilocos RDP 2017-2022 shall build upon the institutional arrangements and linkages developed and nurtured by the Regional Development Council (RDC) and its committees as well as the mechanisms provided by the national government such as the budget review, and monitoring and evaluation as shown in Figure 21.1.

The Planning Committees, which are also the Sector Committees of the RDC, will remain as the principal bodies to thresh out development issues and concerns

before these get to be elevated to the Council's *en banc* for policy action. The local development plans particularly those of the provinces' will also be reviewed to ensure vertical articulation of the region's strategies as contained in the Plan.

As a companion of the Plan, the RDC will prepare the Regional Development and Investment Program and the Annual Investment Program which shall contain the priority programs and projects of the region. This document shall serve as a ready reference for the RDC in ensuring that its development priorities are considered by the implementing agencies in their budget proposals.

Figure 21.1 Plan Implementation and Monitoring of the Ilocos Regional Development Plan (RDP) 2017-2022



A deliberate effort of the Regional Development Budgeting Coordinating Committee (RDBCC), composed of government agencies, private sector representatives, governors, president of league of municipalities and congressmen, in the annual agency budget review and endorsement will likewise warrant that the priority programs and projects identified in the Plan get the needed funds. Moreover, the budgeting exercise gives a platform for the provincial governments to lay-down their concerns which can be addressed by the programs and projects of the national government through their regional offices. The RDC headed by the Chairperson will lobby with the Congressmen of Region 1 to champion the priority programs and project of the region, and therefore gain their support through the budget appropriations to implement these pipelined projects and in the conduct of Feasibility Studies for big-ticket projects as well. The private sector on the other hand, will be on guard as they continue to make sure that the general public is not short-changed as they actively

participate in the planning and budgeting exercise in the region.

The gains and achievement of the Plan will be monitored through the Results Matrices and the Annual Regional Development Report (ARDR) with the Philippine Statistics Authority (PSA) as the official data source. Funded priority projects endorsed by the RDC will also be monitored quarterly and annually by the Regional Project Monitoring Committee (RPMC) using the Regional Project Monitoring and Evaluation System (RPMES).

All of these development efforts shall be promoted by the Development Communications Committee of the RDC led by the Philippine Information Agency (PIA) and the private and government media outlets. A communication plan for the Ilocos RDP 2017-2022 will be prepared by the Committee which shall guide the communications group to gain popular support to the Plan and the corresponding programs and projects.

List of Acronyms

3Rs	Reduce, Reuse And Recycle
4Ps	Pantawid Pamilyang Pilipino Program
ADM	Assistance to Disadvantaged Municipalities
AEC	ASEAN Economic Community
AFCs	Agriculture and Fishery Councils
AFF	Agriculture, Forestry and Fisheries
AFMA	Agriculture and Fisheries Modernization Act
AFP	Armed Forces of the Philippines
AHFF	Agriculture, Hunting, Forestry and Fishing
AIDS	Acquired Immune Deficiency Syndrome
AIPs	Annual Investment Plans
AIP	Agricultural Insurance Program
AO	Administrative Order
AQMS	Air Quality Monitoring Stations
ARB	Agrarian Reform Beneficiaries
ARDR	Annual Regional Development Report
ARGs	Automated Rain Gauges
ARIP	Allied Rivers Improvement Project
ARISEP	Agno River Irrigation System Extension Project
ARTA	Anti-Red Tape Act
ASEAN	Association of Southeast Asian Nations
AVRC-I	Area I Vocational Rehabilitation Center
AY	Academic Year
BEmONC	Basic Emergency Obstetric and Newborn Care
BFAR	Bureau of Fisheries and Aquatic Resources
BGPMS	Barangay Governance Performance Management System
BHS	Barangay Health Station
BIR	Bureau of Internal Revenue
BMBE	Barangay Micro-Business Enterprises
BN	Business Name
BNR	Business Name Registration
BOC	Bureau of Customs
BOD	Biochemical Oxygen Demand
BOI	Board of Investments
BOT	Build-Operate-Transfer
BPLS	Business Permits and Licensing System
BSP	Bangko Sentral ng Pilipinas
BuB	Bottom-up Budgeting
BZ	Buffer Zone

CAR	Cordillera Administrative Region
CBFMA	Community-Based Forest Management Agreement
CCC	Climate Change Commission
CDP	Comprehensive Development Plan
CEDC	Children in Especially Difficult Circumstances
CEmONC	Comprehensive Emergency Obstetric and Newborn Care
CEST	Community Empowerment through Science and Technology Program
CFLCs	Community Fish Landing Centers
CFW	Cash-for-Work
CHED	Commission on Higher Education
CIC	Crime Investigation Course
CLUP	Comprehensive Land Use Plan
CMCI	Cities and Municipalities Competitiveness Index
CMCI	Cities and Municipalities Index
CMP	Cave Management Plans
CMP	Community Mortgage Program
CEDC	Children in Especially Difficult Circumstances
CO	Central Office
CODs	Centers for Development
COEs	Centers of Excellence
CPP	Communist Party of the Philippines
CPR	Contraceptive Prevalence Rate
CSA	Core Shelter Assistance
CSAP	Core Shelter Assistance Program
CSE	Crime Solution Efficiency
CSER	Crime Solution Efficiency Rate
CSFs	Common Services Facilities
CSOs	Civil Society Organizations
CSR	Cohort Survival Rate
DA	Department of Agriculture
DAR	Department of Agrarian Reform
DAR-ARB	Department of Agrarian Reform-Agrarian Reform Beneficiaries
DA-WARA	Department of Agriculture - Weather Adverse Rice Area
DBM	Department of Budget and Management
DBM-RSBSA	Department of Budget and Management - Registry System for Basic Sectors in Agriculture
DENR	Department of Environment and Natural Resources
DENR-LMB	Department of Environment and Natural Resources – Land Management Bureau
DepEd	Department of Education
DevCom	Development Communications
DICT	Department of Information and Communications Technology
DILEEP	DOLE’s Integrated Livelihood and Emergency Employment Program

DILG	Department of Interior and Local Government
DOF-BLGF	Department of Finance – Bureau of Local Government Finance
DOH	Department of Health
DOJ-PPA	Department of Justice – Parole and Probation Administration
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DOT	Department of Tourism
DOTC	Department of Transportation and Communications
DOTS	Directly Observed Treatment Short Course
DPWH	Department of Public Works and Highways
DReAMB	Disaster Response Assistance and Management Bureau
DRR+CCA	Disaster Risk Reduction and Climate Change Adaptation
DRRM	Disaster Risk Reduction and Management
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
e-FPS	Electronic Filing and Payment System
EMB	Environment Management Bureau
ENGP	Expanded National Greening Program
ENR	Environment and natural resources
EO	Executive Order
ESA	Emergency Shelter Assistance
ESCA	Emergency Shelter Cash Assistance
e-SRE	Electronic Statement of Receipts and Expenditures
ESWM	Ecological Solid Waste Management
ESWMA	Ecological Solid Waste Management Act
ETC	Emission Testing Centers
ETEEAP	Expanded Tertiary Education Equivalency and Accreditation Program
FARMCs	Fisheries and Aquatic Resource Management Councils
FAs	Farmers Associations
FC	Fecal Coliform
FDA	Food and Drug Administration
FDP	Full Disclosure Policy
FFW	Food-for-Work
FLUP	Forest Land Use Plan
FMRs	Farm-to-Market Roads
FNFI	Food and Non-Food Items
FSSP	Food Staples Sufficiency Program
FTA	Free Trade Agreement
GAA	General Appropriations Act
GAP	Good Agricultural Practices
GAqP	Good Aquacultural Practices
GDP	Gross Domestic Product
GIA	Grants-in-Aid

GOCCs	Government-Owned and Controlled Corporations
GRBS	Game Refuge and Bird Sanctuaries
GRDP	Gross Regional Domestic Product
GSIS	Government Service Insurance System
GVA	Gross Value Added
HDMF	Home Development Mutual Fund
HEIs	Higher Educational Institutions
HFC	Haven for Children
HFEP	Health Facilities Enhancement Program
HFG	Home for Girls
HFW	Haven for Women
HIV	Human Immunodeficiency Virus
HRA	Humanitarian Relief Assistance
HRH	Human Resource for Health
I&S	Industry and Services
IAs	Irrigators' Associations
IBPAP	Information Technology and Business Process Association of the Philippines
ICAD	Inter-Agency Committee on Anti-Illegal Drugs
ICCs	Indigenous Cultural Communities
ICMP	Integrated Coastal Management Plan
ICs	Index crimes
ICT	Information and Communication Technology
IEC	Information, Education And Communication
IP	Impounding project
IPAs	Investment Priority Areas
IPO	Intellectual Property Office
IPMRs	Indigenous Peoples Mandatory Representatives
IPRA	Indigenous Peoples' Rights Act
IPs	Indigenous Peoples
IPSP	Internal Peace and Security Plan
IRA	Internal Revenue Allocation
IRI	International Roughness Index
IT-BMP	Information Technology and Business Process Management
IUUF	Illegal unreported and unregulated fishing
IWB	In-work benefits
KALAHI	Kapit-bisig Laban sa Kahirapan Comprehensive and Integrated Delivery of Social Services – National Community-Driven Development Program
CIDSS – NCDDP	
LAO	Laoag International Airport
LARISIP	Lower Agno River Irrigation System Improvement Project
LCCAP	Local Climate Change Adaptation Plan
LCEs	Local Chief Executives

LCPC	Local Council for the Protection of Children
LDRRMC	Local Disaster Risk Reduction and Management Council
LDRRMO	Local Disaster Risk Reduction and Management Office
LEES	Labor and Employment Education Services
LFPR	Labor Force Participation Rate
LGC	Local Government Code
LGUs	Local Government Units
LHB	Local Housing Board
LIIC	Local Investments and Incentive Code
LP	Lupon Tagapamayapa
LOPC	Local Peace and Order Council
LPRAPs	Local Poverty Reduction Action Plans
LRC	Local Revenue Code
LSDF	Luzon Spatial Development Framework
LSP	Local Shelter Plan
LSWM	Local Solid Waste Management
LSWMP	Local Solid Waste Management Plan
LTO	Land Transportation Office
LTO-FDA	License to Operate – Food and Drug Administration
LTV	Long-term vision
LUCs	Local Universities and Colleges
MDG	Millennium Development Goals
MENRO	Municipal Environment and Natural Resources Office
MMR	Maternal Mortality Rate
MMSU	Mariano Marcos State University
MNCHN	Maternal, Newborn, Child Health, and Nutrition
MNR	Manila North Road
MOA	Memorandum of Agreement
MPAs	Marine Protected Areas
MRAs	Mutual Recognition Agreements
MRB	Major River Basin
MRF	Materials Recovery Facilities
MRPVO	Moral Recovery Program and Values Orientation
MSMEs	Micro, Small and Medium Enterprises
MT-BME	Mother Tongue-Based Multilingual Education
MTC	Municipal Trial Court
MTDAs	Multi-destination Tourism Areas
NaLUA	National Land Use Act
NBP	National Broadband Plan
NCCA	National Commission for Culture and the Arts
NCIP	National Commission for Indigenous Peoples
NDF	National Democratic Front
NDHS	National Demographic and Health Survey

NDRRMP	National Disaster Risk Reduction and Management Plan
NEDA	National Economic and Development Authority
NER	Net Enrolment Ratio
NFNL	Naval Forces North Luzon
NGAs	National Government Agencies
NGP	National Greening Program
NHA	National Housing Authority
NHIP	National Health Insurance Program
NHTS	National Household Targeting System
NHTS-PR	National Household Targeting System for Poverty Reduction
NIA	National Irrigation Administration
NICs	Non-index crimes
NNC	National Nutrition Council
NP	National Parks
NPA	New People's Army
NRS	Naguilian River System
NSP	National Shelter Program
NSS	National Spatial Strategy
OBE	Outcomes-based Education
 OCD	Office of the Civil Defense
OECD	Organization for Economic Co-Operation and Development
OFs	Overseas Filipinos
OFWs	Overseas Filipino Workers
OS	Other Services
PA	Philippine Army
PA	Protected Area
PAF	Philippine Air Force
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PAMB	Protected Area Management Board
Pantawid Pamilya	Pantawid Pamilyang Pilipino Program
PAPs	Programs, activities and projects
PATROL	Peace and Order Agenda for Transformation and Upholding of the Rule of Law
PBR	Philippine Business Registry
PCG	Philippine Coast Guard
PCIC	Philippine Crop Insurance Corporation
PDP	Philippine Development Plan
PENRO	Provincial Environment and Natural Resources Office
PESFA	Private Education Student Financial Assistance
PESO	Public Employment Service Office
PFM	Public Financial Management

PGR	Population Growth Rate
PHIC	Philippine Health Insurance Corporation
PhilHealth	Philippine Health Insurance Corporation
PHILVOLCS	Philippine Institute of Volcanology and Seismology
PhP	Philippine Peso
PL	Protected Landscape
PLS	Protected Landscape and Seascape
PM	Particulate Matter
PNP	Philippine National Police
PNR	Philippine National Railways
PNS	Philippine National Standards
PopCom	Commission on Population
POs	Peoples Organizations
PPAs	Programs, Projects and Activities
PPP	Private Public Partnership
PPP-SIP	PPP – funded School Infrastructure Program
PSA	Philippine Statistics Authority
PSIP	PPP for School Infrastructure Project
PSU	Pangasinan State University
PWDs	Persons with Disabilities
QRT	Quick Response Team
R&D	Research and Development
RA	Republic Act
RAFC	Regional Agriculture and Fishery Council
RCC/NCC	Regional Competitiveness Council/National Competitiveness Council
RDA	Regional Development Agenda
RDBCC	Regional Development Budgeting Coordinating Committee
RDC	Regional Development Council
RDP	Regional Development Plan
RHUs	Rural Health Units
RLAs	Regional Line Agencies
RLECC	Regional Law Enforcement Coordinating Committee
RM	Results Matrices
ROW	Right-of-Way
RPMC	Regional Project Monitoring Committee
RPMES	Regional Project Monitoring and Evaluation System
RPOC	Regional Peace and Order Council
RPRH	Responsible Parenthood and Reproductive Health
RRCY	Regional Rehabilitation Center for Youth
RRPTP	Recovery and Reintegration Program for Trafficked Persons
RSDF	Regional Spatial Development Framework
S&T	Science and Technology
SBC	Small Business Corporation

SCOUT	Special Counter-Insurgency Operation Unit Training
SDGs	Sustainable Development Goals
SDN	Service Delivery Network
SDRS	Sinocalan-Dagupan River System
SEA-K	Self-Employment Assistance-Kaunlaran
SEC	Securities and Exchange Commission
SeComs	Sectoral Committees
SETUP	Small Enterprise Technology Upgrading Program
SGLG	Seal of Good Local Governance
SHFC	Social Housing Finance Corporation
SLP	Sustainable Livelihood Program
SMEs	Small and Medium-Sized Enterprises
SP	Social protection
SPPBMES	Synchronized Planning, Project Development, Programming, Budgeting, Monitoring and Evaluation System
SSF	Shared Service Facilities
SSS	Social Security System
STD	Sexually Transmitted Disease
STEP	Special Training for Employment Project
STI	Science, Technology and Innovation
STI	Sexually Transmitted Infection
STuFAPs	Student Financial Assistance Programs
SuComs	Support Committees
SUCs	State Universities and Colleges
SWAT	Special Weapon and Tactics
SWD	Social Welfare and Development
SWDAs	Social Welfare and Development Agencies
SWIP	Small Water Impounding Project
SWISAs	Small Water Impounding Irrigators' Associations
SWM	Solid Waste Management
SWMP	Solid Waste Management Plan
TA	Technical Assistance
TDAs	Tourism Development Areas
TESD	Technical Education and Skills Development
TESDA	Technical Education and Skills Development Authority
TFR	Total Fertility Rate
TIT	Trade, Industry and Tourism
TPLEX	Tarlac-Pangasinan-La Union Toll Expressway
TSP	Total Suspended Particulates
TVET	Technical-Vocational Education and Trainings
TWSP	Training for Work Scholarship Program
UDHA	Urban Development and Housing Act
UN	United Nations

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIS	Unified National Identification System
VTIs	Vehicular Traffic Incidents
W/MEDC	Women and Men in Especially Difficult Circumstances
WA	Wilderness Area
WACS	Waste Analysis and Characterization Study
WEF	World Economic Forum
WELL	Welfare, Employment Livelihood and Legal Advice
WFR	Watershed Forest Reserves
WLMS	Water Level Monitoring Stations
WMP	Wetland Management Plan
WMQS	Water Quality Monitoring Stations
WQMA_s	Water Quality Management Areas
YAFS	Young Adult Fertility and Sexuality

Glossary

Achievement rate	The degree of performance in different subject areas in various levels of education (DepEd, n.d., cited from NEDA, 2017).
Affordability	The potential amount of income that could be made available for housing investment after excluding basic necessities such as food, clothing, education, medical expenses, transportation, income tax and recurrent costs of housing (House Joint Resolution No. 0003, n.d., cited from NEDA, 2017).
Agribusiness	The sum of all operations involved in the manufacture and distribution of farm supplies; production activities on the farm; and the storage, processing and distribution of farm commodities and items made from them (DAR, 2009 cited from NEDA, 2017).
Agricultural and Fisheries Mechanization	The development, adoption, assembly, manufacture, and application of appropriate, location specific and cost-effective agricultural and fisheries machinery using human, animal, mechanical operations. These machineries may use electrical, renewable, and other non-conventional sources of energy for agricultural production and postharvest or postproduction operations consistent with agronomic conditions and for efficient and economic farm and fishery management towards modernization of agriculture and fisheries (R.A. 10601, 2013, cited from NEDA, 2017).
Agricultural insurance	A risk managing tool that provides protection to farmers, fisherfolk and other agricultural stakeholders against losses of their crops and produce, including their farm machineries and equipment, transport facilities, and related infrastructure arising from natural calamities, pests and diseases, and other perils beyond their effective control (NEDA, 2017).
Agricultural lands	Lands devoted to or suitable for the cultivation of the soil, planting of crops, growing of trees, raising of livestock, poultry, fish or aquaculture production, including the harvesting of such farm products, and other farm activities and practices performed in conjunction with such farming operations by persons whether natural or juridical and not classified by the law as mineral land,

	forest land, residential land, commercial land, or industrial land (R.A. 8435, 1997, cited from NEDA, 2017).
Aquaculture	Fishery operations involving all forms of raising and culturing fish and other fishery species in fresh, brackish and marine water areas (NEDA, 2017).
Balik Scientist Program	A program that encourages highly-trained overseas Filipino scientists and technologists, experts, and professionals to return to the Philippines and share their expertise for the acceleration of the scientific, agro-industrial and economic development of the country (NEDA, 2017).
Basic education	The education intended to meet learning needs in order to set the foundation for subsequent learning. It covers six years of primary education, four years of Junior High School, and two years of Senior High School. It also includes alternative learning system for out-of-school youth and adult learners and includes education for those with special needs. (RA 10533, 2013, cited from NEDA, 2017)
Basic research	Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view (NEDA, 2017).
Basic sanitation	Refers to flush toilet (either owned or shared) and closed pit facilities (NEDA, 2017).
Broadband	On-line, high-speed access service that provides connection to the internet and other information services (NEDA, 2017).
Caves	Any naturally occurring void, cavity, recess, or system of interconnected passages beneath the surface of the earth or within a cliff or ledge and which is large enough to permit an individual to enter, whether or not the entrance is located either in private or public land (NEDA, 2017).
Children	Persons below 18 years of age or those over but are unable to fully take care of themselves or protect themselves from abuse, neglect, cruelty, exploitation or discrimination because of a physical or mental disability or condition (R.A. 7610, 1992 cited from NEDA, 2017).
Climate change	Refers to changes in climatic systems as measured by mean temperatures or variability of its properties and

	persists for an extended period, typically decades or longer, whether due to natural variability or as a result of human activity (R.A. 9729, 2009, cited from NEDA, 2017).
Climate change adaptation	The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities (R.A. 9729, 2009, cited from NEDA, 2017).
Coastal area	A band of dry land and adjacent ocean space, including submerged land, in which terrestrial processes affect oceanic processes and uses and vice versa. Its geographic extent may include areas within a landmark limit of one kilometer from shoreline at high tide to include mangroves swamps, brackish water ponds, nipa swamps, estuarine rivers, sandy beaches and other area within a seaward limit of 200 meters isobaths to include coral reefs, algal flats, sea grass, beds, and other soft bottom areas (NEDA, 2017).
Cohort survival rate	The percentage of enrollees at the beginning grade or year in a given school year who reached the final grade or year of the elementary level (NEDA, 2017).
Commercialization	The process of deriving income or profit from a technology, such as the creation of a spin-o company, or through licensing, or the sale of the technology and/or Intellectual Property Rights (NEDA, 2017).
Communal irrigation system	A type of irrigation system covering an area of 1,000 hectares or less, which is constructed by the National Irrigation Administration with the participation of local irrigators' associations. Its operation and maintenance is turned over to the IAs upon project completion (NIA, n.d., cited from NEDA, 2017).
Community-based Forest Management Agreement	Partnership between the government and the local community, represented by people's organization, as forest managers, which has a term of 25 years, renewable for another 25 years (NEDA, 2017).
Competency Assessment	An evaluation process that seeks to determine whether the graduate or worker can perform to the standards expected in the workplace based on the defined competency standards (NEDA, 2017).
Completion rate	The percentage of first grade/year entrants in a level of education who complete the required number of years of

study (NEDA, 2017).

Comprehensive Land Use Plan	A document accompanied by maps and similar illustrations, which represent the community-deserved pattern of population distribution and proposal for future allocation of land for the various land use activities, in accordance with the social and economic objectives of the people. It identifies location, character and extent of the area's land resources to be used for different purposes and includes the process and the criteria employed in the determination of the land's use (NEDA, 2017).
Contraceptive prevalence rate	The percentage of currently married women 15-49 years of age reporting current use of any method of contraception (NEDA, 2017).
Convergence program	The complementation of agency initiatives within a defined area under a common intervention strategy to maximize impact (NEDA, 2017).
Cooperative	An autonomous and duly registered association of persons, with a common bond of interest, who have voluntarily joined together to achieve their social, economic, and cultural needs and aspirations by making equitable contributions to the capital required, patronizing their products and services and accepting a fair share of the risks and benefits of the undertaking in accordance with universally accepted cooperative principles (R.A. 9520, 2008, cited from NEDA, 2017).
Crime solution efficiency	The percentage of solved cases out of the total number of crime incidents handled by law enforcement agencies for a given period of time (NEDA, 2017).
Culture	Set of distinctive spiritual, material, intellectual and emotional features of society or a social group, that encompasses not only art and literature, but lifestyles, ways of living together, value system, traditions and beliefs (UNESCO, 2001 cited from NEDA, 2017).
Disaster	A serious disruption of the functioning of a community or a society involving widespread human, material, economic, or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources (R.A. 10121, 2010, cited from NEDA, 2017).
Disaster risk	The potential disaster loss (i.e., lives, health status, livelihoods, assets, services) which could occur to a

particular community or a society over some specified future time period (UNISDR, 2009, cited from NEDA, 2017).

Disaster risk reduction	The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including the reduction of exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events (UNISDR, 2007; R.A. 10121, 2010, cited from NEDA, 2017).
Disaster risk reduction and management	Refers to the systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improve coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster (R.A. 10174, 2012, cited from NEDA, 2017).
Early childhood care and development	The full range of health, nutrition, early education, and social services necessary to promote the optimum growth and development of children age zero to four years (NEDA, 2017).
Early warning system	The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities, and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss (RA 10121, 2010, cited from NEDA, 2017).
Economic zone	Selected areas with highly developed or which have the potential to be developed into agri-industrial, industrial, tourist, recreational, commercial, banking, investment and financial centers whose metes and bounds are fixed or delimited by Presidential Proclamations (PEZA, 1995, cited from NEDA, 2017).
Ecotourism	A form of tourism that can sustainably use natural and cultural resources while providing employment opportunities for local communities (NEDA, 2017).
eCourts	This is a computer-based system designed to enable trial judges and court personnel to organize, plan and control the flow of cases from filing to resolution and enforcement. This system involves the electronic capture, storage, management and retrieval of essential case data to aid the judges and court case processors in more efficiently handling the volume of cases that flood the

judiciary (NEDA, 2017).

Electric cooperatives	An organization or corporation authorized to provide electric services pursuant to Presidential Decree No. 269, as amended, and Republic Act No. 6938 within the framework of the national rural electrification plan (NEDA, 2017).
Farm-to-market roads	Roads linking the agriculture and fisheries production sites, coastal landing points and post-harvest facilities to the market and arterial roads and highways (NEDA, 2017).
Financial inclusion	A state where there is effective access to a wide range of financial products. The term is synonymous to inclusive financial system (NEDA, 2017).
Fisherfolk	People who are directly engaged in catching, culturing, and processing of fishery and/or aquatic resources (NEDA, 2017).
Food security	A condition where all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2002, cited from NEDA, 2017).
Foreign direct investments	Investments made by a resident entity in one economy to another economy to acquire a lasting interest and have a significant influence in the management over the enterprise (NEDA, 2017).
Forest cover	Natural and man-made forests, including forests within wetlands and built-up areas (NEDA, 2017).
Forest land	Includes public forest, permanent forest or forest reserves, and forest reservations (NEDA, 2017).
Forward and backward linkages	The channels through which products, materials, information, and money flow from suppliers to the firms (backward) or customers (forward). Backward and forward linkages are also descriptive measures of the economic interdependence of industries (NEDA, 2017).
Full Disclosure Policy	A policy that mandates local government units to post plans, budgets, and full utilization reports to enable the public to view, download, and print these financial documents to allow their constituents to understand how their local governments budget and spend for public

services (NEDA, 2017).

Functional literacy	A significantly higher level of literacy, which includes not only reading and writing skills but also numerical skills. The skills must be sufficiently advanced to enable the individual to participate fully and efficiently in activities commonly occurring that require a reasonable capability of communicating by written language (NEDA, 2017).
Gender and development	The development perspective and process that "seeks to achieve gender equality as a fundamental value that should be reflected in development choices; seeks to transform society's social, economic, and political structures and questions the validity of the gender roles they ascribed to women and men; contends that women are active agents of development and not just passive recipients of development assistance; and stresses the need of women to organize themselves and participate in political processes to strengthen their legal rights". (RA 9710, 2009, cited from NEDA, 2017).
Good Agricultural Practices	Practices that address environmental, economic and social sustainability for on-farm processes, and result in safe and quality food and non-food agricultural products (FAO, 2003, cited from NEDA, 2017).
Grid	The high voltage backbone system of interconnected transmission lines, substations, and related facilities (NEDA, 2017).
Gross domestic product	The value of all goods and services produced domestically. It is the sum of gross value added of all resident institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the values of their outputs) (NEDA, 2017).
Gross regional domestic product	The aggregate of gross value added of all resident producer units in the region. This includes regional estimates on the three major sectors including their sub-sectors namely: 1) Agriculture, Fishery, and Forestry Sector; 2) Industry Sector (Mining and Quarrying, Manufacturing, Construction, Electricity, Water); 3) Service Sector (Transport, Communication, Storage, Trade, Finance, Ownership of Dwellings and Real Estate, Private or Government Services). (PSA, n.d., cited from NEDA, 2017).
Gross value-added	The total payment to factors of production, namely: wages, interest, profits, rents, including capital

consumption allowance and indirect taxes. It is estimated by deducting from gross value of output the sum of non-factor cost such as raw materials and supplies, containers and packing materials, fuel, advertising and other non-industrial overhead cost (NEDA, 2017).

Hazardous waste	Used or discarded substances or materials that are without any safe commercial, industrial, agricultural or economic uses, and which pose substantial or potential threats to public health and/ or the environment (NEDA, 2017).
Heritage	Includes artefacts, monuments, a group of buildings and sites, that have a diversity of values including symbolic, historic, artistic, aesthetic, ethnological or anthropological, scientific and social significance (UNESCO, 1972, cited from NEDA, 2017).
High density housing	A housing strategy where a significant number of informal settler families are accommodated in a multi-storey building, either in an in-city or near-city relocation or land sharing agreement. It can also refer to the number of families per hectare (NEDA, 2017).
Higher education	The stage of formal education requiring secondary education covering the programs on all courses of study leading to a bachelor's degree and all degree courses of study beyond bachelor's degree level (NEDA, 2017).
High-value crops	Non-traditional agricultural and horticultural commodities that include coffee, cacao, fruits, root crops, vegetables, spices and condiments, cut flowers, and ornamental plants (NEDA, 2017).
Home Development Mutual Fund	A national savings program that aims to provide affordable shelter financing for the Filipino worker. This fund is more popularly known as the Pag-IBIG (Pagtutulungan sa Kinabukasan: Ikaw, Bangko, Industria at Gobyerno) Fund (NEDA, 2017).
Housing needs	The number of conventional dwellings or other suitable living quarters that need to be constructed or repaired in order to bring housing conditions, in a particular point in time, up to nationally adopted standards, plus the number that need to be constructed, repaired or maintained to ensure that housing conditions remain at the standard level over a stated period of time. Composed of accumulated, future, and recurrent structure demands, with allowance for inventory losses and increase in

households (NEDA, 2017).

Inclusive growth

Growth that is rapid enough to matter, given the country's large population, geographical differences, and social complexity. It is sustained growth that creates jobs, draws the vast majority into the economic and social mainstream, and continuously reduces mass poverty (NEDA, 2017).

Indigenous Peoples

Peoples who are regarded as indigenous on account of their descent from the populations which inhabited the country, at the time of conquest or colonization or at the time of inroads of non-indigenous religions and cultures or the establishment of present state boundaries who retain some or all of their own social, economic, cultural and political institutions, but who may have been displaced from their traditional domains or who may have resettled outside their ancestral domains (R.A. 8371, 1997, cited from NEDA, 2017).

Inflation rate

The annual rate of change or year-on-year change in Consumer Price Index (NEDA, 2017).

Information and communication technology

An umbrella term that covers all technical means for processing and communicating information. It defines a broad range of technologies, including methods for communication (communication protocols, transmission techniques, communications equipment, media communication), as well as techniques for storing and processing information (computing, data storage, etc.) (NEDA, 2017).

Integrated Coastal Management

A dynamic process of planning and management involving stakeholders, and requiring the analysis of the environmental and socioeconomic implications of development, the ecosystem processes, and the interrelationships among land-based and marine-related activities across jurisdictions (Executive Order No. 533, 2006, cited from NEDA, 2017).

Intellectual property

The intangible assets resulting from the creative work of an individual or organization. IP also refers to creations of the mind, such as inventions, literary and artistic works, and symbols, names, images and designs used in commerce. IP can also refer to future tangible and/or intangible assets that may be recognized as intellectual property (NEDA, 2017).

Labor force

This refers to population 15 years old and over who are

either employed or unemployed (NEDA, 2017).

Labor productivity	Labor productivity in agriculture, forestry and fishery pertains to the value of agricultural output per employed person in agriculture, forestry and fisheries (NEDA, 2017).
Land degradation	The reduction or loss, in arid, semi-arid and dry sub-humid areas, of the biological or economic productivity and complexity of rain-fed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns (UNCCD, 1994, cited from NEDA, 2017).
Local housing board	A local special body devoted to addressing shelter concerns in the formulation, development and implementation of a comprehensive and integrated housing and land development program of the local government unit (NEDA, 2017).
Local shelter plan	A document that defines the present and projected needs, gaps, issues on local housing vis-à-vis the projected population, resources required, affordability analysis, goals and objectives, strategies, interventions and implementation plan of the local housing program (NEDA, 2017).
Major river basin	Basin with area of at last 990 square kilometers (NEDA, 2017).
Marine protected areas	A defined area of the sea established and set aside by law, administrative regulation, or any other effective means in order to conserve and protect a part of or an entire enclosed environment through the establishment of management guidelines. It is considered a generic term that includes all declared areas governed by specific rules or guidelines in order to protect and manage activities within an enclosed area (Republic Act 10654, cited from NEDA, 2017).
Maternal mortality ratio	The number of women who die from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 livebirths (NEDA, 2017).

Micro, small, and medium enterprises	Any business activity or enterprise that has assets not exceeding P100 million and employment size less than 200, regardless of the type of ownership (NEDA, 2017).
Microfinance	A broad range of financial services such as deposits, loans, payment services, money transfers and insurance products to the poor and low-income households and their microenterprises. By definition, it is important to note that microfinance is not a subsidized credit, not a dole-out, not salary or consumption loans, and not a cure-all for poverty (NEDA, 2017).
Minimum wage	The lowest wage rate fixed by law (NEDA, 2017).
Mutual Recognition Agreements	Framework arrangements established in support of liberalizing and facilitating the mobility of professionals and skilled labor among ASEAN member states, particularly on the equivalencies and competency standards for professionals and labor that would enable them to practice their professions and trades within the ASEAN region (ASEAN, n.d., cited from NEDA, 2017).
National Transport Policy	A draft policy framework that intends the achievement of Transport Vision 1 by setting forth policies to guide all entities involved in the transportation sector. The proposed policies will aim for the maximization of transport infrastructure investments, creation of new economic growth centers, improvement of tourism and agro-industry competitiveness, and promotion of good governance (NEDA, 2017).
Net enrolment rate or participation rate	The ratio of the enrolment for the age group corresponding to the official school age in the elementary/secondary level to the population of the same age group in a given year (NEDA, 2017).
Overseas Filipinos	Refers to migrant workers, Filipino nationals and their dependents abroad (NEDA, 2017).
Patent	A grant issued by the government through the Intellectual Property Office of the Philippines. It is an exclusive right granted for a product, process or an improvement of a product or process which is new, inventive and useful. is exclusive right gives the inventor the right to exclude others from making, using, or selling the product of his invention during the life of the patent (NEDA, 2017).
Poor	Individuals and families whose income fall below the poverty threshold as defined by the government or those

that cannot afford in a sustained manner to provide their basic needs of food, health, education, housing and other amenities of life (R.A. 8425, 1997, cited from NEDA, 2017).

Protected areas

Identified portions of land and water set aside by reason of their unique physical and biological significance, managed to enhance biological diversity and protected against destructive human exploitation (NEDA, 2017).

Public-private partnership

A contractual arrangement between the government and the private sector to deliver public infrastructure and/or public services (NEDA, 2017).

Renewable energy

Energy resources that do not have an upper limit on the total quantity to be used, e.g., biomass, solar, wind, geothermal, hydropower, among others. Such resources are renewable on a regular basis, and whose renewal rate is relatively rapid to consider availability over an indefinite period of time (NEDA, 2017).

Resiliency or resilience

The capacity of social, economic, and environmental systems to cope with a hazardous event or trend disturbance, responding, or reorganizing in ways that maintain their essential function, identity and structure, while also maintaining the capacity for adaptation, learning and transformation (IPCC, 2014, cited from NEDA, 2017).

Risk assessment

A methodology used to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihood, and the environment on which they depend (R.A. 10121, 2010, cited from NEDA, 2017).

Sanitary landfill

A waste disposal site designed, constructed, operated, and maintained in a manner that exerts engineering control over significant potential environmental impacts arising from the development and operation of the facility (NEDA, 2017).

Seal of Good Local Governance

A mechanism that monitors and recognizes adherence of local government units to performance criteria on any of the following areas: good financial housekeeping, disaster preparedness, social protection for the basic sector, business friendliness and competitiveness, environmental compliance, and law and order and public safety. This used to be referred to as the Seal of Good Housekeeping

(NEDA, 2017).

Sewerage	Any system or network of pipelines, ditches, channels, or conduits, which collects, transports, pumps, and treats waterborne human and animal waste removed from residences, buildings, and industrial and commercial establishment to point of disposal (NEDA, 2017).
Social insurance	Programs that seek to mitigate income risks by pooling resources and spreading risks across time and classes. These are designed in such a way that beneficiaries pay a premium over a given period of time to cover or protect them from loss of income and unemployment as a result of illness, injury, disability, retrenchment, harvest failure, maternity, old age, etc. This component includes micro and area-based schemes to address vulnerability at the community level such as micro-insurance, agricultural insurance and social support funds. (NEDA-SDC, 2007, cited from NEDA, 2017).
Social protection	Constitutes policies and programs that seek to reduce poverty and vulnerability to risks and enhance the social status and rights of the marginalized by promoting and protecting livelihood and employment, protecting against hazards and sudden loss of income, and improving people's capacity to manage risks (NEDA-SDC, 2007, cited from NEDA, 2017).
Social safety nets	Stop-gap mechanisms or urgent responses that address effects of economic shocks, disasters and calamities on specific vulnerable groups with the objective of providing relief and transition. Measures include emergency assistance, price subsidies, food programs, employment programs, retraining programs and emergency loans. (NEDA-SDC, 2007, cited from NEDA, 2017).
Socialized housing	Units that are affordable to low-income earners, with price ceiling not more than P450,000. It also refers to programs and projects undertaken by the government or private sector entities to assist underprivileged and homeless citizens in acquiring housing structures (R.A. 10884, 2016, cited from NEDA, 2017).
Solid waste	Discarded household, commercial, institutional and industrial materials, street sweepings, construction debris, agricultural refuse, and other non-hazardous/non-toxic solid excess (NEDA, 2017).
Solid waste	Discipline associated with the control of generation,

management	storage, collection, transfer and transport, processing, and disposal of solid wastes in a manner that is in accord with the best principles of public health, economics, engineering, conservation, aesthetics, and other environmental considerations, and that is also responsive to public attitudes (NEDA, 2017).
Sustainable development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (NEDA, 2017).
Technical vocational education and training	The education or training process where it involves, in addition to general education, the study of technologies and related sciences and acquisition of practical skills relating to occupations in various sectors of economic life and social life, comprises formal (organized programs as part of the school system) and non-formal (organized classes outside the school system) approaches (NEDA, 2017).
Technology transfer	The process by which one party systematically transfers to another party the knowledge for the manufacture of a product, the application of a process, or rendering of a service, which may involve the transfer, assignment or licensing of Intellectual Property Rights (NEDA, 2017).
Under-five mortality rate	The probability of a child born in a specific year or period dying before reaching the age of five, if subject to age-specific mortality rates of that period (NEDA, 2017).
Unemployed	Persons in the labor force who are reported as without work and currently available for work. These persons may be actively seeking work, not seeking work, awaiting results of previous job application, waiting for rehire or job recall. Persons who are jobless because of temporary illness, disability, or bad weather are also included (NEDA, 2017).
Value chain	The full range of activities that are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use (NEDA, 2017).
Vulnerability	The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. Vulnerability may arise from various physical, social, economic, and environmental factors

such as poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management. (R.A. 10121, 2010; UNISDR, 2007; cited from NEDA, 2017).

Vulnerable

Households confronted by ex-ante risk that, if they are currently non-poor, will fall below the poverty line, or if they are currently poor, will remain in poverty. It is also defined in terms of exposure to adverse shocks to welfare and not only in terms of exposure to poverty (NEDA-SDC, 2007, cited from NEDA, 2017).

Water quality management areas

Designated sites, pursuant to Republic Act 9275, which uses appropriate physiographic units such as watershed, river basins or water resources regions. The objective of the designation is to protect, through stakeholder collaborations, the water body and its tributaries by keeping their water quality within the Water Quality Guidelines or Criteria conforming to the water body's classification or even improve the quality to higher classification (e.g., from C to B or SC to SB) (NEDA, 2017).

Watershed

A land area drained by a stream or fixed body of water and its tributaries having a common outlet for surface run-off. Also called basin or catchment areas (NEDA, 2017).

Whole-of-Government approach

An approach where a government actively uses formal or informal networks across different agencies to coordinate the design and implementation of interventions in order to increase the effectiveness of those interventions in achieving the desired objectives (NEDA, 2017).

Yield

An indicator of productivity for agricultural commodities derived by dividing total production by the area planted or harvested (NEDA, 2017).

Youth

Individuals belonging to the age group 15 to 30 years (RA 8044, 1995, cited from NEDA, 2017).

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RDP 2017-2022

Planning Committees

GOVERNANCE SECTOR COMMITTEE

Chair: Department of Interior and Local Government (DILG) Region 1

Co-Chair: Private Sector Representative for Governance

Member Agencies/Local Government Units/ Private Sector Representatives:

Bureau of Internal Revenue (BIR)
Civil Service Commission (CSC)
Commission on Audit (COA)
Department of Budget and Management (DBM)
Department of Interior and Local Government (DILG)
Department of Justice – Parole and Probation Administration (DOJ-PPA)
National Commission on Indigenous Peoples (NCIP)
National Police Commission (NAPOLCOM)
National Economic and Development Authority (NEDA)
Office of the Civil Defense (OCD)
Philippine Information Agency (PIA)
Philippine National Police (PNP)
PSR for Education
PSR for Indigenous Peoples
PSR for Youth

ECONOMIC DEVELOPMENT SECTOR COMMITTEE

Chair: Department of Agriculture (DA)-Field Office 1

Co-Chair: Private Sector Representative for Trade, Industry and Tourism

Member Agencies/Local Government Units/ Private Sector Representatives:

Bureau of Fisheries and Aquatic Resources (BFAR)
Cooperative Development Authority (CDA)
Commission on Higher Education (CHED)
Development Bank of the Philippines (DBP)
Department of Agrarian Reform (DAR)
Department of Foreign Affairs (DFA)
Department of Interior and Local Government (DILG)
Department of Labor and Employment (DOLE)

Department of Science and Technology (DOST)
 Department of Tourism (DOT)
 Department of Trade and Industry (DTI)
 Don Mariano Marcos Memorial State University (DMMMSU)
 Land Bank of the Philippines (LBP)
 National Economic and Development Authority (NEDA)
 National Food Authority (NFA)
 National Irrigation Authority (NIA)
 National Nutrition Council (NNC)
 National Tobacco Administration (NTA)
 Philippine Chamber of Commerce and Industry (PCCI)
 Philippine Crop Insurance Corporation (PCIC)
 Philippine Statistics Authority (PSA)
 Philippine Information Agency (PIA)
 Provincial Planning and Development Office of Ilocos Norte
 Provincial Planning and Development Office of Ilocos Sur
 Provincial Planning and Development Office of La Union
 Provincial Planning and Development Office of Pangasinan
 PSR for Agriculture
 PSR for Cooperatives
 PSR for Labor
 Regional Agricultural and Fishery Council 1
 Technical Education and Skills Development Authority (TESDA)

SOCIAL DEVELOPMENT SECTOR COMMITTEE

Chair: Department of Education (DepEd) Region 1

Co-Chair: Private Sector Representative for Health

Member Agencies/Local Government Units/ Private Sector Representatives:

Department of Social Welfare and Development (DSWD)
 Department of Health (DOH)
 Department of Labor and Employment (DOLE)
 Housing and Urban Development Coordinating Council (HUDCC)
 National Economic and Development Agency (NEDA)
 Provincial Planning and Development Office of Ilocos Norte
 Provincial Planning and Development Office of Ilocos Sur
 Provincial Planning and Development Office of La Union
 Provincial Planning and Development Office of Pangasinan
 PSR for Senior Citizens
 PSR for Education
 PSR for Women and Children
 PSR for Youth
 PSR for Indigenous Peoples

INFRASTRUCTURE AND UTILITIES SECTOR COMMITTEE

Chair: Department of Public Works and Highways (DPWH) Region 1

Co-Chair: Private Sector Representative for Infrastructure and Utilities

Member Agencies/Local Government Units/ Private Sector Representatives:

Civil Aviation Authority of the Philippines (CAAP)
Department of Agrarian Reform (DAR)
Department of Agriculture (DA)
Department of Budget and Management (DBM)
Department of Education (DepEd)
Department of Energy (DOE)
Department of Environment and Natural Resources (DENR)
Department of Health (DOH)
Department of Information and Communications Technology (DICT)
National Economic and Development Agency (NEDA)
National Electrification Administration (NEA)
National Grid Corporation of the Philippines (NGCP)
National Irrigation Administration (NIA)
National Telecommunications Commission (NTC)
Philippine National Police (PNP)
Philippine Ports Authority (PPA)
Pororo Point Management Corporation (PPMC)
Provincial Planning and Development Office of Ilocos Norte
Provincial Planning and Development Office of Ilocos Sur
Provincial Planning and Development Office of La Union
Provincial Planning and Development Office of Pangasinan

ENVIRONMENT AND NATURAL RESOURCES SECTOR COMMITTEE

Chair: Department of Environment and Natural Resources (DENR) Region 1

Co-Chair: Private Sector Representative for Environment

Member Agencies/Local Government Units/ Private Sector Representatives:

Bureau of Fisheries and Aquatic Resources (BFAR)
Department of Education (DepEd)
Department of Health (DOH)
Department of Interior and Local Government (DILG)
Department of Labor and Employment (DOLE)
Department of Science and Technology (DOST)

Department of Tourism (DOT)
Don Mariano Marcos Memorial State University (DMMMSU)
Environmental Management Bureau (EMB)
Ilocos Sur Polytechnic State College (ISPSC)
Mariano Marcos State University (MMSU)
Mines and Geosciences Bureau (MGB)
National Commission on Indigenous Peoples (NCIP)
National Economic and Development Authority (NEDA)
Pangasinan State University (PSU)
Philippine Information Agency (PIA)
Provincial Planning and Development Office of Ilocos Norte
Provincial Planning and Development Office of Ilocos Sur
Provincial Planning and Development Office of La Union
Provincial Planning and Development Office of Pangasinan
PSR for Indigenous People
PSR for Youth
University of Northern Philippines (UNP)

Schedule of RDP 2017-2022 Consultations

Provincial Consultation (La Union and Pangasinan)	November 11, 2016
1 st Regional Consultation	November 17, 2016
Provincial Consultation (Ilocos Norte and Ilocos Sur)	November 25, 2016
Technical Working Group Workshop on the Preparation of the RDP 2017-2022 Results Matrices for Region 1	December 1, 2016
4 th Quarter 2016 Environment and Natural Resources Sectoral Committee Meeting	December 5, 2016
4 th Quarter 2016 Social Development Sectoral Committee Meeting	December 6, 2016
4 th Quarter 2016 Infrastructure Sectoral Committee Meeting	December 8, 2016
4 th Quarter 2016 Governance Sectoral Committee Meeting	December 12, 2016
2016 Economic Development Sectoral Committee Meeting	December 14, 2016
2 nd Regional Consultation	December 15, 2016
2016 1 st Regional Gender and Development Committee Meeting	December 16, 2016
2016 4 th Regular Regional Development Council-1 Full Council Meeting	December 19, 2016
1 st Quarter 2017 Environment and Natural Resources Sectoral Committee Meeting	March 16, 2017
1 st Quarter 2017 Economic Development Sectoral Committee Meeting	March 22, 2017
1 st Quarter 2017 Governance Sectoral Committee Meeting	March 23, 2017
1 st Quarter 2017 Infrastructure Sectoral Committee Meeting	March 23, 2017
1 st Quarter 2017 Social Development Sectoral Committee Meeting	March 27, 2017
2017 1 st Regular Regional Development Council-1 Full Council Meeting	March 28, 2017

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OVERALL SECRETARIAT

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Vida Karna D. Dejos
Mary Jane C. Cacanindin
Rey B. Ferreria
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EDITORIAL TEAM

Director Nestor G. Rillon
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Marissa M. Gorospe
Racquel T. Atawe

PRODUCTION TEAM

Irenea B. Ubungen
Glo Ann N. Balcita
Fatima Gail E. Antipolo
Irish Joy L. Mayrina



REGIONAL DEVELOPMENT PLAN 2017-2022

Published by:

**National Economic and Development Authority
Regional Office I**

Guerrero Road, City of San Fernando, 2500 La Union
(072) 888-2679 * (072) 888-2680
nedaregionaloffice1@gmail.com

<http://ilocos.neda.gov.ph>