



Cordillera Regional Development Plan 2011-2016



**REGIONAL DEVELOPMENT PLAN
2011-2016
Cordillera Administrative Region**

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Message



I commend the NEDA, Regional Development Councils and all stakeholders in the 17 regions for coming together to formulate your respective Regional Development Plans. May this partnership among regional and local institutions, the private sector, and civil society ensure the continued success of these programs and the distribution of their benefits throughout the country.

Along with the Philippine Development Plan, the RDPs will guide our development efforts in the next five years, and will act as a common roadmap for our country's development and for the establishment of the necessary infrastructure that will help us achieve our goal of increasing economic and social opportunities for our people. Guided by our commitment to the UN Millenium Development Goals, our concerted efforts will not only help accelerate economic growth, but will also give our provinces improved access to quality education, health, and social services.

We came to government with a mandate to eradicate poverty and create a better future for our nation. As we carry out key reforms in the bureaucracy, we also strive to set in place an environment of sustainable and equitable progress in the coming years. Together, let us fulfill the potential of our great nation.



BENIGNO S. AQUINO III
President
Republic of the Philippines

MANILA
May 2011

Message



The Regional Development Plans (RDPs) represent the aspirations of Filipinos in different areas of the country. As accompanying documents of the Philippine Development Plan (PDP) 2011-2016, the RDPs also provide the spatial dimension to the national plan by identifying the region's contributions to our goal of a high, sustained and broad-based growth. This "inclusive growth" involves rapid economic expansion that must reach population groups throughout the country through the provision of productive employment opportunities, thereby reducing poverty.

The attainment of our goals requires massive investments in infrastructure, social services and other productive activities. The PDP, along with the RDPs are the key instruments that will guide the proper and equitable allocation of resources to ensure improvements in the welfare of our people. Likewise, our plans shall direct our efforts in protecting the environment, reducing climate and disaster risks, promoting good governance and ensuring peace and stability.

The RDPs provide the framework for local development. We thus enjoin the local government units to align their local plans and programs with the RDPs. We likewise seek the support of regional institutions and the private institutions in the realization of the plans which many of them have helped prepare. We need to strengthen multistakeholder cooperation particularly as we promote public-private partnership to improve the provision of services of our people.

I thank the Regional Development Councils (RDC) for spearheading the preparation of the RDPs and we count on their continued leadership in coordinating development efforts in the regions.


CAYETANO W. PADERANGA

Secretary of Socioeconomic Planning
and NEDA Director-General

Message



REGIONAL DEVELOPMENT COUNCIL Cordillera Administrative Region

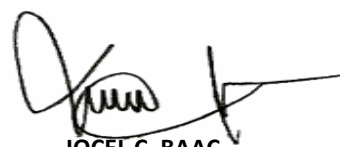
The Cordillera Region fully supports the national development agenda of President Benigno Simeon C. Aquino III as contained in the Philippine Development Plan 2011-2016. Our commitment is embodied in the Cordillera Regional Development Plan 2011-2016 that sets the development directions of our region in the next six years.

Embracing the President's development directions enunciated in his "Social Contract with the Filipino People", we share the President's goals through this Plan to achieve inclusive growth, create employment opportunities and reduce poverty through good governance and anti-corruption. Further, we hope we can contribute to these goals especially through our twin regional priority strategies of: (1) being the Watershed Cradle of North Philippines that will help sustain water-dependent economic activities in the area as well as generate economic activities appropriate for our region; and (2) becoming an autonomous region, a set-up seen and designed to help fast-track our development.

The Cordillera will always be grateful to the late President Corazon C. Aquino who recognized and granted our desire to become a separate and distinct region of the country through her issuance of Executive Order 220. We hope that the current administration will again be instrumental in giving priority attention to our development issues and concerns as outlined in our Plan, and in fulfilling the Cordillera's aspiration to become an autonomous region that we see and expect to bring us many advantages to greatly enhance our development and improve the lives of our constituents.

The Regional Development Plan is only as good as its implementation, and its implementation will depend on the collective will and determination of the people who choose to undertake the Plan in its concrete form amidst challenging limited resources. Each of us has a critical role to play in ensuring that the vision and development aspirations of Cordillerans will be attained.

On behalf of the members of the Regional Development Council, I wish to invite all our development partners in and outside the region to support the Cordillera Regional Development Plan 2011-2016, especially its implementation by aligning their policies, programs and projects to our identified regional development priorities towards achieving a progressive Cordillera.



JOCEL C. BAAC
RDC Chairman 2010-2013
(Governor, Kalinga)

Foreword



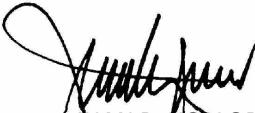
NATIONAL ECONOMIC AND DEVELOPMENT AUTHORITY Cordillera Administrative Region

The Cordillera Region remains challenged in advancing its state of development. While gains in reducing poverty were achieved with its slight reduction in 2009, the region is in need of a strategy that will not only help sustain our modest achievements but also provide a more solid foundation for continued and accelerated economic growth and development. The region's ecological integrity must also be ensured while it pursues progress. This remains the critical element in the Cordillera's development agenda.

The Cordillera Regional Development Plan 2011-2016 is set to steer the CAR economy towards economic activities that will help achieve the national government's goals of inclusive growth, employment generation and poverty reduction. Continuing on with the strategic planning approach, the Cordillera expects to contribute to these goals through Key Focus Areas of economic activities based on identified comparative advantages and specializations. Specifically, by bannerizing our region as the Watershed Cradle of North Philippines we hope to become a model of a more sustainable development in the country.

In crafting the Regional Development Plan, we endeavored to consult all major sectors and stakeholders to gather views, inputs, comments and feedbacks on preliminary drafts prepared culminating in a Regional Consultation Workshop on November 5, 2010. We then attempted to translate these inputs into specific and doable plans and programs that we hope reflects the common desires, aspirations and development priorities of Cordillerans. We also hope this Plan incorporates reconciled priorities of complementary and conflicting views on how the region should develop itself.

We would like to thank the members of the Regional Development Council including the Sectoral Committee members, the various regional line agencies, local government units, our Congressional representatives, the non-government, people's and civil society organizations, the private sector and the general public who participated and contributed in refining and enhancing this Plan. With the Cordillera Regional Development Plan 2011-2016 as our guide, we ask everyone to take up the challenge to work together towards realizing our development vision of a progressive and prosperous Cordillera Region.


JUAN B. NGALOOb
RDC Vice-Chairman
(Regional Director, NEDA-CAR)

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LIST OF ACRONYMS

A & D	Alienable and Disposable
AADT	Annual Average Daily Traffic
AAGR	Annual Average Growth Rate
ACEP	Agricultural Competitiveness Enhancement Fund
ADSDPP	Ancestral Domain Sustainable Development and Protection Plan
AFF	Agriculture, Fishery and Forestry
AIM-C	Agrarian Information and Marketing Center
ALS	Alternative Learning Systems
AO	Administrative Order
APEC	Aragon Power Energy Corporation
ARBs	Agrarian Reform Beneficiaries
ARCs	Agrarian Reform Communities
ARISP	Agrarian Reform Infrastructure Support Program
ATS	Alternative Transport Systems
BCSAT	Baguio City School of Arts and Trades
BERM	Business Environment and Risk Management
BESRA	Basic Education Sector Reform Agenda
BHSs	Barangay Health Stations
BIR	Bureau of Internal Revenue
BLGF	Bureau of Local Government Finance
BLISTT	Baguio- La Trinidad- Itogon- Sablan- Tuba-Tublay
BOD	Biochemical Oxygen Demand
BOT	Build-Operate-Transfer
BPO	Business Process Outsourcing
BUC	BLISTT University Community
CADTs	Certificate of Ancestral Domain Titles
CALTs	Certificate of Ancestral Land Titles
CAR	Cordillera Administrative Region
CATV	Cable Television
CBA	Cordillera Bodong Administration
CBMS	Community Based Monitoring System
CCT	Conditional Cash Transfer
CEB	Cordillera Executive Board
CEPMP	Cordillera Energy Producer Master Plan
CHARMP	Cordillera Highland Agricultural Management Project
CHD-CAR	Center for Health Development-Cordillera Administrative Region
CHED	Commission on Higher Education
CICT	Commission on Information and Communication Technology
CMT	Cellular Mobile Telephone
CODs	Centers of Development
COEs	Centers of Excellence
CRA	Cordillera Regional Assembly
CRDAP	Cordillera Regional Development and Autonomy Program
CRIP	Cordillera Roads Improvement Project
CSOs	Civil Society Organizations
DA	Department of Agriculture

DACs	Distinctive Areas of Competence
DAR	Department of Agrarian Reform
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DFA	Department of Foreign Affairs
DILG	Department of the Interior and Local Governments
DOE	Department of Energy
DOF	Department of Finance
DOH	Department of Health
DOJ	Department of Justice
DOST	Department of Science and Technology
DOTC	Department of Transportation and Communication
DPWH	Department of Public Works and Highways
DRR/CCA	Disaster Risk Reduction/Climate Change Adaptation
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
ECC	Environmental Compliance Certificate
ECCGC	Eastern Central Cordillera Growth Corridor
EGW	Electricity, Gas and Water
EIA	Environmental Impact Assessment
EMD	Education and Manpower Development
EMK	Equivalent Maintenance Kilometer
EO	Executive Order
ER	Energy Regulations
FIES	Family Income and Expenditure Survey
FPIC	Free, Prior and Informed Consent
GAA	General Appropriations Act
GCE	Government Consumption Expenditure
GDP	Gross Domestic Product
GMC	Guidance Management Corporation
GNP	Gross National Product
GO	Government Organization
GOCCs	Government Owned or Controlled Corporations
GOP-SONA	Government of the Philippines-State of the Nation
GRDP	Gross Regional Domestic Product
GVA	Gross Value Added
GWH	Gigawatt Hours
HDI	Human Development Index
HEIs	Higher Education Institutions
HLURB	Housing and Land Use Regulatory Board
HSRA	Health Sector Reform Agenda
ICC	Investment Coordinating Council
ICCs	Indigenous Cultural Communities
ICK	Indigenous Culture and Knowledge
ICT	Information and Communication Technology
IEC	Information, Education and Communication
IKSPs	Indigenous Knowledge, Systems and Practices
IPPs	Independent Power Producers
IPR	Intellectual Property Rights
IPRA	Indigenous Peoples Rights Act

IPs	Indigenous Peoples
IRA	Internal Revenue Allotment
IRR	Implementing Rules and Regulation
IT	Information Technology
JICA	Japan International Cooperation Agency
KALAHI-CIDSS	Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services
KFAs	Key Focus Areas
KOICA	Korean International Cooperation Agency
KV	Kilo Volts
KW	Kilowatt
KWH	Kilowatt Hours
LGC	Local Government Code
LGUs	Local Government Units
LPCs	Local Power Corporations
LRA	Land Registration Authority
LSBs	Local Special Bodies
LTI	Land Tenure Instrument
MC	Memorandum Circular
MDGs	Millenium Development Goals
MHPDEP	Mini-Hydropower Development Extension Program
MIB	Mankayan-Ilocos (Cervantes)-Benguet
MOOE	Maintenance Operations and Other Expenditures
MSMEs	Micro, Small and Medium Enterprises
MSR	Marginal Scarcity Rent
MTPDP	Medium-Term Philippine Development Plan
MW	Megawatts
NAPC	National Anti-Poverty Commission
NCIP	National Commission on Indigenous People
NCR	National Capital Region
NEA	National Electrification Administration
NEDA	National Economic and Development Authority
NGAs	National Government Agencies
NGCP	National Grid Corporation of the Philippines
NGOs	Non-Government Organizations
NHTS-PR	National Household Targeting System for Poverty Reduction
NIPAS	National Integrated Protected Areas System
NLAQ	North Luzon Agribusiness Quadrangle
NLGA	North Luzon Growth Area
NLGQ	North Luzon Growth Quadrangle
NPC	National Power Corporation
NPC-FAB	National Power Corporation-Funding Assistance to Benguet
NR	Natural Resources
NRM	Natural Resource Management
NSCB	National Statistical Coordinating Board
NSO	National Statistics Office
NWC	Next Wave Cities
ODA	Official Development Assistance
OFWs	Overseas Filipino Workers
OP	Office of the President
OTOP	One Town-One Product

PALMANABA	Paracelis-Alfonso Lista-Mayoyao-Natonin-Barlig
PEENRA	Philippine Economic, Environment and Natural Resources Accounting
PEM	Public Expenditure Management
PES	Payment for Environmental Services
PEZA	Philippine Economic Zone Authority
PHC	Primary Health Care
PIA	Philippine Information Agency
PIC	Provincial Industrial Centers
PNP	Philippine National Police
POs	Private Organizations
PPAs	Program/Project/Activities
PPFP	Provincial Physical Framework Plan
PPP	Public-Private Partnership
PS	Personnel Services
PSOs	Private Sector Organizations
PSRs	Private Sector Representatives
PUVs	Public Utility Vehicles
R & D	Research and Development
RA	Republic Act
RAICs	Regional Agro-Industrial Centers
RBA	Rights-Based Approach
RDC	Regional Development Council
RDC-SAF	Regional Development Council-Special Autonomy Fund
RDIP	Regional Development Investment Program
RDP	Regional Development Plan
REB	Reaching Every Barangay
REC	Rural Electric Cooperative
REDD	Reducing Emissions from Deforestation and Forest Degradation
RHUs	Rural Health Units
RLAs	Regional Line Agencies
ROD	Register of Deeds
RPFP	Regional Physical Framework Plan
RPM	Responsible Parenthood Movement
RPMES	Regional Project Monitoring and Evaluation System
RTC-Baguio	Regional Training Center-Baguio
SABATESA	Sabangan-Bauko-Tadian-Besao-Sagada
SAFDZs	Strategic Agriculture and Fishery Development Zones
SCALOG	Systems Competency Assessment for LGUs
SEA-K	Self-Employment Assistance-Kaunlaran
SNRs	Secondary National Roads
SONA	State of the Nation Address
SPED	Special Education Program
SPUG	Special Power Utilities Group
SRPAA	Social Reform Poverty Alleviation Act
SUCs	State Universities and Colleges
SWO	Social Welfare Office
TB-DOTS	Tuberculosis-Directly Observed Treatment Short Course
TESDA	Technical Education and Skills Development Authority
TRANSCO	National Transmission Corporation
TSP	Total Suspended Particulates
TSS	Total Suspended Solids

TVET	Technical-Vocational Education and Training
TVIs	Technical-Vocational Institutes
UGC	Urban Growth Corridor
UN	United Nations
UNDP	United Nations Development Programme

Chapter 1: Assessment and Challenges

The CAR economy experienced unsustained growth in the Plan period 2004-2009. Starting with a high 4.1 percent growth in 2004, this ebbed to a low 0.82 percent the following year, regained and peaked at a high 7.1 percent in 2007 and settled to an average 2.0 percent growth in 2008 and 2009. On average, the regional economy grew 3.0 percent in the past Plan period even as it reeled from the effects of the global financial crisis that occurred in the middle half of 2008 affecting the region's manufacturing sector with poor exports performance of electronics products, the region's main growth driver.

But with significant infusions of national government funds and the continuing expansion of the business process outsourcing (BPO) sector, economic growth remained positive though below Plan targets. The region benefitted from infusion of public construction funds specifically for the completion of road infrastructure flagship projects that kept the regional economy afloat from the effects of the financial crisis.

The limited growth did not translate to significant additions in jobs keeping underemployment at high levels, even as the regional unemployment rate was halved in 2009 from its 2004 level. With this lackluster economic performance compared to the 4.3 percent average growth in the 1998-2003 Plan period, the region suffered a setback in more recent years with poverty slightly worsening in 2006 but again improved in 2009 but still accompanied by a widening gap between the Baguio-Benguet area and the rest of the provinces.

1.1 Macroeconomic Performance 2004-2009

Slight increase in poverty in 2006 but improved in 2009

Latest poverty estimates show that the incidence of families living below the poverty threshold slightly increased to 18.6 percent in 2006 from 16.1 percent in 2003, but improved to 17.1 percent in 2009. With this, the number of poor families living below the threshold increased between 2003 and 2006 – from 45,088 to 56,346 – but dropped to 54,949 in 2009.

Prior to using the 2009 refined poverty estimation methodology, CAR's poverty situation has always been worse than the national average and also worst among the North Luzon regions over the years. The current estimates compared to those using the old methodology show a similar trend in the poverty situation in CAR. But the latest estimates also show that CAR's poverty incidence rate improved in 2009 and was lower than for Ilocos Region with 17.8 percent and with Cagayan Valley remaining the least poor region among the North Luzon regions at 14.5 percent. But in terms of other poverty measures, CAR still remains the poorest with a higher subsistence incidence rate, and also higher income gap, poverty gap and poverty severity ratios compared to the Ilocos and Cagayan Valley regions implying CAR's continuing disadvantaged status. Subsistence incidence of families in CAR was at 7.6 percent, compared to 5.5 percent for Ilocos and 4.1 percent for Cagayan Valley.

Despite the improved poverty incidence rate based on the 2009 poverty estimates, CAR still needs to strengthen efforts to further reduce poverty in the next five years to achieve its regional Millennium Development Goal (MDG) target of 15.6 percent by 2015. Else, based on the current pace of poverty reduction efforts in the region it will take another 20 years to halve the 2009 poverty incidence rate of 17.1 percent.

Limited and unsustained economic growth

CAR, on the average, only half-achieved its targets on regional gross output between 2004-2009, especially falling short in the last two years as the region reeled from the effects of the 2008 global financial crisis. The regional economy was kept afloat by growth in construction and private services activities despite the slowdown in manufacturing output and contraction in mining and quarrying output, two the region's biggest contributors to regional gross output.

Specifically, the production and export of electronics products manufactured in the Baguio Economic Zone (Baguio EcoZone) that contributes the bulk to the region's gross output was significantly dampened by the financial crisis. The industry sector that contributes on average about 62 percent to regional gross output grew the slowest by an average 1.8 percent per year, well below the average target of 6.5 percent. The manufacturing sub-sector that contributes on average 62 percent to regional industrial output and dominated by the electronics industry grew by a dismal 0.7 percent per year as the rest of the sub-sectors failed to make up for the slack. Mining and quarrying, the second biggest contributor to industrial output and third biggest contributor to regional gross output contracted by an average -2.3 percent per year. This is even as construction output increased by an average 10.0 percent per year making it the fastest growing sub-sector and currently the fifth biggest contributor to regional gross output. Electricity, gas and water (EGW) output also increased an average 4.2 percent per year and now contributes the sixth biggest to regional gross output.

The services sector that contributes around 24 percent to regional gross output was the fastest growing at an average 5.2 percent per year, close to the average target of 6.6 percent. In fact, all sub-sectors posted growth between 2004-2009. Private services output that includes that of the booming BPO industry was the biggest contributor and grew the fastest at an average 8.5 percent per year, and now has the fourth biggest share to regional gross output. The momentum in IT and IT-enabled industries through the Cyber Corridor super region initiative where Baguio City serves as the northernmost hub provided the impetus for strong growth in the sector. The trade sub-sector, the second biggest contributor to regional services output and sixth biggest contributor to regional gross output together with EGW, grew by an average 4.0 percent per year due to brisk local trading despite the effects of the global financial crisis.

The agriculture sector's performance, while managing to grow by a respectable 4.7 percent per year, was below the average target of 6.3 percent. The sector's contribution to regional gross output has also stagnated through the years currently contributing only around 13 percent, the least contribution among the major sectors, compared to the 1990 level of 20 percent. However, the agriculture sector remains as the region's biggest employer among the major sectors of the economy.

North Luzon contributed only around 7.2 percent to total national gross output between 2004-2009, the lowest compared to the other Luzon-based regions including NCR (32.3%), Central Luzon (8.4%) and South Luzon (17.7%). However, CAR contributed more to national gross output averaging 2.2 percent in the past six years than Cagayan Valley's 2.0 percent, but ironically is poorer than Cagayan Valley.

CAR needs to address the volatility of its industry-based economy to global economic shocks as it continues to rely on the manufacture and export of electronics and metal mineral products (primarily gold, silver and copper) responding to global market demand. It needs to diversify in the direction of the other sectors even as it also needs to address the type of industries to be developed in the region focusing on their labor absorptive capacity to provide greater employment opportunities for the region's increasing labor force.

The region also needs to be wary of the slowdown in the growth of the services sector that remains a potential growth driver, with gross output down to 4.1 percent in 2009 from 5.2 percent in 2008. Specifically, the operation of BPO firms in Baguio, a significant contributor to private services gross output, appears to have started tapering off with gross production value growing by just 4.0 percent in 2009 from almost 82.0 percent in 2008 due to the limited space area that Baguio can offer for these activities. The early option is to expand operations, specifically to the BLISTT area, for the region to continue gaining benefits from the apparent continuing worldwide demand for BPO services.

Improved unemployment situation but high underemployment and poor job generation

Despite managing to grow in its gross output, the region considerably failed in significantly increasing the number of jobs for its ever growing workforce. This is even as the regional unemployment rate was almost halved, from a high 9.1 percent in 2004 down to 4.6 percent in 2009. This was partly affected by the fewer number of those who did not actively try to find work as they may have been pessimistic about actually finding a job, thus reducing the region's available workforce.

High underemployment also persisted negating the gains of the improved unemployment situation. The regional underemployment rate remained at double-digit levels peaking at 22.6 percent in 2008 in the midst of the global financial crisis where some establishments had to lay off workers who had to seek part-time jobs, or for some establishments resorting to flexi-work arrangements to avoid bigger losses. With an average 67.2 percent of the population per year considered to be in the labor force, the region was only able to generate around 91,000 jobs in the past six years.

By sectoral distribution, the agriculture sector continued to employ more than half of the total workforce averaging 55.2 percent between 2004-2009, the industry sector employed the least (9.7% average) while there is a steady but slow increase in services sector employment (35.1% average).

Increased yet unsustained investments but with positive effect on economic growth

Investments in capital formation (that includes construction both public and private, durable equipment, breeding stock and orchard development, and changes in stocks) grew by an average 6.4 percent per year, below the average target of 9.2 percent. It was targeted that by 2009, the ratio of capital formation to regional gross output must reach 20 percent. However, this ratio was only achieved in 2009 with a significant 24 percent increase in public construction expenditures as the region benefitted from the SONA (State of the Nation Address) projects specifically roads and bridges under the North Luzon Agribusiness Quadrangle (NLAQ) super region initiative.

Specifically, construction of the Halsema Highway Phase 2 (Mt. Data-Bontoc section) and Phase 3 (Bontoc-Banaue section) and the Bontoc-Tinglayan-Tabuk-Tuguegarao Road

Table 1.1.
Macroeconomic Indicators (Actual vs. Target), CAR: 2004-2009

Indicator	2004		2005		2006		2007		2008		2009		AAGR/Average (%)	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Gross Regional Domestic Product (In million pesos)														
GRDP	27,323	27,190	28,687	27,412	30,291	28,397	32,249	30,414	34,662	30,921	37,408	31,547	6.5	3.0
AFF	3,550	3,466	3,743	3,433	3,943	3,620	4,200	4,342	4,491	4,449	4,808	4,368	6.3	4.7
Industry	17,706	17,509	18,520	17,386	19,557	17,859	20,824	18,753	22,456	18,776	24,229	19,166	6.5	1.8
Services	6,068	6,215	6,424	6,594	6,790	6,918	7,224	7,318	7,714	7,696	8,371	8,014	6.6	5.2
Sectoral GVA and GRDP Growth Rate (In percent)														
GRDP	4.5	4.1	5.0	0.8	5.6	3.6	6.5	7.1	7.5	1.7	7.9	2.0		
AFF	3.5	4.7	5.4	(0.95)	5.4	5.5	6.5	19.9	6.9	2.5	7.1	(1.8)		
Industry	5.0	3.3	4.6	(0.7)	5.6	2.7	6.5	5.0	7.8	0.1	7.9	2.1		
Services	3.8	6.3	5.9	6.1	5.7	4.9	6.4	5.8	6.8	5.2	8.5	4.1		
Employment by Major Sector (In thousand persons)														
AFF	366	349	385	343	407	368	433	360	461	370	490	369	6.0	1.1
Industry	55	58	57	62	60	64	64	62	69	64	75	70	6.4	3.8
Services	213	212	228	219	243	226	258	240	275	234	300	245	7.1	2.9
Total	634	619	670	624	710	658	755	662	805	668	865	685	6.4	2.0
Job Generation	33	35	36	5	40	36	45	3	50	5	60	17		
Labor Force Participation Rate (%)	71.6	69.8	72.9	65.8	73.2	67.3	73.1	67.4	74.2	66.5	75.7	66.6	73.5	67.2
Employment Rate (%)	93.2	90.9	93.3	94.8	94.4	94.7	96.2	95.9	97.0	95.4	97.2	95.4	95.2	94.5
Unemployment Rate (%)	6.8	9.1	6.7	5.2	5.6	5.3	3.8	4.2	3.0	4.6	2.8	4.6	4.8	5.5
Underemployment Rate (%)	10.5	13.3	10.0	18.8	9.4	21.1	8.9	17.2	8.3	22.6	7.7	17.6	9.1	18.4
Capital Formation														
Level (In million pesos)	4,700	4,960	4,933	4,540	5,400	4,928	5,869	5,585	6,516	3,073	7,295	6,757	9.2	6.4
% Share to GRDP	17.2	18.2	17.2	16.6	17.8	17.4	18.2	18.4	18.8	9.9	19.5	21.4		
Exports														
Value (In million US\$)	3,200	758	3,498	2,963	3,678	3,555	3,878	3,266	4,066	2,740	4,607	2,856	7.6	(0.9)
Poverty Incidence														
Incidence Rate of Families (In percent)	31.8		30.6		27.2	28.8	18.6		21.5		19.1	17.1		
No. of Poor Families	96,941		95,369		86,452	87,050	56,346		71,041		64,399	54,949		

Notes:

1. Exports is for PEZA only. AAGR of -0.9% for value of exports is for 2005-2009.
2. Annual estimates for 2009 labor force participation rate, employment rate, unemployment rate and underemployment rate is based on NSCB Resolution No. 9 series of 2009 (Approving and Adopting the Official Methodology for Generating Annual Labor and Employment Estimates).
3. Poverty incidence data is latest poverty estimates as of February 2009 using refined methodology; 2003 revised poverty incidence of families = 16.1%; 2003 revised number of families below poverty threshold = 45,088.

Sources of basic data: National Statistical Coordination Board, National Statistics Office, Philippine Economic Zone Authority

provided the impetus for growth in 2009. This is clear evidence that large infusion of public capital into the region, given its current level of development, can be a significant growth driver with strong multiplier effects to the economy. This is also a clear and solid argument for the region's renewed pursuit of regional autonomy that seeks to increase the region's access to national financial assistance to help, if not significantly fast-track its socio-economic development.

North Luzon has steadily increased its share to national public construction investments averaging almost 20 percent between 2004-2009. But CAR has always received the least from this increased investment, and in fact received the lowest of an average 5.5 percent during the period compared to 6.1 percent for Ilocos and 8.2 percent for Cagayan Valley.

Poor exports performance due to slowdown in global demand

The region's exports, largely made up of electronics products manufactured in the Baguio EcoZone, was greatly affected by the slowdown in the economies of its major exports markets particularly the United State and Japan resulting from the global financial crisis that occurred in mid-2008 and lingering through 2009. As such, the region considerably missed its exports targets in both years, with a 68 percent and 62 percent accomplishment in 2008 and 2009, respectively. Exports reached its best performance in 2006 with a 20 percent increase valued at US\$3.555 million with this level not breached until the end of the past Plan period.

1.2 Development Challenges and Opportunities

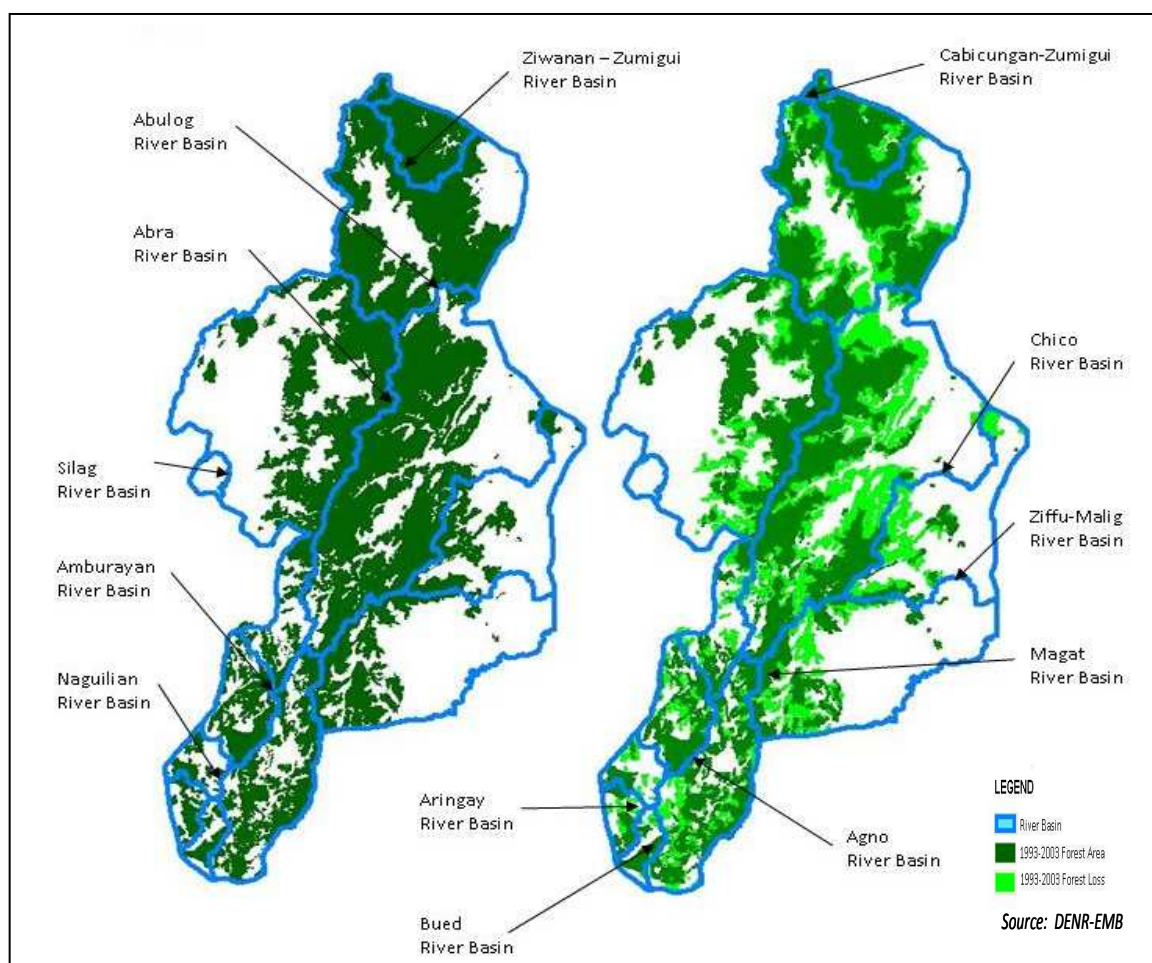
1.2.1 Development Challenges

Arresting and reversing the continued deterioration of CAR's watersheds and the region's vulnerability to disasters - natural and man-made

CAR is home to 13 major watersheds, playing a key role in maintaining ecological balance in Northern Philippines. In fact, 80 percent of CAR's total land area is classified as forest land that is home to some of the country's most unique flora and fauna. But as of 2003, the region's forest cover was estimated at 668,801 hectares compared to 673,790 hectares in 1993 or an average forest loss of close to 500 hectares per year during the period. This is due to conversion to other uses including agriculture, industrial, residential and other economic uses because of increasing human activity. Such conversion has not only resulted to encroachment of people further into the forests but has also been a major cause of soil degradation and soil erosion resulting to massive forest denudation. Complicating the conversion of forest lands to other uses is the fact that CAR is predominantly characterized by steep mountains and high elevation terrain, with almost three fourth's of the region's land area having slopes of 30 percent and above.

These conditions make the region highly vulnerable to disasters – both natural and man-made. The region has witnessed the resulting hazards to land resources due to increasing population, rapid urbanization and the ever changing climatic patterns of El Niño and La Niña culminating in the loss of many lives and massive destruction of property in the wake of Typhoon Pepeng in October 2009. CAR's slope and elevation characteristics also pose limits to the type of land development, and consequently the type of economic activities appropriate for the region.

Figure 1.1
Forest Cover, CAR: 1993 and 2003



Source: Department of Environment and Natural Resources-Environment Management Bureau

With increasing population and the growing demand for socio-economic development amid increasing poverty, the conflicting demands on the use of land has put a stress on CAR's watersheds surfacing issues and debates on whether environmental quality must be sacrificed for economic growth. The Cordillera's response is that both can go hand in hand and that CAR economic growth can in fact be anchored on its efforts to preserve, protect and maintain its watersheds and developing economic activities suitable to the region's fragile ecology.

Diversifying and balancing the current lopsided regional economic structure favoring industry

CAR's regional economy has traditionally been anchored on industry being the biggest contributor to gross regional output. High-value electronics manufactured for export at the Baguio EcoZone contributes the biggest share to industrial gross output even as industry employs only about 10 percent of the regional workforce, the least among the major sectors. The manufacturing sector's vulnerability to outside shocks particularly developments in the global electronics market largely determines the region's growth trend that is often erratic and unsustainable.

Meanwhile, the agriculture and forestry sector that employs more than half of the regional workforce now contributes just over 13 percent to regional gross output, and is

characterized by very slow growth and low productivity. The services sector, on the other hand, has steadily increased its share to regional gross output currently averaging 24 percent mainly in response to growth and expansion in the booming BPO industry.

The need to diversify CAR's sources of growth anchored on advancing itself as a Watershed Cradle highlights the region's critical role in maintaining ecological balance in North Philippines, and will promote and develop homegrown industries that will use the region's natural and human resources in a sustainable manner, maintain the integrity of the region's fragile environment, protect and preserve the region's rich and diverse indigenous culture.

Dramatically increasing the current low contribution of CAR to national growth and development

Since CAR's creation as a separate region of the country in 1987, it has consistently been one of the lowest contributing regions to the nation's national gross output. CAR's dilemma is how to increase its contribution to national growth and development without sacrificing, but rather enhancing the integrity of its natural environment and the culture and traditions of its indigenous peoples (IPs) and indigenous cultural communities (ICCs). Anchoring CAR's development as a Watershed Cradle by rehabilitating and protecting its watersheds is designed to showcase CAR as a developing model "green economy" in the country and calls for developing local industries and enterprises that harness the region's natural resources in a sustainable manner.

Working out increased CAR allocations from the national budget while also increasing and facilitating access to CAR's share in national wealth taxes

CAR has, and continues to be the least populated region in the country accounting for less than 2 percent of the total national population. Excluding the NCR, CAR is the sixth smallest region in the country in terms of land area. Both of these factors inherently bring disadvantages to the region in the distribution of nationally-determined financial allocations that give premium to population and land area. As such, CAR receives the lowest budget allocation for national line departments in the regions and shares in internal revenue allotments (IRA). This, despite the facts that CAR remains a relatively poor Luzon-based region, has the worst road network in the country, has dominantly fourth and fifth class IRA-dependent municipalities compared to the dominantly first class municipalities of Ilocos and Cagayan Valley, and a uniquely difficult terrain that makes delivery of services costlier, indeed tend to perpetuate the position of CAR as the least developed region in Luzon. CAR needs to aggressively advocate to the national government that these factors need to be considered and given higher premium in the allocation of national finances to compensate for the historical and still continuing neglect of the region and its people specifically the IPs and ICCs.

The region has also been disadvantaged in the implementation of nationally-determined projects and in accessing compensation for the use of its natural resources. The sad experiences of the past resulting to the dislocation and disenfranchisement of IPs and ICCs with the implementation of large-scale national development projects (e.g., the Chico River Dam and Cellophil Resources) triggered anti-development sentiments that involves use of the region's natural resource base. Likewise, upland communities that protect the headwaters of hydropower generating facilities operating in the region do not benefit under the current definition of "host communities" of hydropower generation activities, giving no importance to their significant role and to the economic value of their watershed protection activities. The region has also had difficulty accessing its share in compensation provided under national wealth taxes given complexities in the system employed to access these

resulting to long delays and late fund releases hampering implementation of much earlier identified development programs and projects of host LGUs.

The region needs to continue to pursue reforms and amendments to national policies and standards as it seeks just and equitable compensation for the use, including protection and preservation activities of its natural resources not only for the benefit of IPs and ICCs but for the country as well.

Speeding up the building of the infrastructure backbone of the Cordilleras

CAR has the poorest road network in the country. In 2004, paved national roads in CAR was at 29 percent, gradually improving to 35.5 percent in 2007 and 41.1 percent in 2009. However, these are well below the national average of 71 percent in 2007 and 75 percent in 2009, and worse than that of CARAGA - a relatively younger region than CAR- with paved national roads at 46 percent in 2007 and 58 percent in 2009.

CAR's standing in 2009 also considerably pales to the Ilocos' 93 percent and to Cagayan Valley's 72 percent standing. Poor road conditions and the lack or absence of an efficient network of roads connecting production areas to markets dampens the entry of needed investments that could help develop and make profitable enterprises especially in the rural areas. Moreover, poor road conditions or the lack and even absence of roads in some remote areas of the region also hampers the delivery of basic social services.

But given the rugged topography of the region where traditional road building construction poses hazards to the region's fragile environment, alternative transport schemes need to be developed to increase accessibility especially to the more remote areas of the region. Also, establishing a reliable and efficient communications network to reach remote areas inaccessible by roads needs to be established. CAR needs to lessen the cost of doing business in the region and to improve the delivery of basic public services through an integrated and efficient regional transportation and communications network.

Addressing the chronic poverty in certain Cordillera localities and the continuing disparity in the distribution of benefits of socio-economic development and accelerating achievement of regional Millenium Development Goals (MDGs) targets

The Baguio-Benguet area remains the comparatively most developed area in the region while the rest of the provinces continue to lag behind. As such, social and human development indicators also show Baguio and Benguet leading in measures of quality of life. This is a consequence of the distribution of economic activities in the region where high-value ones are dominantly located in the Baguio-Benguet area whereas enterprises characterized by low productivity are located in the inner hinterlands in the northern part of the region. This is also a consequence of disparities in the location or distribution of social facilities including education and health facilities where more are located in the Baguio-Benguet area.

The Baguio-Benguet area has consistently recorded low poverty and subsistence incidence rates, while situations in the rest of the provinces exhibit momentary shifts to improving and back to worsening poverty with no real long-term change for improved conditions. Even in terms of the Human Development Index (HDI), the gap between the Baguio-Benguet area is glaring with Benguet topping the list in 2006 with the best HDI record among the 77 provinces in the country while Apayao and Kalinga are at the bottom rung ranking 64th and 65th.

CAR also faces a big challenge in attaining certain regional MDG targets to be met by 2015. While there is a high probability of achieving a reduction in income poverty, improving

nutrition and increasing access to safe drinking water and sanitary toilets, the region will need to increase efforts to attain important education and health targets specifically elementary participation, survival and completion rates, maternal mortality rate, infant mortality rate and tuberculosis death rate. Likewise, the region will need to sustain its gains in being on track with its MDG targets to help lift national averages and help achieve the national MDG targets.

Forging regional and national unity amid cultural diversity and speeding up the slow implementation of Republic Act 8371 or the IPRA (Indigenous Peoples Rights Act) Law

CAR is inhabited by a predominantly indigenous population mainly the Kankanaeys, Ibalois, Bontocs, Ifugaos, Kalingas, Isnegs, Tingguians and other smaller minority groups with very distinct cultural characteristics and traditions. There is a prevailing sentiment among Cordillerans that national government viewed and continues to view CAR as a resource base to be exploited for its mineral and other natural resources. The impression is that national government – by itself or through its policies – has exploited the region in the past but did not give back commensurate benefits for the development of the region's IPs and ICCs causing a still prevailing sentiment that CAR was and continues to be exploited, marginalized and neglected. On the other hand, the region's IPs and ICCs have also gravitated to the protection of their indigenous culture and traditions and demonstrated resistance to be integrated to lowland mainstream culture.

With the diversity of indigenous tribal groups in the Cordillera, many observers see a considerable challenge to unifying these various tribal groups towards an appropriate Cordillera development agenda. A unifying common element may yet be the agreement towards protecting the region's environment and its natural resources not only for national but more so for the IPs and ICCs socio-economic development. Along with bringing to the national consciousness the interests of Cordillera IPs and ICCs, CAR intends to take the lead in advocating and promoting the important role of IPs and ICCs alongside other cultural groups in the country in the task of nation building.

The United Nations (UN) has elevated IP concerns in the international arena through the UN Declaration of IP Rights and advancing IP rights as an empowering factor for IPs and ICCs. Also, the enactment of RA 8371 or the IPRA Law in 1997 was a landmark legislation for all indigenous peoples in the country finally giving recognition to the IPs' struggle for cultural identity. Yet there is widely shared observation that the country, through its instrumentalities specifically the National Commission on Indigenous Peoples (NCIP), appears to have not aggressively taken advantage of this UN affirmative action on IP issues; IPRA implementation has also been fraught with many difficulties.

The NCIP that is tasked to be the prime advocate of IP rights in the country has been buffeted to different agencies in the national government - from the Office of the President (OP) to the Department of Environment and Natural Resources (DENR) to the Department of Agrarian Reform (DAR) and currently back to the OP. Some observers see this office shuttling as an apparent lack of a decided sense of direction of the national government towards addressing and managing IP concerns in the country while other observers see this as a strategy towards allowing IPs to provide the initiative and direction for national government to take.

Allowing IPs to provide the direction for national government to take in addressing and managing IP concerns is indeed a challenge but also a promising prospect. While observers say that indeed the national government is willing to address IP issues and concerns, they also see the apparent lack of readiness of the NCIP to take on its role as prime advocate and enabler of IPs in the country. Questions on the human, administrative

and resource capacities of the NCIP and its functionaries needs to be addressed. NCIP functionaries will need to radically upgrade their capabilities both in managing its affairs and in obtaining and managing resources. CAR intends to continue advocating to the national government for strengthening the institutional capabilities of the NCIP towards implementation of the IPRA and other relevant laws and treaties advancing IP rights.

Upgrading and strengthening the current level of development management capabilities of CAR institutions including RLAs, LGUs and other public bodies

With the current level of development of the region, much remains to be desired in developing further the capacities of institutions including RLAs, LGUs and other public bodies in the field of development management, that is planning, organizing, leading and coordinating development processes and resources. Currently, there is a need to upgrade and strengthen the seemingly still low capabilities not only of regional and local development managers but more so regional and local development planners in development management that requires continuing education and training. At program/project implementation there are real and felt needs for improving/upgrading extension work in agriculture and agribusiness; technical assistance in developing, growing and upgrading/modernizing micro, small and medium enterprises, for instance. All the wealth-creating strategies in this development Plan entail in varying degrees substantial capability-building requirements. Such continuing education and training intends not only to improve but enhance the region's capacity to effectively formulate, implement, monitor and evaluate development plans, programs and projects to deliver major development results and outcomes.

The current high demand for trainings on project development, financial resource generation and mobilization, geographic information system (GIS), among others is evidence of the continuing interest and demand for skills upgrading. Programs to upgrade and strengthen the region's bureaucracy for project development and management capabilities should accommodate policies and strategies for continuing productivity and quality management efforts that embraces needs to adopt modernization concepts (including science and technology advancements), adopting more effective ways of doing things (such as continuing learning or adoption of "best practices"), cooperativism, and volunteerism, among others. The challenge is for CAR to develop programs and projects to attract development practitioners and experts to share and extend their knowledge and expertise to the region.

1.2.2 Development Opportunities

Advancing the critical role of Cordillera watersheds in North Philippines in the consciousness of national and international development authorities

With CAR hosting 13 major river systems and watersheds in North Philippines, leaders of the Cordillera claim that the region plays a key role in maintaining ecological balance in Northern Philippines. The region's major rivers have enormous water-bearing capacity and serve as major sources of water for domestic, agricultural, power generation and industrial needs not only of the Cordillera but also neighboring regions. In the context of the growing international awareness on and efforts to address global warming and climate change issues, the Cordillera can harness this most natural advantage not only for regional but also national socio-economic growth and development. This also creates an opportunity for CAR to be a major player in the emerging carbon trading markets to act as carbon sink in trapping greenhouse gas emissions.

With initiatives towards solving the problems brought about by global warming and climate change, CAR can advance its advocacy for the compensation of environmental services that it provides to North Philippines and to the international community. The opportunity and challenge here lies in speedily capacitating and enabling the concerned environment functionaries of CAR on how to enrol the region in carbon trading schemes like the UN-sponsored REDD (Reducing Emissions from Deforestation and Forest Degradation) or other similar carbon trading schemes.

Harnessing the abundant natural resources of the Cordillera to diversify the region's sources of economic growth

CAR's fragile ecosystem is also its best resource to economically develop itself. It intends to use its stature as the Watershed Cradle of Northern Philippines to benefit from the gains of protecting the environment. It can also identify and develop homegrown industries that will harness the region's rich natural and human resources in a sustainable manner, and that will promote, preserve and enhance the rich and diverse indigenous culture of the IPs/ICCs in harmony with other local cultures. And taking off from its strategic planning framework in the past Plan period, CAR will continue developing industries and economic activities based on its identified areas of comparative advantages and specialization – the Key Focus Areas (KFAs) of regional development, particularly those on developing the vast potentials of CAR in hydropower, ecotourism and mid-temperate fruits and vegetables.

Increasing attention to and intensified integration of disaster risk reduction/climate change adaptation (DRR/CCA) strategies in development plans and programs of RLAs and LGUs

Climate change is seen to undermine efforts to combat poverty as it puts stress on the environment amid efforts to economically develop to improve quality of life. The destruction and devastation brought about by droughts, more intense storms, floods and other natural hazards, including the loss of lives and damage to properties will only negate efforts and gains already achieved to accelerate progress in human development. More so that it is often the poor who are most vulnerable and have greater difficulty rebuilding lives from the effects of natural disasters and calamities.

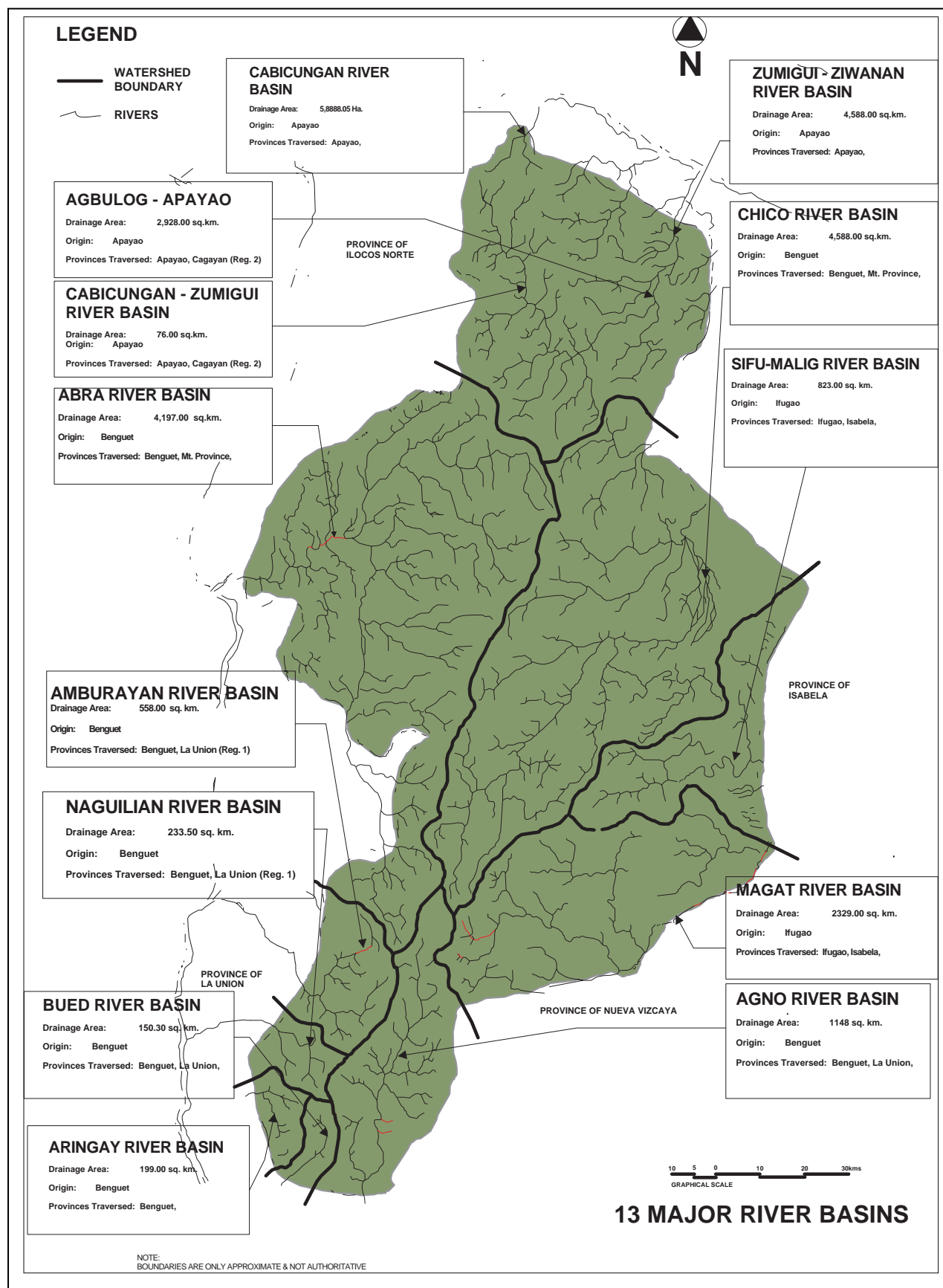
The increasing global awareness on climate change affords CAR an opportunity to highlight its development path that is consistent with environmental protection and sustainable development. The region intends to take advantage of international efforts towards DRR/CCA mainstreaming in national, regional and local planning activities to address its current geological vulnerabilities and advance the protection and preservation of the region's ecological integrity that will play a critical role in national growth and development.

But first, the region needs to capacitate its functionaries and institutions specially its development planning officers and councils on DRR/CCA, and integrate DRR/CCA concepts, principles and policies in the various development plans of the region and its sectoral and LGU components.

Capitalizing on the development edge offered by the Constitutional mandate to establish an autonomous region in the Cordilleras

Calls for the Cordillera IP's right to self-determination culminated in the inclusion of Article 10, sections 15-21 in the 1987 Philippine Constitution providing for the creation of an autonomous region in the Cordillera. On July 15, 1987, then President Corazon C. Aquino signed into law Executive Order 220 creating the Cordillera Administrative Region as a

Figure 1.2
Major River Basins in CAR



Source: Department of Environment and Natural Resources-CAR

transition and preparatory set-up for an autonomous region in the Cordillera. But with the failure to establish an autonomous region with the two-time rejection of proposed Organic Acts in 1990 and 1998, the move towards regional autonomy was momentarily sidelined (RDC) in 2006 to renew the pursuit of regional autonomy as a major regional goal and development strategy.

Until the constitutional provision for the creation of an autonomous region in the Cordillera is realized, the region will capitalize on this option recognizing that autonomy as a governance strategy could help, if not drastically fast-track the development of the region and its component units through substantially increased devolution of central government powers, functions and responsibilities with the corresponding transfer of significantly increased national government resources to the would-be regional autonomous region and its LGUs.

Enhancing the development planning process through the integration of the human rights perspective to provide equal access to development opportunities

Economic growth in the midst of increasing poverty and growing inequality has remained a paradox for the world economy, leading to calls to put human dignity in the forefront of economic growth and development. This is to recognize that economic growth must afford people the opportunity to realize their human rights – economic, social, political, civil and cultural. The elimination of poverty – through the opportunity to have decent work, adequate nutrition, proper health care and education, among others – are accordingly not to be viewed only as development goals but as basic human rights. With RA 8371 or the IPRA Law, it is important to include among these basic human rights the right to cultural liberty – the ability to choose one's identity along ethnic, religious and cultural lines especially for indigenous peoples and indigenous cultural communities - to encourage diversity in a multi-cultural Philippine state. Foremost of these is settling the issue on the ownership of ancestral lands and domains of IPs and protecting IP land rights. The region intends to take advantage of efforts towards the integration of the human rights-based approach to development planning to highlight IP rights and the uniqueness of the Cordillera situation.

Leveraging the region's quality education and manpower advantages for nationally and internationally competitive human resources

CAR has always been a magnet for higher education and technical-vocational institutions producing more professional board passers than other regions in the country. This makes CAR a popular and highly competitive region in providing quality education and manpower development services. This creates an advantage in providing a readily available pool of highly educated and highly skilled manpower for prospective industries and businesses considering to invest in the region. CAR intends to continue if not strengthen this advantage by further improving the quality of education and manpower development services to entice businesses to invest in the region.

Positioning certain slow-developing areas of CAR in inter-regional and other area development planning clusters for accelerated socio-economic development

The region benefitted from the implementation in the past Plan period of inter-regional development clusters such as the interregional connections of the Cordillera Roads Improvement Program (CRIP), the North Luzon Agribusiness Quadrangle (NLAQ) and Philippine Cyber Corridor. The momentum and initial gains gathered from these supra-regional area development programs need to be sustained as the opportunities to develop CAR's potentials in agri-industry production and trading, ecotourism, human resource

development, and other dimensions of socio-economic development can be better appreciated in the broader supra-regional to national contexts.

CAR also needs to further pursue sub-regional cluster or area development planning harnessing the potentials for growth at sub-regional aggrupations as identified by cooperating provinces and municipalities. Among these clusters are: (1) the BLISTT (Baguio City-La Trinidad-Itogon-Sablan-Tuba-Tublay) Metro Area that serves as the region's major regional and urban center; (2) the PALMANABA Cluster consisting of the contiguous municipalities of Paracelis, Alfonso Lista and Mayoyao in Ifugao and the municipalities of Natonin and Barlig in Mountain Province in the eastern area of CAR bordering with Isabela in the Cagayan Valley (Region 2) as agro-industrial processing and ecotourism sites; (3) the MIB Cluster consisting of the Mankayan-Ilocos (Cervantes)-Benguet Tri-boundary Cluster for settlement; and (4) the Applai Cluster (SABATESA or Sabangan-Bauko-Tadian-Besao-Sagada) for activities such as watershed protection, ecotourism, agro-processing, hydropower supply, education and trading, forest production, cattle production, and fruits, vegetables and coffee production.

Chapter 2: Regional Strategic Development Framework

2.1 CAR Development Vision

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

2.2 Regional Development Goals

a. Social and human development

CAR is mandated to ensure that the region's economic growth strategy will result to improved quality of life and total human development of all Cordillerans. Conscious that the benefits of economic growth should be equitably spread and shared by all, the region will focus on addressing the basic social needs of the most vulnerable sectors of Cordillera society especially children and women and the poorest of the poor. The region will ensure equal access to development opportunities so that all Cordillerans could enjoy the benefits of regional growth and development. In this Plan period, CAR aims to achieve its regional Millenium Development Goals targets by 2015.

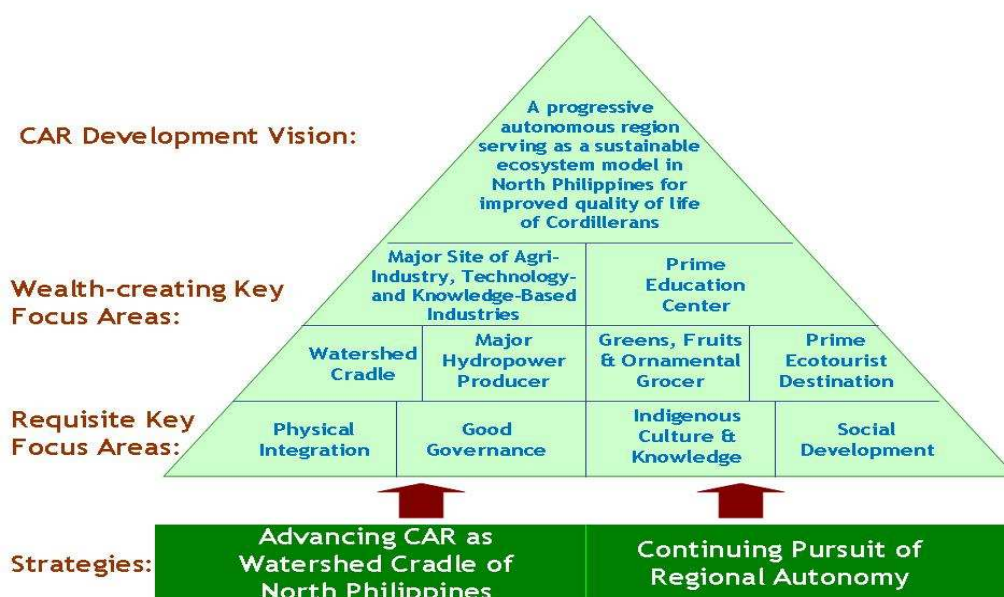
b. Sustained economic growth

CAR plans to diversify its sources of growth anchored on the region's areas of comparative advantage and specialization in order to gradually increase its contribution to national growth and development. The region intends to bring about a sustainable supply of quality water, improve agricultural productivity within the limits of environmental quality, accelerate rural enterprise development, restore its status as a prime ecotourist destination, enhance its status as prime education center, expand and strengthen Baguio City as the north node of Cyber Philippines, maintain and strengthen its contribution to national high-value exports, and increase its contribution to North Luzon hydropower energy production. Specifically, CAR plans to focus on increasing the value of the following: (1) organic food, high-value crops and agro-forestry production, including the value of the region's standing timber stock resulting from its watershed rehabilitation efforts; (2) local natural resource-based manufacturing and other high-value, low volume technology-based manufacturing; (3) tourism and tourism-related products and services; (4) education and education-related services; (5) IT and IT-enabled services; and (6) hydropower energy production.

c. Environmental quality and sustainable use of resources

With the nation's goal towards sustainable development, CAR plays a key role in promoting ecological balance not only in North Luzon but in the whole country by advancing and realizing itself as the Watershed Cradle of North Philippines. CAR will intensify efforts

Figure 2.1
CAR Regional Development Direction 2011-2016



towards integrated watershed rehabilitation, protection and development of its 13 major watersheds that will protect the region's natural assets and biodiversity, promote environmental quality and restore ecological balance. It will promote and develop industries and enterprises that are ecologically friendly and mindful of indigenous natural resources management practices to harness the region's natural resources in a sustainable manner. The region will only develop, adopt and implement development plans, programs and projects that will respond to the demand of preserving and maintaining environmentally acceptable watershed conditions, and where the most appropriate use and condition of the watersheds shall dictate the introduction, formulation and implementation of development interventions within the watersheds.

d. Cultural integrity and cultural identity

Recognized as basic human rights and essential elements of human development, Cordillera cultural integrity and identity will be among the goals the region will endeavour to achieve. CAR will pursue to be a model of IP self-determination and sustainable development under a social justice, peace and development, and human rights framework. CAR will pursue a development path sensitive to the history, culture and heritage of the IPs/ICCs of the region, alongside and in harmony with other cultures in the region. It will promote and advance the basic rights of IPs/ICCs with particular attention to settling lingering issues on natural resources management. The region will also endeavour to integrate IKSPs to enrich its development and endeavour to protect and preserve the authenticity of its indigenous cultural assets. By attaining cultural integrity, the region will be enabled to bring to the national consciousness the cultural identity of Cordillera IPs deserving greater respect, recognition and attention from government for (1) the role and relevance of Cordillera indigenous culture as a major resource for national development and (2) the need to develop culturally-sensitive plans, policies, programs and projects designed to advance multiculturalism, accept and promote diversity recognizing the important role of IPs/ICCs as distinct groups but equal partners in nation building.

e. Regional integration

CAR will continue to develop an efficient and reliable transportation and communication network to interconnect provincial capitals and major growth centers and build up the economic backbone of the region. Improved transport and communication is envisioned to enable faster economic development of this landlocked region and make the regional economy more efficient. Road, air and other alternative transport systems plus state-of-the-art communication facilities are planned to be developed to physically integrate CAR to increase access and mobility of people, information, goods and services while keeping the costs of delivering basic social and economic services affordable. Regional integration is designed through the establishment of a regional infrastructure backbone with the completion of important road components under the Cordillera Roads Improvement Project (CRIP), the region's flagship infrastructure project.

f. Regional autonomy

CAR will continue to pursue and capitalize on the constitutional provisions embodied in Article 10, sections 15-21 of the 1987 Philippine Constitution for the establishment of an autonomous region in the Cordilleras as an add-on development edge in advancing, if not fast-tracking regional socio-economic development. Clearly the understanding that the pursuit and realization of regional autonomy is admittedly an extremely difficult undertaking - CAR has already rejected two previous regional autonomy organic acts - achieving this regional goal will have two dimensions. One, the pursuit of regional autonomy and two, the realization of regional autonomy itself.

On the pursuit of regional autonomy, the region will continue (1) implementing enabling and capability building activities towards self-reliance in governance and (2) educating Cordillerans on the various ramifications of the regional autonomy issue. Towards the realization of autonomy, the region plans to (1) undertake broad-based regionwide public consultations and cause popular participation to formulate a hopefully acceptable draft legislative bill for a proposed third organic act; (2) work out for the enactment of the draft bill (i.e., without "major mangling") into law; (3) launch an effective campaign for the favorable ratification of the Third Organic Act in a future plebiscite; and (4) manage the expected transition period to establish the regional autonomous government should the Organic Act be favorably ratified.

Regional autonomy is seen as the most effective option to provide CAR the needed solid foundation to pursue sustainable development as it hopes to address lingering issues on the management and use of its natural resources and how the region should benefit. Attaining regional autonomy in the Cordilleras should also bring to national attention the benefits of promoting and accepting cultural diversity through the formulation of multicultural policies for IPs and ICCs as the traditional uniform application of national norms and standards do not apply well to the Cordilleras.

2.3 Broad Regional Development Strategies

2.3.1 CAR spatial strategy

As proposed in the Regional Physical Framework Plan (RFPF) 1994-2023, the region adopts a ***bi-polar and dispersed spatial development strategy***. The bi-polar spatial pattern is represented by two primary growth centers that will also serve as the primary growth centers in the region namely: (1) Baguio City representing the BLISTT (Baguio City-La Trinidad-Itogon-

Sablan-Tuba-Tublay) metro area and (2) Tabuk in Kalinga representing the Eastern Central Cordillera Growth Corridor (ECCGC) that also includes Rizal in Kalinga, Paracelis in Mountain Province, and Alfonso Lista in Ifugao. Meanwhile, the dispersed spatial strategy is represented by secondary and tertiary growth centers spread across the region that shall act as service centers and as catalysts of growth for the more remote parts of the Cordillera.

The central part of the region with steep slopes of 50 percent and above shall primarily be a conservation and protection zone, with minimal or controlled development to be introduced to protect the mossy, pine, old growth forests and NIPAS (National Integrated Protected Areas System) areas within the zone. This is in recognition of the region's critical role as the Watershed Cradle of North Philippines. The non-protection areas, mostly located in the lowland areas of Kalinga, Apayao, Mountain Province and Abra shall be developed for agriculture and agri-industrial activities or settlements owing to the wide expanse of flat lands and rich agricultural resources in these areas.

2.3.2 The Regional Settlement Plan

A. Primary Growth Centers

The Urban BLISTT is the de facto regional center that will perform the following specialized roles: (1) regional administrative center; (2) regional shopping (higher order goods and services), trading and banking; (3) specialized or professional services; (4) higher education, trainings, research and development, conventions and conferences; (5) rest and recreation; and (6) specialized industries (Figure 2.2).

The Eastern Cordillera Growth Corridor shall be the regional center for agri-industrial development and shall be the region's economic link to Cagayan Valley. Tabuk shall be the major growth node radiating to Rizal, Paracelis and Alfonso Lista. It shall also serve as regional adjunct in providing education and health services, specialized or professional services, and financial services catering to the northern provinces of Kalinga and Apayao and the eastern towns of Mountain Province and Ifugao.

B. Secondary Growth Centers

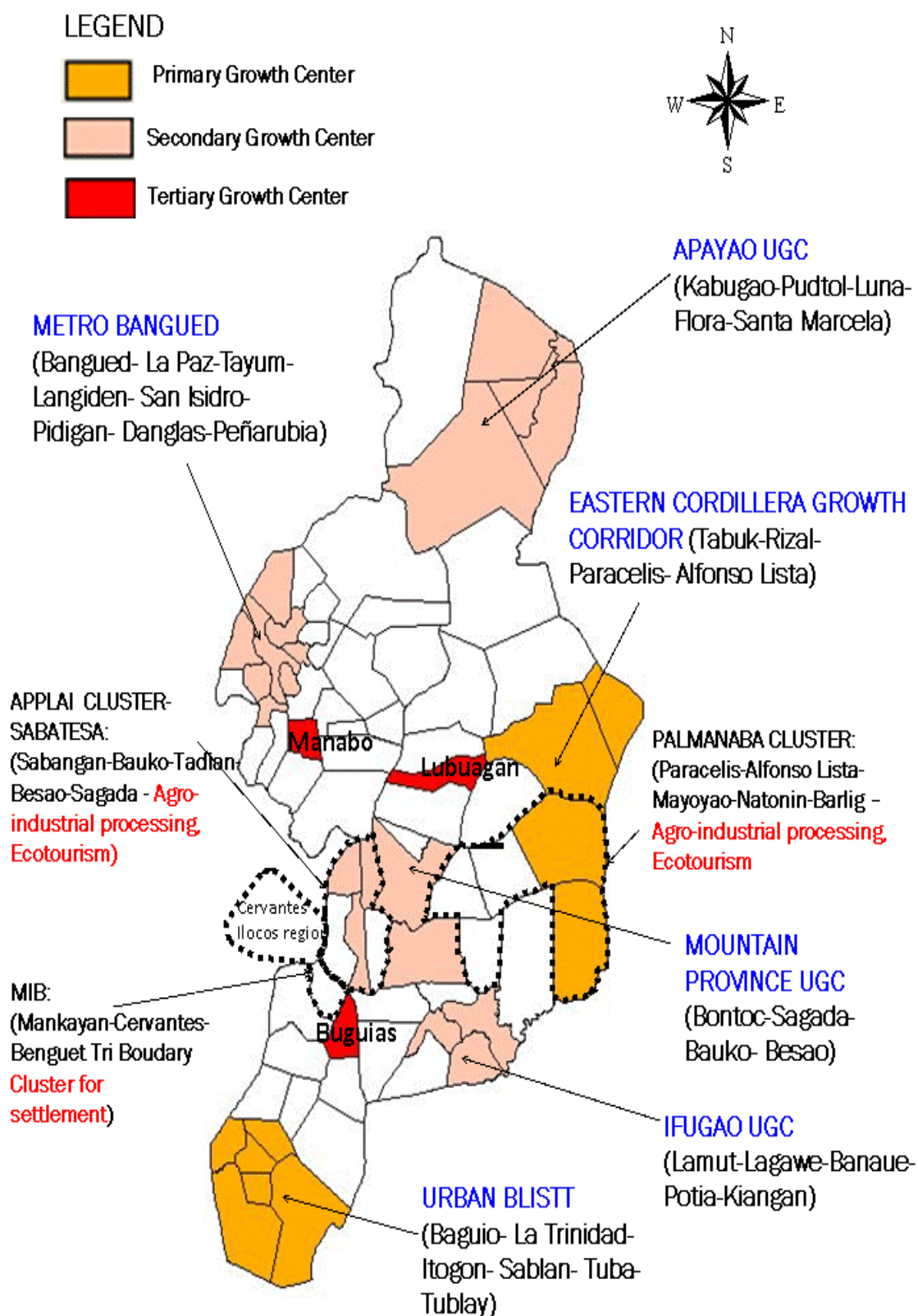
Designated as secondary growth centers are the provincial capitals and their neighboring urbanizing areas to form an urban growth corridor (UGC) in each province also with designated roles and preferred economic activities (Table 2.2).

C. Tertiary Growth Centers

Strategically located towns shall be developed as tertiary growth centers to provide lower order services for hinterland areas. These include: (1) Buguias for the northern municipalities of Benguet; (2) Lubuagan for Upper Kalinga; and (3) Manabo for the upland towns of Abra.

Elsewhere in the region, the dispersed but clustered type of settlements shall be encouraged as these are traditionally and naturally harmonious in keeping with the indigenous culture and environmental settings of these areas. These traditional hamlets or villages (or indigenously-called "*ilis*") shall be provided appropriate types and levels of public infrastructure and services to address their roles and needs.

Figure 2.2 - Hierarchy of Settlements and Development Planning Clusters



Sources: CAR Regional Physical Framework Plan (CAR RFPF) 2004-2034 and Provincial Development and Physical Framework Plans (PDPFPs)

Table 2.1
Macroeconomic Targets, CAR: 2011-2016

Indicator	Actual 2009	Forecast 2010	Target						AAGR (2011- 2016)
			2011	2012	2013	2014	2015	2016	
Gross Regional Domestic Product by Major Sector (In million pesos) (Low and High Growth)									
GRDP	31,547	32,461- 32,776	33,725- 34,380	35,039- 36,064	36,706- 38,141	38,223- 40,391	40,434- 43,180	42,819- 46,161	4.9- 6.1
AFF	4,368	4,521- 4,565	4,724- 4,816	4,937- 5,080	5,159- 5,360	5,160- 5,708	5,452- 6,136	5,806- 6,597	4.2- 6.5
Industry	19,166	19,645- 19,837	20,333- 20,729	21,044- 21,662	21,991- 22,854	22,981- 24,111	24,245- 25,678	25,578- 27,347	4.7- 5.7
Services	8,014	8,294- 8,375	8,668- 8,835	9,058- 9,321	9,556- 9,927	10,082- 10,572	10,737- 11,365	11,435- 12,218	5.7- 6.7
Sectoral GVA and GRDP Growth Rate (In percent)									
GRDP	2.0	2.5-3.5	3.5-4.5	3.5-4.5	4.5-5.5	4.5-5.5	5.5-6.5	5.5-6.5	
AFF	(1.8)	3.5-4.5	4.5-5.5	4.5-5.5	5.5-6.5	5.5-6.5	6.5-7.5	6.5-7.5	
Industry	2.1	2.5-3.5	3.5-4.5	3.5-4.5	4.5-5.5	4.5-5.5	5.5-6.5	5.5-6.5	
Services	4.1	3.5-4.5	4.5-5.5	4.5-5.5	5.5-6.5	5.5-6.5	6.5-7.5	6.5-7.5	
Employment by Major Sector (In thousand persons) ^{1/}									
AFF	366	371	379	387	390	401	411	420	2.1
Industry	66	69	72	76	80	85	89	95	5.8
Services	247	253	265	275	291	300	310	322	4.0
Total	679	694	715	738	761	786	810	837	3.2
Job Generation		15	22	23	23	25	24	27	
Labor Force Participation Rate (%)	66.6	67.4	65.5	66.0	66.5	67.0	67.5	68.0	
Employment Rate (%)	95.4	94.9	94.8	95.0	95.2	95.5	95.7	96.0	
Unemployment Rate (%)	4.6	5.1	5.3	5.0	4.8	4.6	4.3	4.0	
Underemployment Rate (%)	17.6	15.7	16.5	15.0	15.0	14.0	12.0	10.0	
Capital Formation									
Level (In million pesos)	6,757	6,926	7,134	7,383	7,716	8,140	8,628	9,189	5.2
% Share to GRDP (High Growth)	21.4	21.1	20.7	20.5	20.2	20.2	20.0	19.9	
Exports ^{1/}									
PEZA Exports (In million US\$)	2,856	3,445	4,113	4,935	5,922	7,107	8,528	10,234	20.0
Poverty Incidence									
Poverty Incidence Rate (Families) (%)	17.1 ^{2/}						16.0 ^{3/}		
Number of Families Below Poverty Threshold	54,949 ^{2/}								

^{1/}High growth scenario only. 2010 data is actual data.

^{2/}Based on 2009 poverty estimates by NSCB using a refined methodology.

^{3/}Regional MDG target based on revised 1991 poverty incidence rate of 32.0% using 2009 methodology.

2.3.3 CAR's twin priority development strategies for 2011-2016

To pursue CAR's development in the medium-term, the region has twin priority strategies: (1) advancing CAR as the Watershed Cradle of North Philippines and (2) continuing pursuit of Cordillera regional autonomy.

Advancing CAR as the Watershed Cradle of North Philippines presents the strategically significant role of the Cordilleras in the national ecological balance, and thus justifies why the national government should reverse its cavalier attitude towards CAR development specially in the context of the need for increased efforts to address global warming and climate change.

The watershed development strategy of this Plan overarches the other wealth-creating strategies of the Plan. This strategy intends to capitalize on the region's rich natural resources from its watersheds to generate environment-friendly economic activities with existing and potential backward and forward linkages with agriculture and forestry, tourism, agri-industrial manufacturing and hydropower generation activities.

Table 2.2
Identified Secondary Growth Centers of CAR

Secondary Growth Centers	Roles and Preferred Economic Activities
Benguet Urban Centers: La Trinidad-Tuba-Itogon	<ul style="list-style-type: none"> • Hosts to BPO outfits, special medical facilities, tertiary education, tourism facilities, food processing, marketing and shopping services • Primary center for Benguet
Metro Bangued: Bangued-La Paz-Tayum-Langiden-San Isidro-Pidigan-Danglas-Peñarubia	<ul style="list-style-type: none"> • Primary service center for Abra • Secondary, tertiary and vocational education, health, recreation • Medium-scale agro-processing (canning, rice and feed milling, food processing) • Handicrafts (bamboo crafts, woodworks)
Apayao UGC: Kabugao-Pudtol-Luna-Flora-Santa Marcela	<ul style="list-style-type: none"> • Primary service center for Ifugao • Agro-processing industries (rice milling, canning, food processing) • Handicrafts (rattan crafts, bamboo crafts, woodworks)
Ifugao UGC: Lamut-Lagawe-Banaue-Alfonso Lista-Kiangnan	<ul style="list-style-type: none"> • Primary service center for Ifugao • Secondary, tertiary and vocational education, health, recreation • Ecotourism related ventures • Handicrafts and furniture (wood carving) • Agro-production, processing (coffee milling, fruit, tilapia, coffee milling) and marketing
Mountain Province UGC: Bontoc-Sagada-Besao-Tadian-Bauko	<ul style="list-style-type: none"> • Primary service center for Mountain Province • Secondary, tertiary and vocational education, health, recreation • Conventions, corporate retreats and training activities • Research-based activities • Ecotourism related ventures • Small-scale handicrafts (woodcarving, rattan crafts) • Small-scale agro-processing (canning, coffee milling, food processing) • Western Mountain Province with the northwestern Benguet municipality of Mankayan as link to Ilocos Sur of Region 1

Sources: CAR RPFP 2004-2034, PDFFPs

As the Watershed Cradle, the Cordilleras provide “environmental services” to the rest of the country specially in North Luzon. But this fact appears not well appreciated by development stakeholders at the national scene. Hence, in this development strategy, the region will seek to maximize its benefits derived from the use of its watersheds and will also continue to advocate for or seek amendments to policies that will give premium to the protection and preservation of CAR’s watersheds (e.g., the formulation and adoption of national planning standards for highland areas to address the effect of higher costs of program/project implementation). CAR will also endeavour to further expand and strengthen Cordillera watershed development and management plans and programs.

The continuing pursuit of regional autonomy remains a valid and active agenda of the region, and while regional autonomy by itself is a desired regional development goal, it shall also serve as a major strategy that the region will capitalize on to fast-track regional development. It will continue its social preparation activities towards regional autonomy that started in 2007 in order not to allow rejection of a future Third Organic Act. It will intensify expanded information, education and communication activities on regional autonomy. It will continue building up the capabilities of regional and local government functionaries in gradually assuming the responsibilities to be devolved to a future autonomous regional government, and will continue to gradually institute other necessary requisites towards eventually becoming regionally autonomous under the CAR-RDC’s Cordillera Regional Development and Autonomy Program (CRDAP). Until the creation of an autonomous region, CAR will continue to seek national government support for its social preparation activities towards regional autonomy.

2.3.4 Key Focus Areas (KFAs) of CAR Regional Development

The Key Focus Areas (KFAs) for CAR regional development are classified into two categories: (1) the wealth-creating KFAs that are identified strategic niches or economic activities based on the region’s areas of comparative advantage and specialization; and (2) requisite KFAs that provide the necessary foundations for the other KFAs to be effective and for the region to pursue sustainable development.

Wealth-creating Key Focus Areas for CAR regional development.

In this Plan are six development strategies designed to grow the region’s economy or wealth-creating KFAs. The Watershed Cradle strategy overarches these other KFAs.

CAR should play a vital role in the country’s search for alternative renewable sources of energy with its vast potentials for hydropower generation estimated at 3,580 MW or about 27 percent of the country’s hydropower potential. More so with rehabilitated watersheds, the region would increase its capacity for water storage and river flow to generate energy along small, mini and micro run-of-river type hydropower generation projects that are not only more socially acceptable to the region’s indigenous communities but also more environment-friendly. Small, mini and micro hydropower are also planned to provide energy for communities to help spur rural industries specifically food processing and forest-based products manufacturing to support the local tourism industry.

CAR will also focus on high-value agroforestry production to help rehabilitate, regenerate and protect the condition of its watersheds for agriculture to establish a link with the region’s watersheds. It will also encourage the establishment of forest plantations for both major and minor forest products. High-value agroforestry and forest plantations will be the major sources of raw materials for resource-based manufacturing industries that will spur rural enterprise development.

CAR's restoration, rehabilitation and protection of its watersheds will improve the competitiveness of its ecotourism industry that will establish links with resource-based manufacturing industries to promote the products of micro, small and medium enterprises (MSMEs) producing agri-industrial products. This will include wine, coffee and other food-based processing and manufacturing, basketry and other wood-based souvenir products, and bamboo, rattan and wood-based furniture products.

As additional sources of growth, CAR will also enhance its stature as prime education center in the country to maintain its competitive edge in providing quality education for both local and international students.

While focusing on agri-industrial manufacturing, CAR will continue to capitalize on the presence of the Baguio Economic Zone to produce, including locally outsourcing, high-value, low volume technology-based industrial products. The region will also maintain and strengthen Baguio City's role as the northernmost hub of Cyber Philippines and its constant inclusion in the Top Ten Wave Cities in the country for IT and IT-enabled industries.

Requisite Key Focus Areas (KFAs) for CAR regional development.

To spur economic growth and deliver essential social and economic services, CAR will need to interconnect major development areas through the completion of the regional road trunkline and major road laterals and the provision of telecommunication services. At the core of CAR's sustainable development strategy, it will integrate IKSPs to enrich the development of the region. The region will also ensure that the region's economic growth strategy must result to improved quality of life and total human development of all Cordillerans. Good governance as a requisite will ensure transparency and accountability in the delivery of public goods and services under a regional autonomous government.

2.3.5 Other key regional development strategies

In addition to its broad spatial and twin priority development strategies, CAR will also pursue and promote other key regional strategies along the current administration's platform of governance. The following are additional key strategies that the region shall pursue: (1) conduct continuing assessment of development plans, programs and projects; (2) conduct continuing capacity building of RLAs and LGUs in development management activities; and (3) promote and strengthen public-private sector partnerships in the formulation and implementation of development plans, programs and projects, including encouraging volunteerism as a strategy for development.

The region will take cognizance of national programs and projects successfully implemented in the region (e.g., the foreign-funded Cordillera Highland Agricultural Management Project (CHARMP) and learn from their "best practices" towards the formulation and implementation of intervention programs and projects appropriate for CAR and for replication in other areas or sectors.

With its ability to identify and evaluate gaps in needed programs and projects, the region will need to continually build the capacities of program/project managers and implementors (including RLAs, LGUs, state universities and colleges (SUCs), the private sector and other development partners) in conceptualizing, formulating and developing project proposals for eventual funding and investment by the public or private sectors or foreign donors. The region will need to institutionalize a capability building program not only in project development but to include areas that will empower government functionaries and other development partners to efficiently and effectively manage regional development.

In line with the current administration's thrust on public-private partnership (PPP), the region will aggressively promote, encourage and forge strong linkages and partnerships with the private sector (NGOs, POs, the business sector, civil society) in managing CAR's development. The region will not only seek ties with the private sector in the implementation of programs and projects but will also consult with and strongly involve them and intended beneficiaries in the identification, planning, implementation, monitoring and evaluation of programs and projects.

As a government-private sector-civil society partnership strategy, CAR will promote volunteerism as one key strategy for regional development. This is to recognize and give importance to the value of people participation and to harness the talent, knowledge and know-how of individuals willing to contribute to CAR development. CAR will promote a strategy of forging linkages with local and international institutions to eventually invite their volunteers and tap their services and expertise in areas and sectors deemed critical towards advancing regional development (e.g., environment, tourism or governance/autonomy experts). This is to widen the region's perspective in pursuing its development agenda and learn "best practices" in pursuing and advancing specifically the region's key focus areas of regional development.

Chapter 3: Key Focus Areas of Regional Development

3.1 Wealth-Creating Key Focus Areas for Regional Development

3.1.1 CAR as Watershed Cradle

A. Assessment and Challenges

CAR's location and physiographic attributes makes it the Watershed Cradle in North Philippines. There are 27 major proclaimed forests and watersheds in the region comprising 1.589 million hectares or about 85 percent of the 1.829 million hectares of the region's total land area.

Potential Resources in the Watersheds

Timber and minor forest products are major resources from the watersheds. Pine and dipterocarp timber are estimated at 8 million and 84 million cubic meters, respectively that are available for the wood industry and wood-based light industries in the region and are also the source of the upland communities' fuel wood requirements. Besides timber resources, the watersheds are also the source of diverse flora and fauna that are important materials for medicine, food and other products of economic and ecological significance. CAR's watersheds are rich in biodiversity and home to rare species of flora and fauna yet to be explored for products of economic value and scientific importance. The scenic landscape and pristine ecology afforded by the watersheds are also tourism attractions and destinations presenting an opportunity for packaging tourism-related services as community-based economic enterprises, as well as investment opportunities for upstream entrepreneurs.

CAR's 13 major river basins have great water bearing capacities with an estimated drainage area of 18,293 square kilometers suitable for water and energy exploration and other economic purposes. The water bearing capacities of the region's river basins is estimated to be able to irrigate some 68,623 hectares farmlands or 36 percent of the irrigable areas in CAR as well as adjoining regions. Available water resource could likewise support hydro-power generation with a potential to reach 659 megawatts.

Status of CAR's Watersheds

Land Classification and Land Cover. The region's certified alienable and disposable (A & D) lands is set at 275,769 hectares or 15 percent of the region's total land area. The rest are forest lands (1.5 million hectares or 85%) comprising of public land/forest, mineral reservation, national park, other wooded lands, and built-up areas. Latest information on CAR's land cover shows that about 47 percent of CAR's total land area is already of non-forest uses. This level of non-forest land use is already seven percentage points below the standard optimum of 40 percent (Land Balance Ratio: 60% forest-40% non-forest land use). Situations indicating environmental pressures are prominently felt in recent years, i.e., worsening soil erosion, siltation, declining water supply, deteriorating water quality and flooding.

Forestry/Timber Resources. Mossy forest resources declined annually by 10 percent from 204,700 hectares in 1999 to 85,875 hectares in 2007. These areas are gradually converted to other land uses putting pressure on the ecology and environmental quality of the region. Available information shows that the annual average forest loss between 1997-2003 is estimated at 1,670.84 hectares. The regional average annual timber harvest escalated continuously since 2001 at 6,599 cubic meters annually reaching 22,283 cubic meters in 2008. Restoring the lost forest stand could take 30-50 years even with strict timber harvesting measures.

Biodiversity Resources. CAR is host to five of the country's extremely high biodiversity conservation priority areas identified in the Philippine Biodiversity Conservation Priorities Plan. The areas are Apayao Lowland Forest, Balbalasang-Balbalan National Park, Abra River, Agno/Amburayan River, Abulog River and the peaks of Central Cordillera (elevation above 1,000 meters above sea level). These areas however are constantly threatened with undue pressure from human activities such as timber poaching and forest land use conversion to agricultural use, among others, that are inimical to the pristine requirement for rich biodiversity and its sustainable existence.

Water Resources. The current total installed capacity of CAR hydro-power facilities (all located in Benguet) is estimated at 207.36 megawatts. This rated capacity should have been higher by 75 mega watts had the Ambuklao Hydro-electric Plant been running in full operation. It is still under rehabilitation since the 1990 killer earthquake. For all these hydro-power generation facilities, data from the Department of Energy (DOE) for 2005 indicates 52.83 percent power generation turn-over implying 47.17 percent under-capacity operations of the facilities aggravated by the declining water supply to operate their turbines. Ultimately, this observation points to the lowering of water levels in the river basins associated with the watersheds' declining water yield. The status of CAR watersheds and hydro-power facilities operational capacity could be closely interrelated.

Mineral Resources. Data from MGB-DENR indicates that the region in 2009 has an estimated mineral reserves of about 1.44 billion metric tons. These reserves comprise of copper ore, limestone, shale, gold ore, silica, sand and gravel, kaolin clay, manganese ore and sulfur. In recent years, the production of small-scale mining has contributed substantially to total output of the mining industry. The value of gold production of small-scale mining had an average annual increase of 25% from P 1.04 Billion in 2002 to P 3.17 Billion in 2007. The increasing importance of small-scale mining in providing livelihood and revenues to the government highlight the need for regulation and assistance to small-scale miners as well as capacity building for the LGUs through the Provincial Mining Regulatory Board (PMRB) tasked to oversee small scale mining programs.

The following are the major challenges facing the current state of CAR's watersheds:

Addressing the competing demands on the use of watersheds. CAR's water resources supply the domestic and economic requirements of its component LGUs and adjoining regions. Other than CAR's domestic and agricultural requirements for water and that of adjacent regions, there are other competing demands on the use of watersheds such as source of water for hydroelectric power generation, ecotourism, mining activities, among others. A major cause of watershed denudation is the encroachment of farms and the conversion of forestlands for agricultural use. It is estimated that the regional annual forest destruction rate from all causes was 1,398.97 hectares from 1993 to 2008. This rate translates to 22,383.52 hectares forest stand destroyed within the report period. Tree harvesting and the unabated forest destruction contribute to the deterioration of CAR's watersheds over time. The forest denudation is also adversely affecting the ecotourism potentials of the watersheds especially for nature experience and wildlife sanctuaries. There

is a need therefor to strike a balance between forestlands for protection, conservation and production with areas primarily for agricultural production.

Promoting Payments for Environmental Services (PES). Water-use compensation and other forms of payments for environmental services need to be evolved and paid to the region by the beneficiaries of these environmental services. The payment scheme becomes a development financing mode for the implementation of development programs of LGUs in the watersheds. Watershed protection as an environmental service ensures the provision of domestic water, irrigation water or water for hydropower generation. The stewards of the watershed ensure the regular supply of water in the desired quantity and quality. Additional benefits of watershed management to downstream settlements and enterprises are siltation mitigation and flood control, fisheries, recreation and sustainability of downstream ecosystems. The challenge is to provide compensation, benefits and incentives to the environmental service providers that may be direct cash payments or payments in kind such as provision of infrastructure, livelihood support, market preference, health and educational services, skills training, technical assistance or land tenure security.

Keeping a healthy environment amidst the pursuit of accelerated economic growth. Studies by the Environmental Management Bureau in 2006 indicated that major rivers systems in the region exceeded the maximum allowable values for total suspended solids (TSS). This is alarming considering the region is host to major river basins supplying the water requirements of Northern Luzon. An example is the deteriorating water quality of the Chico River expressed by the residents and officials of Tabuk in Kalinga. In Baguio City and La Trinidad, Benguet, on the other hand, the Balili River registered in 2007 biochemical oxygen demand (BOD) values that far exceeded the standard allowable maximum level. These cases cite the need for multi-stakeholder river rehabilitation programs. There is a need, however, to also consider programs for preventive interventions to maintain the water quality of river systems that still register acceptable water quality standards. Other environmental quality concerns particularly for rapidly urbanizing areas are: industries with potential for air and water pollution, air pollution from the exhaust of motor vehicles, the generation of hazardous wastes and inadequate waste management. These concerns underscore the need for the sustained enforcement of pollution control laws and waste management programs.

B. Goal/Objectives

The Cordillera Region shall endeavor to become the Watershed Cradle of North Philippines and model of a sustainable ecosystem. The objectives are as follows: (1) to improve the quality of air, water, and land resources; and (2) to increase benefits derived by the region and its component LGUs from the watersheds/forests.

C. Strategic Interventions

1. Delineation of protection, production and multiple land use areas in watersheds and forestlands considering carrying capacity, sustainable and optimum utilization of natural resources.

Some forests in specific sites should be left undisturbed for their heritage value, for recreation, biodiversity as well as their potential future use. Selective timber harvesting is thus encouraged, albeit with constraints due to off-site impacts and the need to maintain the optimum allowable standard land cover balance ratio of 60 percent forest and 40 percent for other land uses.

2. Pursue integrated river basin or ecosystem planning and resource management. Comprehensive plans shall include the intergration of disaster risk reduction (DRR)

and climate change (CC) principles to enhance disaster preparedness. A river basin-ecosystem approach to environment and natural resources planning and development would entail interregional coordination and sharing of resources in program implementation.

3. Undertake asset reform particularly on land ownership that would entail the resolution of land tenure issues and utilization of natural resources in forestlands.
4. Adopt the economic approach to contain excessive resource extraction through application of economic instruments (taxes, subsidies and fines). The said instruments shall attempt to improve or protect quality of watersheds and forests with the internalization of implied cost in the harvesting and use of the resource. These aim to influence economic behavior relative to allocational efficiency of natural resources use to consider the ratio of total social benefits to total social costs on the use of such resources.
5. The enactment of a policy and legal framework on resource pricing and Payment for Environmental Services (PES) that would ensure incentives to communities and LGUs maintaining the watersheds and forestlands as well as payments by those who benefit from such services, extract or utilize natural resources with penalties for over-exploitation or pollution of the environment.
6. Pursue organizational and institutional development, linking and networking with all stakeholders in managing the region's watersheds and natural resources. Environmental quality is a public good. Thus, the provision of environmental services concerns all stakeholders: the government, private sector, civil society and communities and entails collective and wholistic actions in natural resources management. Under this initiative are the following interventions:
 - Institutionalization of private-public partnerships (PPP) approach to watershed and forest management.
 - Convergence in the delivery of services and development interventions including law enforcement.
 - Institution-building to establish stakeholder based watershed development planning and management mechanisms such as the creation of watershed management councils.
7. Continuing capacity-building of Regional Line Agencies (RLAs) and LGUs on project development for the packaging of investment-ready proposals in environment and natural resources management. Capacitation should also entail decentralization in the implementation of Official Development Assistance (ODA) funded projects to regional and local levels.
8. Continuing assessment of the state of the ENR sector and existing programs and projects to identify and address gaps in development planning, investment programming and project development to advance the KFA on Watershed Cradle and Sustainable Ecosystem.
9. Development and institutionalization of Environmental Accounts in policy-formulation, planning and project development by national agencies, LGUs and other stakeholders in resource utilization. The use of Environmental Accounts and resource pricing in decision-making shall be facilitated with the establishment of a database banking and retrieval system.

10. Explore the realization of incentives and benefits in preserving and rehabilitating the region's forestlands through the Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Degradation (REDD).
11. Strict implementation and enforcement of laws protecting the region's forestlands and watersheds and for natural resources management and development including, among others, Republic Act No. 7586, the National Integrated Protected Areas System (NIPAS) of 1992; Republic Act No. 7076, People's Small-Scale Mining Act of 1991; Republic Act No. 7942, Philippine Mining Act of 1995; Republic Act 8371, Indigenous Peoples Rights Act of 1997; Republic Act No. 8749, Philippine Clean Air Act of 1999; Republic Act No. 9147, Wildlife Resources Conservation and Protection Act of 2001, Republic Act 9176 on the extension for the issuance of free patents; Ecological Solid Waste Management Act and Philippine Clean Water Act of 2004. Particularly in relation to land tenure and natural resources utilization, there is a need to harmonize the laws, regulations and procedures of implementing agencies such as the DENR, NCIP, DAR and the Land Registration Authority. Likewise, the recognition and adoption of sustainable indigenous forest and natural resources management practices should be considered in watershed and forestland management.
12. Advocacy for regional autonomy as a means of ensuring the sustainable utilization and management of the region's natural resources for the benefit of local communities providing the environmental service or resource for agricultural, domestic or industrial uses.
13. Assist LGUs in the crafting of local ordinances on resources use and management such as a mining or environmental code or updating the local tax code to increase LGU revenues to finance ENR programs.
14. Adopting a tripartite management approach to the administration of small scale mining with the government through the Mines and Geosciences Bureau (MGB) and local government units, the private sector particularly the large-scale mining companies and the small-scale miners through their associations and the community.
15. Support for the enactment of legislation on the equitable sharing of benefits from the utilization of national wealth or the provision of environmental services such as:
 - Redefinition of Host Community. Legislation redefining the Term "Host Community" as found in the Local Government Code of 1991 (RA 7160), as amended, the Department of Energy Act of 1992 (RA 7638) and the Electric Power Industry Reform Act (EPIRA) of 2001 (RA 9136) to include upland areas or upstream communities and Local Government Units that are protecting and maintaining the watersheds of hydroelectric power generating facilities and multi-purpose dams or are maintaining the sources where the natural resources come from.
 - Increasing the Financial Benefits of Host Communities and LGUs from the Development and Livelihood Funds of the LGC of 1991 (RA 7160) and EPIRA of 2001 (RA 9136) and facilitating access to such funds for natural resources management.

The value of the P 0.01/KwH of electricity sales provided for in Energy Regulation No. 1-94 (ER No. 1-94) to fund electrification, livelihood and environmental projects of LGUs should be adjusted for inflation. The DOE should regularly adjust this value based on the appropriate Consumer Price

Index (CPI) or maintain its value at 0.05% of the effective power selling rate per Kwh when ER No. 1-94 was issued in 1994.

- Support the proposed bill that requires direct payment or remittance to LGUs of their 40 percent share in the national wealth tax (automatic retention)
- Formulation of Environmental Code in all LGUs and establishment of the Environment and Natural Resources Office (ENRO)

D. Broad Program Packages

The following broad programs, on-going and proposed, are envisioned to implement the identified strategies to achieve the region's goal as Watershed Cradle, improve environmental quality and the provision of environmental services.

1. Upland Development Program: Reforestation and Agroforestry Plantation Development
2. Community Based Forest Management Program-Convergence Area Development
3. River Rehabilitation Management and Flood Control Program
4. Forestland Boundary Delineation and Land Use Assessment Program
5. Biodiversity Conservation, Protection and Management Program
6. Land Tenure Improvement Program: Free Patent Processing and Issuance
7. Cave and Cave Resources Management
8. Community-Based Management of Critical Habitats
9. Environment and Natural Resources Research and Development Program
10. Information, Education and Communication Program on Disaster Risk Reduction and Climate Change Adaptation
11. Forest Protection Program
12. Rivers and Coastal Management Program
13. Data Banking and Information Management Program
14. Cordillera Integrated Watershed Management Program (Mini-Marshall Plan type Program)
15. Watershed Characterization and Delineation Program

3.1.2 CAR as Leading Hydropower Producer

A. Assessment and Challenges

CAR's mountainous topography and uniquely high altitude and extensive network of rivers contribute to the vastness and diversity of the region's energy potential for hydropower. There are also geothermal, solar and wind energy potentials for future studies. Together with gradually advancing the region's hydropower potentials, sustainably developing CAR's other renewable energy resources is projected to generate additional employment, increase local income through expanded national wealth tax receipts, and boosting the region's local economy especially in the countryside.

Hydropower

Snail paced hydropower development. The development of CAR's huge hydropower potential which stands at 3,587 megawatts (MW) has been observed to be generally sluggish, falling short of the region's target of 42 MW installed capacity by 2010. The only recorded hydropower facility established from 2004-2010 is the 200 kilowatts (KW) Ambangal Mini-Hydro Plant in Kiangnan, Ifugao raising by a minute fraction the region's 2004 aggregate power contribution to the Luzon Grid. Excluding the presently non-operational 75 MW Ambuklao Hydroelectric Dam, the total energy produced in CAR as of 2004 was 208 MW in installed capacity consisting of the 100 MW Binga Dam, 70 MW Bakun Hydro and 38 MW from 14 Independent Power Producers (IPPs). Other known large dams that draw water from the region but whose power plants are situated in Regions 1 and 2 are the 345 MW San Roque Dam in Pangasinan and the 360 MW Magat Dam in Isabela.

The slow progress of hydropower development in the Cordilleras and subsequent non-attainment of Plan targets can be traced to the following issues and concerns:

- Apparent insufficient public/private sector interest in hydropower development due to perceived unstable peace and order situation in the Cordillera northern provinces, inaccessibility of prospective hydropower sites and lack of power transmission lines.
- The lack of related technical, organizational/management and operational skills, apart from capitalization shortage of LGUs with potential hydropower resources.
- Uncertainty on the sustainability of hydropower plants due to the threat on the region's deteriorating watersheds and its adverse impact on future water supply. Likewise, the danger of massive deforestation could trigger heavy reservoir siltation from frequent upstream landslides. Already, a number of the existing hydropower plants have become barely 40-60 percent dependable—meaning these plants no longer operate at optimum capacity due to technical issues like low water reservoir/intake dam levels triggered by both natural and man-made factors such as El Nino, deteriorating watersheds, heavy siltation of reservoirs, pollution and obstruction of river systems from improper solid waste disposal, etc. In fact, the expected re-commissioning of the earthquake-damaged Ambuklao hydroelectric dam which is currently undergoing rehabilitation did not materialize last year due to the unprecedented heavy siltation of its reservoir from various upstream landslides traced to the recent typhoons.
- Apparent reluctance among LGUs and local communities over additional hydropower investments in view of their past and recent experiences on the manner of collection and release of National Wealth Taxes perceived to be unfair and insufficient tax

shares, and administrative issues surrounding the release of other related benefits like those under Energy Regulations (ER) 1-94.

- Various requirements/clearances/permits and processes necessary for the establishment of hydropower projects such as obtaining Free, Prior and Informed Consent (FPIC), Environmental Compliance Certificate (ECC) and other requirements.

The 2004-2013 Cordillera Energy Producer Master Plan (CEPMP), formulated in 2004 providing the impetus to attain the vision of CAR as a major energy producer, also lacked ample support for its execution. The CEPMP intended to: (1) develop some 36 small and mini hydropower plants in the region generating a total installed capacity of 401 MW by 2013; (2) improve watershed management; and (3) improve LGU capacity in natural resources management. It also proposed the establishment of local power corporations (LPCs) with various LGU levels, Rural Electric Cooperatives (RECs), the local private sector and host communities as initial incorporating stockholders.

For the CEPMP to take off, the Mini-Hydropower Development Extension Program (MHPDEP) was conceptualized in 2008. Funded from the Regional Development Council-Special Autonomy Fund (RDC-SAF) implementing the Cordillera Regional Development and Autonomy Program (CRDAP), the MHPDEP is an ongoing program currently working for the establishment of a pilot local power corporation in the City of Tabuk, Kalinga. Several training programs, meetings and conferences have been held on hydropower development to capacitate the said pilot LGU. It is anticipated that a successful establishment of an LPC in Tabuk would interest other LGUs in the region to produce energy and generate additional revenue as well.

Other renewable energy sources

Untapped wind, geothermal and solar power energy sources. Apart from hydropower, the Cordilleras is rich in other renewable energy sources and has great potentials for wind, geothermal and solar electricity. However, these resources are still awaiting to be harnessed commercially. The Department of Energy (DOE) estimates the wind power density in the Cordillera at 100-600 watts per square meter (w/m^2), with 87 potential sites for generation capacity of roughly 609 MW (Table 3.1).

In terms of geothermal sources, preliminary assessment by DOE also indicates the provinces of Kalinga, Ifugao and Mountain Province as potential geothermal power producers with an estimated generating capacity of 510 MW. More recent reports however, indicate that the proposed Pasil geothermal plant in Kalinga could generate as much as 1,200 MW of electricity. Accordingly, the Guidance Management Corporation (GMC) and the Aragon Power Energy Corporation (APEC) is set to sign an agreement with Chevron Philippines that will operate the plant in due time.

Table 3.1
Practical Wind Sources and Estimated Capacity in CAR

Province	No. of Sites	Estimated Aggregate Capacity (MW)	Estimated Annual Power Generated (GWH)
Abra	26	183	567
Benguet	20	137	421
Ifugao	15	98	299
Kalinga-Apayao	21	158	484
Mountain Province	5	33	100
CAR	87	609	1,871

Source: Philippine Investment Kit, Department of Energy

Moreover, the Solar Radiation Map of the Philippines reveals that the region can produce some 145-194 watts per square meter of solar power. When harnessed, this potential can help energize off-grid areas in the region.

Rural electrification and system loss

Minimal improvement in rural electrification. Rural electrification continued to expand towards off-grid areas through renewable and non-renewable energy schemes. As of 2007, around 94 percent of the barangays in CAR has been energized, up by three percent from the 2002 level. Household connection, on the other hand, reached 89.45 percent from 71.73 percent in 2002. Ifugao and Apayao registered the lowest household service coverage at 56.34 and 57.19 percent, respectively (Table 3.2). The cost of bringing power in remote areas in the region is relatively exorbitant due to the difficult terrain and lack of accessibility, coupled with the predominantly dispersed settlement pattern of hinterland communities.

The challenge of further reducing system loss to cut down on power costs. Regional system loss in 2005 was relatively high at 13.32 percent implying higher costs of electricity. System loss is caused by technical and non-technical factors such as dilapidated distribution and transmission facilities and meters, meter reading inaccuracies, as well as power theft and pilferage. Across provinces, unaccounted electricity was observed to be soaring in Mountain Province and Kalinga at 14.20 and 14.0 percent, respectively.

Table 3.2
Status of Rural Electrification, CAR: 2007

Province/ City	Municipalities			Barangays			Household		
	Total	Served	Service Coverage (%)	Total	Served	Service Coverage (%)	Total	Served	Service Coverage (%)
Abra	27	27	100	303	301	99.34	40,709	38,631	94.90
Apayao	7	7	100	133	90	67.67	15,754	9,010	57.19
Benguet	13	13	100	140	136	97.14	63,123	53,135	84.18
Ifugao	11	11	100	175	168	96.00	31,349	17,661	56.34
Kalinga	8	8	100	152	136	89.40	32,058	21,924	68.39
Mountain Province	10	10	100	144	144	100	30,203	23,406	77.50
Baguio City	1	1	100	129	129	100	52,302	73,733	100
CAR	77	77	100	1,176	1,104	93.88	265,498	237,500	89.45

Sources: National Electrification Administration, Regional Electric Cooperatives, Provincial Planning and Development Offices

B. Goal/Objectives/Targets

The KFA on Leading Hydropower Producer will strive to make CAR the leading hydropower producer in Luzon, ensuring a reliable and steady power supply at all times, exploring and developing other renewable energy for geothermal, wind and solar power, while vigorously campaigning for a fair and equitable share in the sustainable development and utilization of the region's enormous energy resources.

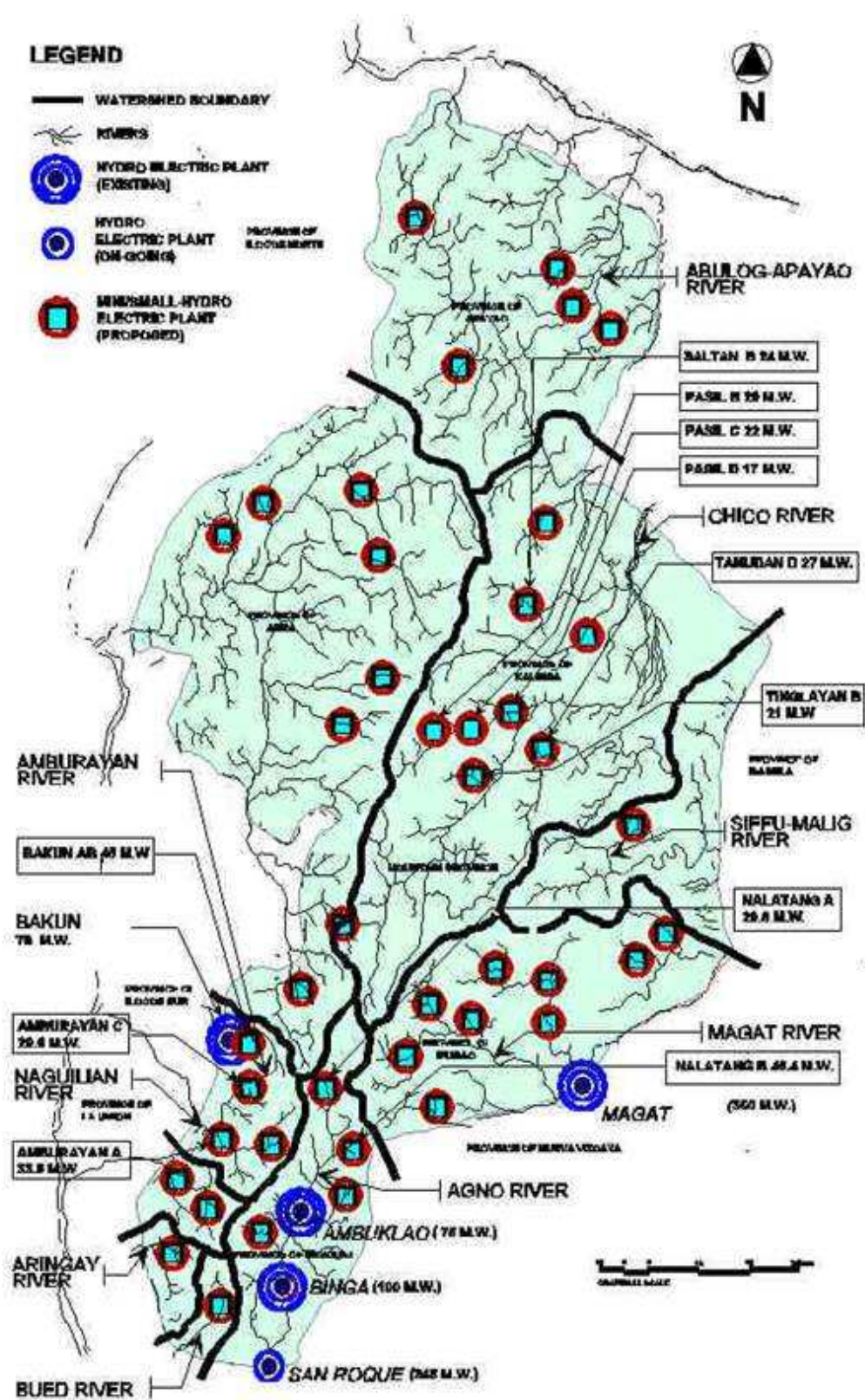
At the end of the Plan period, the following shall have been attained:

1. Increased regional hydropower energy contribution in the Luzon Grid by 200 percent and advanced status in the development of the other renewable energy sources for geothermal, wind and solar power.
2. Increased National Wealth Tax receipts from energy sources and related compensatory benefits by 50 percent.
3. Expanded rural electrification, increasing both barangay service coverage and household connection to 100 percent.

C. Strategic Interventions

1. Strongly advocate for the implementation of the Cordillera Energy Producer Master Plan harnessing new small, mini and micro hydropower projects and working for the establishment of local power corporations, while capacitating LGUs and other institutions for the development, financing and management of small, mini and micro hydropower projects and other renewable energy sources.
2. Coordinate and liaise with appropriate entities to enhance energy dependability of existing hydro-electric power plants from the region by:
 - a. Rehabilitating/re-commissioning existing power plants; and
 - b. Strengthening collaboration with DOE, LGUs, DENR, civil society and IPPs for the rehabilitation, conservation and protection of watershed areas and river systems.
3. Promote public-private sector partnerships (PPPs) in energy development by providing reasonable tax incentives, establishing one-stop shops for the processing and releasing of permits, clearances, consents and other incentive measures.
4. Work out for technical and financial assistance to advance investment-ready propositions for Build-Operate-Transfer (BOT) schemes or Official Development Assistance (ODA), as applicable.
5. Seek amendments to ER No. 1-94 increasing compensatory benefits derived from power sales from one (1) centavo per KWH to 0.5 percent of gross sales, effectively updating its current and real value considering the effects of inflation, while relaxing the requirements of and making more readily accessible benefits derived from ER No. 1-94 by host communities.
6. Pursue the following legislative agenda:
 - a. Redefinition of “host communities” to include “all LGUs and communities where natural resources come from;
 - b. Just and equitable distribution of and share from the National Wealth Tax including resolution of current administrative issues;
 - c. Direct release of financial benefits to host LGUs; and
 - d. Lower power rates for communities hosting renewable energy power plants.
7. Vigorously campaign for the exploration and development of other renewable energy sources including wind, geothermal, solar and other sources, and seeking full support from LGUs and actively cooperating with the DOE, IPPs and other entities.

Figure 3.1
Proposed Hydropower Plants in CAR



Source: Cordillera Energy Producer Master Plan

8. Collaborate with LGUs, the DOE's Special Power Utilities Group (DOE-SPUG) to energize off-grid communities through the development of sustainable hydro-based power systems, other renewable energy sources and non-renewable energy sources.
9. Partner with the National Electrification Administration (NEA) and RECs to effectively reduce systems loss through the rehabilitation, replacement, upgrading or establishment of new distribution lines.
10. Establishment of a transmission trunk line in CAR and rehabilitation of old transmission lines.

D. Broad Program Packages

Micro, Mini, Small and Hydropower Development Program. This covers the development of various hydropower plants in the region (Figure 3.1), in collaboration with the DOE. For the Plan period, hydropower additions are proposed in Pasil, Kalinga; Talubin and Can-ao in Mountain Province; Agbulu in Apayao; Binongan or Palsiguan in Abra; and Nalatang in Benguet. According to DOE, feasibility studies have already been conducted for the proposed Agbulu, Binongan (Palsiguan) and Nalatang plants while economic evaluation are being prepared for the proposed 5.6 MW Talubin project and the 22 MW Pasil projects.

Rehabilitation and Modernization Program of Existing Power Facilities. This project includes the rehabilitation, modernization and recommissioning of the Ambuklao Dam as well as rehabilitation of the Binga Dam and other existing plants to optimize their power generating capacities.

Capability-Building Programs for the Development, Organization and Management of Hydropower Projects. Capability-building programs shall include project development and packaging of hydropower and other renewable energy sources, training on BOT and PPP schemes, organization of LPCs as well as operation and management of these facilities.

Watershed and River Systems Rehabilitation Program. This will include reforestation and promotion of proper solid waste management. With the overall objective of sustaining the operations of hydropower plants and increasing their power supply dependabilities, this project shall be initiated by the LGUs, DENR, DOE and IPPs but prioritizing efforts in Benguet.

Renewable Energy Development Program. This includes the continued exploration, development and harnessing of other renewable power potentials of the region. For the Plan period, priority shall be on the DOE proposed geothermal power plants in Dakla, Benguet, in Pasil and Batong Buhay in Kalinga, and Buguias-Tinoc in Ifugao.

Establishment of One-Stop-Shops. This project aims to set-up various one-stop-shops in LGUs to cater to the needs of prospective energy developers. The shops shall offer detailed information on proposed projects and investment requirements as well as assist in the processing and releasing of permits and clearances.

Rural Electrification Program. This will primarily target un-energized barangays and households in Ifugao and Apayao and other remotes areas in the region using the appropriate energy source available in the locality. In coordination with DOE-SPUG, priority for exploration shall be run-of-river systems, as well as solar and wind sources.

Rehabilitation/Replacement/Upgrading/Construction of Distribution and Transmission Lines. To reduce system loss and minimize power costs, RECs in collaboration with the National Electrification Administration are encouraged to continue to rehabilitate, replace and upgrade distribution lines while the NGCP shall upgrade transmission infrastructure.

This will include the 230-kV Binga-San Manuel transmission project and when practicable establish a CAR transmission trunkline to increase power transfer capability from North to Central Luzon.

3.1.3 CAR as Prime Ecotourist Destination

A. Assessment and Challenges

The Cordillera as prime eco-tourist destination speaks of its natural beauty, refreshing climate and distinctive scenic physical setting. These endowments provide the region diverse attractions such as lush forests and wooded mountainous areas traversed with 13 major river systems, rich biodiversity of rare species of flora and fauna, and the cultural heritage that abounds the region spread across the six provinces with Baguio City as the main hub and service center on these legacies. Added to these are scientific and historical values which the region is known for.

Besides its unique features, Baguio City is well known as the Summer Capital of the Philippines; Sagada, Mountain Province for its natural caves; the rice terraces in Ifugao, Mountain Province, Kalinga - the eighth wonder of the world on mountain engineering; Mount Pulag, being the country's second highest mountain is the site for cloud catching; Kabayan municipality epical for indigenous peoples' ancient embalming technology as human mummies abound the place; and Philex and Balatoc, Benguet known for its mines tour. Moreover, nature's best and nature experience sites abound the region like the white water rafting in Kalinga, as well as water skiing in the two huge water reservoirs in CAR provide vast potentials raring to be tapped for tourism.

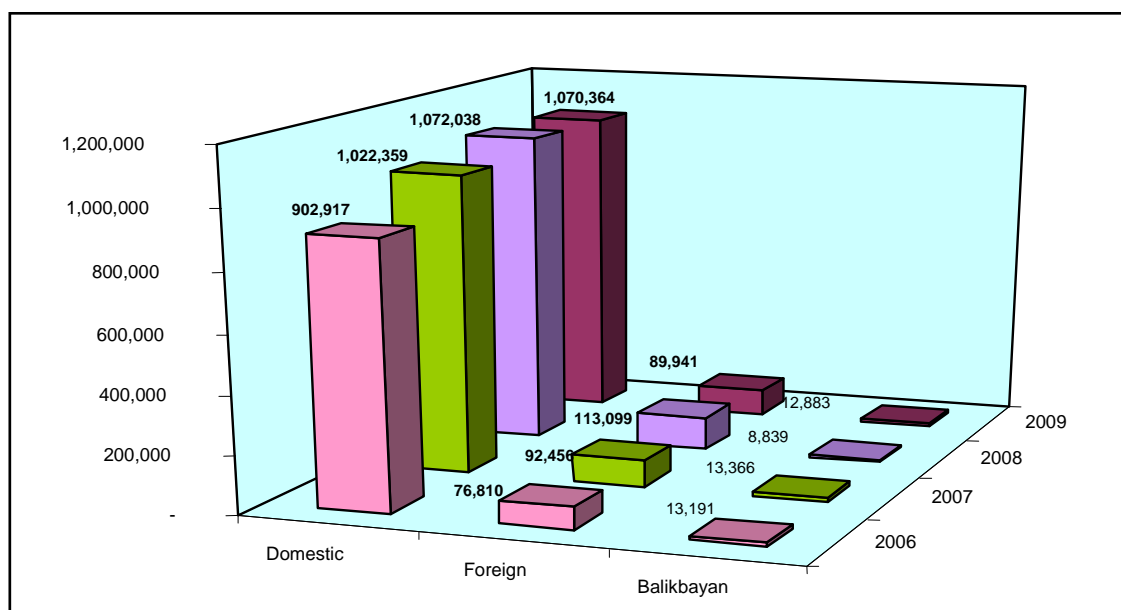
Currently, the region has developed two major tourism circuits, namely; the **Agri-Cultural Circuit** comprised of Kiangnan-Banaue-Bontoc-Sagada-Besao-Buguias-La Trinidad-Kabayan-Tinoc-Baguio, and **Adventure Circuit** which includes Tabuk-Pasil-Lubuagan-Tinglayan-Sagada-Tublay-Bokod-Kabayan-Tinoc-Itogon-Tuba. For the current plan period, the region is currently exploring the agri-cultural and adventure potentials of Abra and Apayao, respectively for the expansion of the two existing tourism circuits.

Tourist Arrivals

Figure 3.2 projects the 2006 to 2009 tourist arrivals in the region. Shown are the consistently increasing visitors from 2006 to 2008, except the 2009 level. In the four-year review period, visitor arrivals almost accomplished the 2008-2010 Updated CAR Regional Development Plan's (RDP) 2007 targeted level more so surpassed the 2008 and 2009 targets. The decline of visitors in 2009 may be attributed to the global financial crisis that struck the world economy during the fourth quarter of 2008.

The tourists in the four-year period, generally, were domestic tourists (91%), eight percent foreign, and the rest (1%) were "*balikbayans*". The tourists' preferred destination was Baguio City with 66 percent average annual share of total CAR visitor arrivals. This could be due to the presence of various tourism support in the area such as accommodation, recreation, transportation and communication facilities and other services support like financial intermediation services. Benguet is the second preferred tourist destination. Ifugao has the highest foreign tourist arrivals among the CAR provinces.

Figure 3.2
Tourist Arrivals by Type, CAR: 2006-2009



Source: Department of Tourism-CAR

Table 3.3
Tourist Arrivals by Province (Target and Actual), CAR: 2007-2009

	2007		2008		2009	
	Target	Actual	Target	Actual	Target	Actual
CAR	1,168,663	1,117,226	1,094,690	1,193,976	1,149,425	1,173,188
Abra	10,527	5,314	3,450	6,299	3,623	7,438
Apayao	359	5,372	3,507	6,132	3,682	16,913
Baguio City	987,630	794,548	782,412	814,975	821,533	770,187
Benguet	66,780	117,365	117,286	194,491	123,150	205,032
Ifugao	48,991	101,880	102,573	110,660	107,702	102,194
Kalinga	20,485	40,339	31,484	28,755	33,058	30,041
Mountain Province	33,891	52,408	53,978	32,664	56,677	41,383
Tourism Receipts (Pmillion)	7,304	9,776	6,842	10,447	7,184	10,265

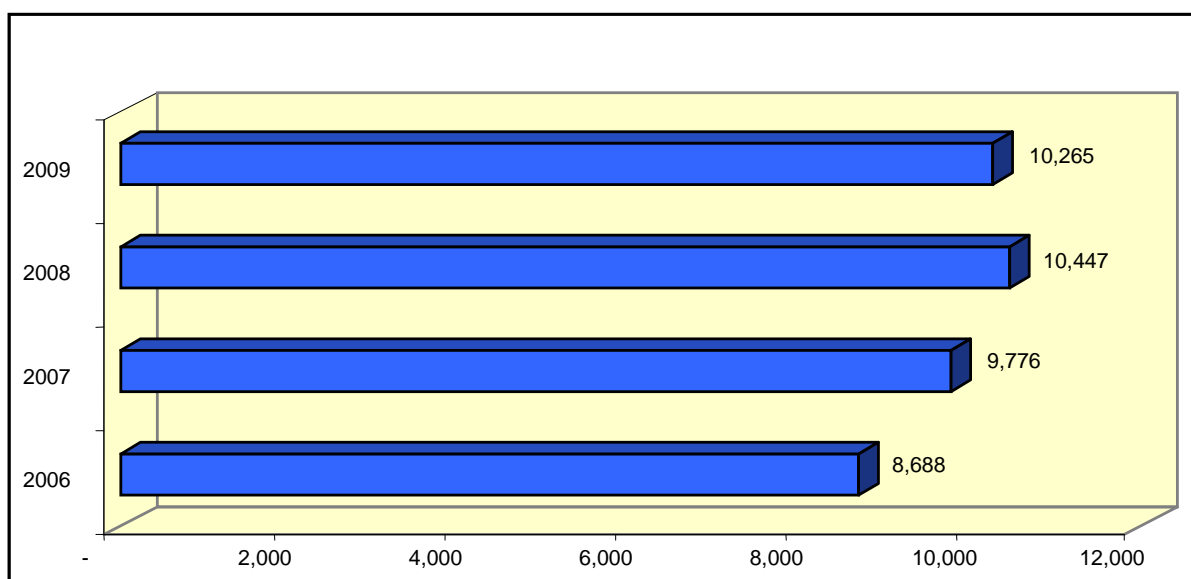
Source: Updated CAR RDP 2008-2010, Department of Tourism-CAR

By country of origin of tourists, the top five major countries are Korea, Canada, US, Japan and Germany. These combined nationalities of tourists makes up 44 percent of the region's total foreign tourists from 2006-2008.

Tourism Receipts

Tourism receipts are computed per day of tourists within estimated length of stay and their average daily expenditures. Hence, tourism receipts follow tourist arrivals trend which,

Figure 3.3
Tourism Receipts, CAR: 2006-2009 (In million pesos)



Source: Department of Tourism-CAR

in CAR, which grew consistently from 2006 to 2008 but slightly declined in 2009 attributed to the global recession and unfavorable weather condition due to typhoons “Ondoy” and “Pepeng” in the last quarter of the year.

B. Goal/Objectives

CAR as a premier eco-tourist destination making tourism a major regional industry benefiting all sectors.

By the end of 2016, CAR shall have:

1. Increased and dispersed tourist arrivals across CAR provinces.
2. Improved visits to year-round and lengthened stay of tourists in the region.
3. Increased employment in tourism establishments.
4. Increased tourism receipts.

C. Strategic Interventions

1. Develop and promote new tourism circuits of the region.

The new circuits shall complement the existing ones in the CAR and those in the adjacent regions. This shall be pursued by following stringent criteria in selection of sites for development and advocating the same to muster support by concerned LGUs and other stakeholders for their provision of complementary infrastructure facilities/utilities support to tourism activities in the said circuits. Technical assistance through capability building in managing the circuits shall be extended to concerned LGUs and other stakeholders.

2. Institutionalize CAR provincial festivals.

This shall be done through organized activities and aggressive promotion and marketing to potential markets. This is supported by tourism market research

determining key improvements in future conduct of the festivals zero-in on visitors' come-ons attending the festivals to guide in designing/conceptualizing activities of the festivals.

3. Protect and preserve CAR tourism assets.

The region's cultural heritage and its pristine natural environment are the major CAR tourism assets. The integrity of these assets shall be protected, preserved and respected by everyone concerned, i.e., RLAs, LGUs, PSOs/NGOs, and the communities bounding these assets. Sustainable tourism practices/activities shall be encouraged to be conducted for appropriately managing these assets.

4. Improve infrastructure facilities/utilities support to tourism.

The tourism sector shall strengthen its linkages with other agencies for the construction, repair and rehabilitation of roads, bridges and airports leading to and from the priority tourist destinations. Public-Private Partnership schemes for the provision/improvement of tourism-related infrastructure facilities/utilities shall be encouraged in priority tourist destinations. Technical assistance to potential investors shall be provided, as appropriate.

5. Promote tourism business development and provide a conducive environment for tourism investments and its progressive operation.

The local government units shall partner with private sector in promoting tourism business services such as local tourist promotions, conventions, organizing travel tour packages to development sites/areas and other related tourism business services.

In providing suitable environment for tourism investments, host LGUs to tourism circuits shall provide tax/revenue incentives to prospective investors for tourism projects in their areas. Support facilities/utilities and services to investors shall be developed and implemented. Mutually beneficial tourism circuit development agreement between LGUs and investors shall be forged, i.e. clustering local tourism initiatives with MSMEs development like the One Town-One Product (OTOP) scheme enterprise development, etc. Included in the package is the maintenance of peace/security and cordiality within the region and its environment.

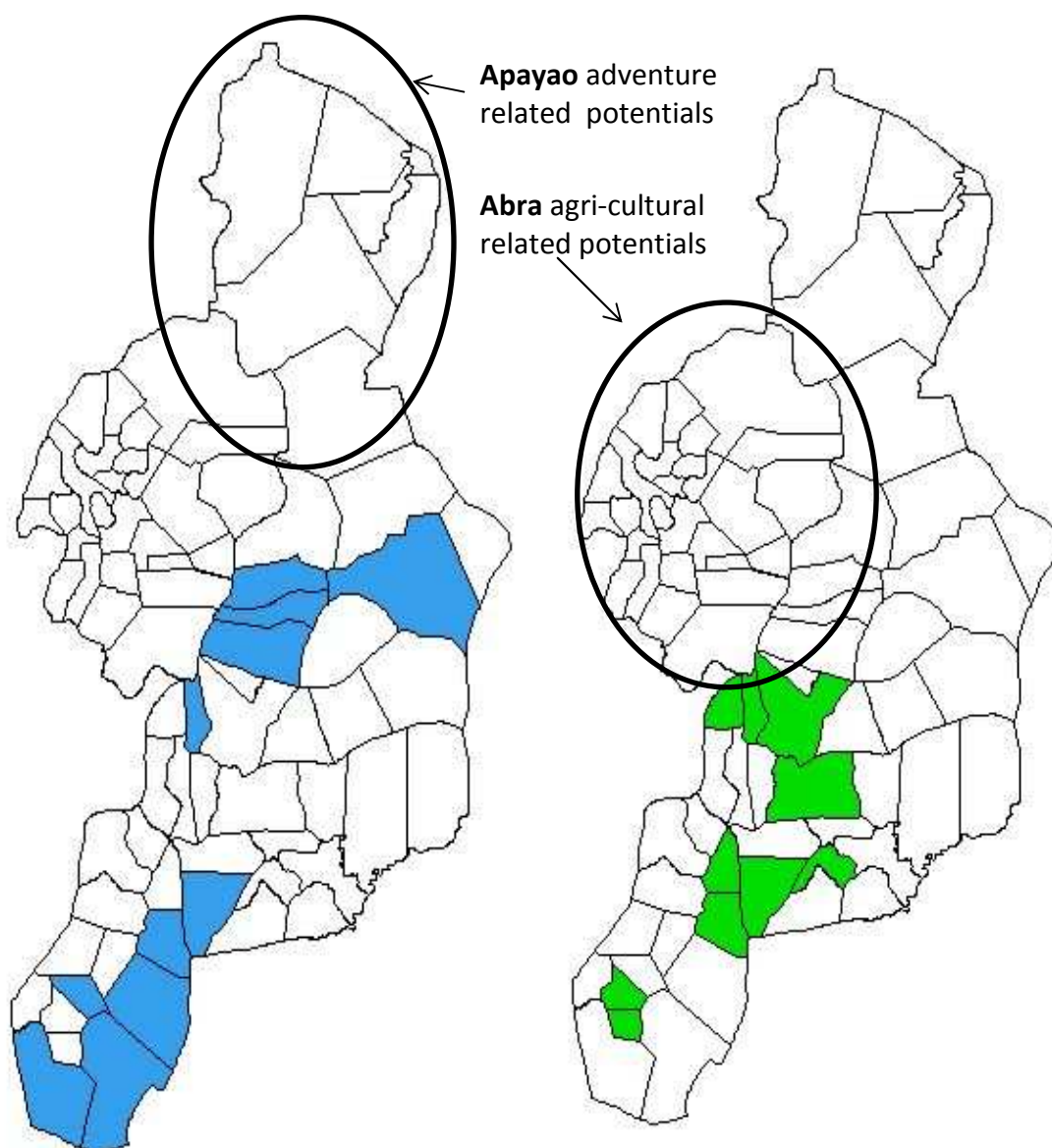
6. Continuing capacity building of RLAs and LGUs in tourism development and management.

All tourism stakeholders shall be provided with continuing skills development, upgrading and re-tooling on (a) protection and preservation of CAR tourism assets, (b) adoption and practice of international systems and standards on tourism protocol and management, and (c) tourism business management and development.

7. Continuing assessment and monitoring of existing KFA PPAs.

To identify their adequacy, responsiveness, relevance and effectiveness in restoring CAR as a premier eco-tourist destination. Likewise, to identify the gaps in existing PPAs where the region can go into tourism project development.

Figure 3.4
Proposed Tourism Circuits



Adventure

Tabuk – Pasil – Lubuagan – Tinglayan – Sagada – Tublay – Bokod – Kabayan – Tinoc – Itogon – Tuba with exploration on **Apayao** adventure related potentials

Agri-Cultural

Kiangan – Banaue – Bontoc – Sagada – Besao – Buguias – La Trinidad – Kabayan – Tinoc – Baguio with exploration on **Abra** agri-cultural related potentials

Source: Department of Tourism-CAR

D. Broad Program Packages

Tourism Circuit Development Program. PPAs shall implement both the intra- and inter-provincial/regional tourism circuit development to complement the existing ones. Tourism circuit development includes watersheds/forests protection, conservation and development, management of biodiversity and other natural attractions.

Eco-cultural Tourism Asset Conservation/Protection, Development and Rehabilitation Program. The basic foundation of the program is sustaining strong collaboration of LGUs, private sector and the community in the conservation, protection, development and rehabilitation of the region's tourism assets. An integrated eco-cultural tourism asset conservation/ protection, development and rehabilitation plan and its corresponding investment program shall be drawn and officially legitimized to be the blueprint guiding everyone concerned in the program.

Tourism Infrastructure Support Facilities/Utilities Development Program. This covers construction, renovation and improvement of tourism support facilities. This shall be pursued in coordination with the agencies of the KFA on Physical Integration that responds to the needs of tourists and tourism industries in the region.

Tourism Investments Promotion Program. This program aims to create suitable environment for tourism investments in the region. It includes the development of tourism investment incentive schemes, maintenance of peace and security and provision of necessary support services. This also include capacity building that would enable RLAs/LGUs conceptualize project proposals for ICC/ODA consideration.

Tourism Business Development and Marketing Program. Tourism business development is highly encouraged in the region to cater to the needs of tourists and the tourism industry. This does not only refer to souvenirs and OTOP selling by the MSMEs but also tourism services such as travel and tours packages, major activity coordination, organizing and hosting in addition to the institutionalized year-round tourist activities by concerned LGUs.

3.1.4 ***CAR as Greens, Fruits and Ornamental Grocer***

A. Assessment and Challenges

CAR's agricultural area covers 18 percent or 323,683.56 hectares of the region's total land area. These are lands suitable for crop, livestock, poultry and fishery production. The cold climate of Benguet and Mountain Province makes these areas the region's major sources of semi-temperate fruits and vegetables, root crops and cutflowers. Kalinga, Apayao, Abra and Ifugao are the major suppliers of grains.

The region's agricultural endeavors are basically carried out in areas identified as Strategic Agriculture and Fishery Development Zones (SAFDZs). These areas are supported with irrigation facilities. As of 2010, less than 50 percent (42.52%) of the estimated potential irrigable area was irrigated. Of these areas, 17.64 percent was developed under national irrigation, 46.65 percent under private irrigation system, while the remaining 35.71 percent was irrigated by communal irrigation system. Likewise, two cold chain facilities for post-harvest support were installed in La Trinidad and Buguias municipalities of Benguet.

Table 3.4
Status of Irrigation Development, CAR: 2006-2009 (In hectares)

	2008	2009	2010
Estimated Potential Irrigable Area	185,406	185,406	185,406
National Irrigation System	13,908	13,908	13,908
Communal Irrigation System	62,041	36,646	36,780
Private Irrigation System	2,473	28,153	28,153
Total Irrigated Area	78,422	78,707	78,841
Remaining Area to be Developed	42.30	42.45	42.52

Source: National Irrigation Administration – CAR

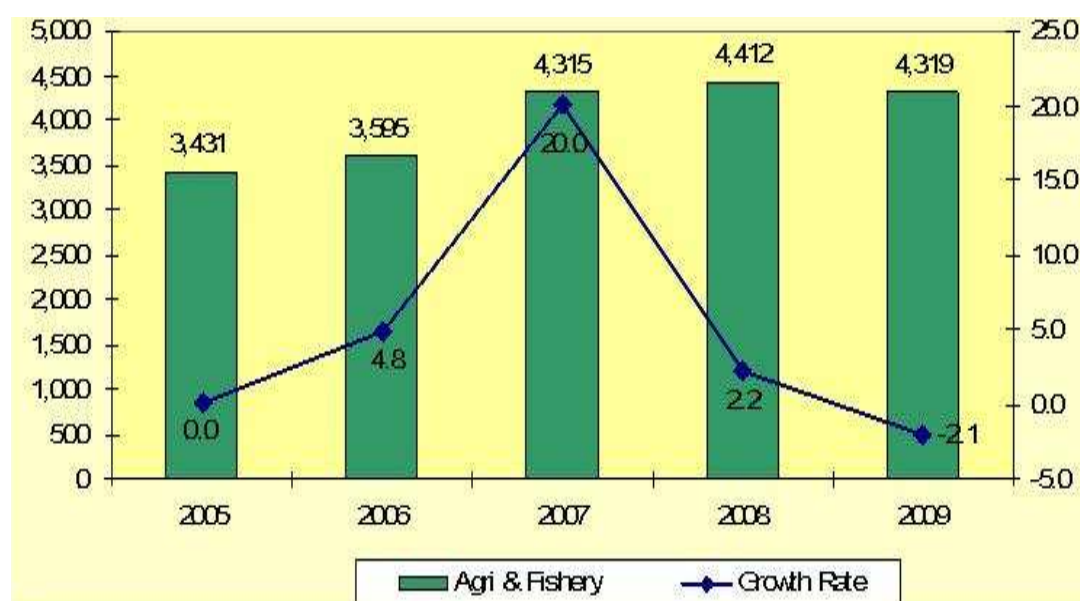
Agriculture and Fishery Sub-sector Performance

The output of this sub-sector makes almost 100 percent of the region's total agriculture, fishery and forestry (AFF) sector's output. Less than one percent of the sector's output comes from the forestry sub-sector.

From 2005 to 2008, the agriculture and fishery sub-sector saw 6.7 percent average annual growth. In this reference period, its highest growth was in 2007. In 2009, a typhoon-frequent year specifically typhoons “Pepeng” and “Ondoy”, the sub-sector's growth tremendously declined even lower than the 2006 level. The worst hit by the typhoons were the crops.

The 2005-2008 CAR's contribution to the national AFF gross value added (GVA) was mealy 1.7 percent. This contribution is expected to increase during this plan period with the rising demand for organic vegetables and fruits at local as well as global markets. These organic products include semi-temperate vegetables, coffee, and heirloom rice.

Figure 3.5
Agriculture and Fishery Subsector Gross Value Added and Growth Rate, CAR: 2005-2009 (Value in million pesos at constant 1985 prices)



Source: National Statistical Coordination Board

In terms of volume of production, crops are the major agricultural produce of the region. The highest growth rate of crops production was recorded in 2007 reaching a double-digit increase from the 2006 level. However, this rate was not sustained in the succeeding years leading to a dismal growth in 2009 caused by weather disturbances such as El Niño and series and prolonged tropical storms that occurred during those years. The poultry production, though recorded a decline from 2006 to 2007, managed to grow substantially in 2008 and 2009. Fishery production captures the lowest share in the agricultural production as this only covers the inland municipal and aquaculture fisheries. Its production levels grew annually but at a declining rate from 2007 to 2009. Livestock production consistently declined during the whole period of 2006-2009.

Table 3.5
Volume of Agricultural Production, CAR: 2006-2009 (In metric tons)

Agricultural Products	Production				Growth Rates			AAGR 06-09
	2006	2007	2008	2009	06-07	07-08	08-09	
CROPS	849,116	1,028,280	1,067,560	1,050,910	21.1	3.8	(1.6)	7.8
Palay	397,338	436,311	445,156	431,656	9.8	2.03	(3.0)	2.9
Corn	160,109	175,582	196,421	201,773	9.7	11.9	2.72	8.1
Coffee	6,346	6,252	5,950	5,700	(1.5)	(4.8)	(4.2)	(3.5)
Banana	25,054	26,786	26,700	26,981	6.9	(0.3)	1.1	2.5
Cabbage	68,887	99,957	102,894	99,155	45.1	2.94	(3.6)	14.8
Carrots	27,966	57,491	60,303	59,024	105.6	4.89	(2.1)	36.1
White Potato	52,205	100,752	103,303	101,061	93.0	2.53	(2.2)	31.1
Others	111,211	125,149	126,833	125,560	12.5	1.3	(1.0)	4.3
LIVESTOCK	50,872	55,973	54,318	49,883	10.0	(3.0)	(8.2)	(0.4)
POULTRY	11,802	11,296	11,573	12,696	(4.3)	2.5	9.7	2.6
FISHERY	3,543	3,881	4,130	4,229	9.5	6.4	2.4	6.1

Source: Bureau of Agricultural Statistics

AFF Sector Employment and Labor Productivity

For the period 2006-2009, the bulk of employment in the region was found in the AFF sector absorbing more than 50 percent of the 679 thousand employed in 2009. This AFF sector covered the agriculture, forestry and hunting, and fishing activities. Its high employment absorption but low GVA turn-over brought a low labor productivity in the sector at one monetary unit is to 24 units in the industry and 3 units in the services sector, respectively. This reflects the AFF's disadvantageous labor productive potentials, compared over other sectors.

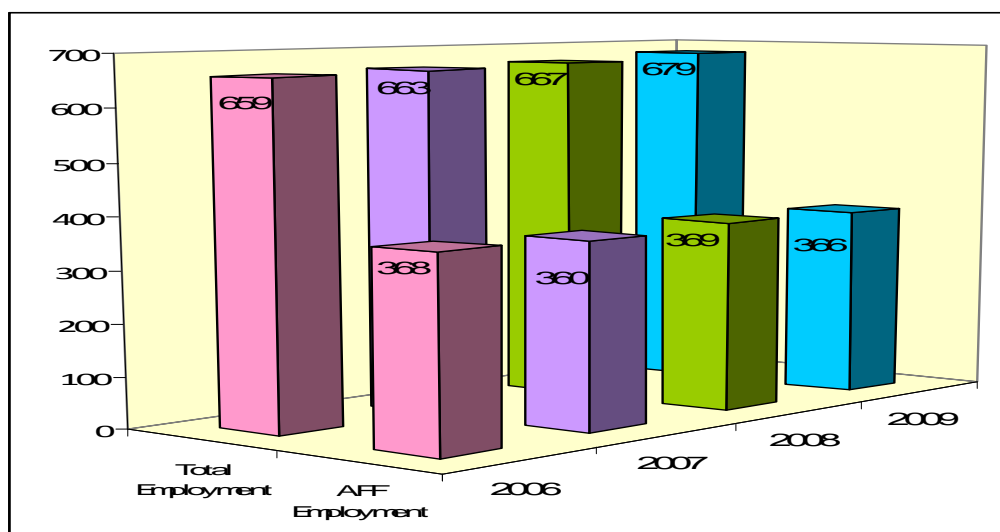
B. Goal/Objectives

CAR shall be a major contributor to national food security on semi-temperate vegetables and fruits, while sustaining self-sufficiency in rice and ornamentals, and attaining sufficiency in livestock, fish and coffee, consistent with the region's watershed character.

By 2016, CAR shall have:

1. Increased and sustained the year-round production and distribution of priority commodities to include semi-temperate fruits and vegetables, grains, livestock, fish, high value ornamentals, coffee and heirloom rice.
2. Increased agricultural labor productivity and profitability.
3. Increased agricultural land productivity and farm incomes.

Figure 3.6
Employment in Agriculture, CAR: 2005-2009 (In thousands)



Source: National Statistics Office

C. Strategic Interventions

The policies and strategies are geared towards improving agricultural productivity with focus on organic agriculture, agro-forestry production and high-value crops production which include semi-temperate fruits and vegetables, coffee and heirloom rice.

1. Create greater value from agriculture through:

- Appropriate modernizing and commercializing of the traditional agriculture, e.g., niche export as well as local markets for rice terraces rice (heirloom rice) which is grown only in the region and other organic high value crops such as semi-temperate fruits and vegetables and coffee.
- Processing of agriculture products with the assistance of DTI and DOST, e.g., contract growing for manufacturers and large fast food chains.
- Intensify R & D towards appropriate processing of Cordillera agricultural products through tie-up with SUCs, DOST, other institutions in the country, private sector, etc.
- Introduction of appropriate productivity enhancing technologies, e.g., new crop/commodity trials (lanzones, rambutan, durian in Apayao)
- Other measures/ programs of increasing/enhancing rural farmers incomes (e.g. off-farm, off-season employment)

2. Intensify bio-safe production of high-value agricultural commodities.

This refers to mass production of bio-safe agricultural commodities both for food and other uses. By this initiative, agricultural production is to be carried-out in certified safe zoned areas requiring agronomic practices (i.e., minimum tillage) which are cost-effective. Crop zoning and programming practice shall be promoted to maintain/improve the physical, chemical and biological status of farmlands.

3. Intensify adoption, implementation and development of agro-forestry production schemes as appropriate to environmental setting.

Highland farming systems production approach shall be promoted. Sloping agricultural engineering technologies founded on indigenous knowledge, systems, and practices (IKSPs) on farm management is invoked. The traditional farming practices that apply environmental preservation and protection shall be pursued in the entire agricultural livelihood pursuits.

4. Institute product diversification for agricultural value creation following the requirements of the environment and rhythm of nature.

Value-chain principles for creating agricultural values are impressed in agricultural enterprise development for the highlands. This is done through integrated farming among agricultural entrepreneurs. Agribusiness management support shall be provided to ensure profitability of agricultural enterprises. Farmers, farmers' organizations and agri-entrepreneurs shall be assisted in their access to government financing and the Agricultural Competitiveness Enhancement Fund (ACEP). These financing services help the farmers and agri-entrepreneurs fully integrate appropriate technologies in their production and post-production endeavors including establishment/expansion of agribusiness ventures and agri-based MSMEs.

5. Improve agricultural infrastructure facilities/utilities support in the production and distribution of agri-products and services.

This comprises but not limited to farm to market roads, irrigation, post-harvest facilities (i.e., cold chain storage, processing facilities), trading centers, storage and packaging centers, training/ research and extension services centers, etc. Public-Private Partnership schemes for agriculture support facilities shall be explored.

6. Promote conducive environment for agricultural investments.

The local government shall develop incentives scheme for agricultural investments while maintaining peace and order in the region.

7. Institute DRR/CCA - enhanced physical planning and zoning for agriculture.

This is pursued within the planning period in reconciling agricultural production with environmental requirements in the highlands. This aims to reduce disaster vulnerabilities instigated in the agriculture sector.

8. Strengthen agricultural research and program/project development for the highlands.

This aims to provide extension services for agricultural entrepreneurs in maintaining the highlands environmental integrity with offsite influences while carrying out their agricultural cultivation in the sloping areas. Likewise, there should be continuing capacity-building provided for the RLAs and LGUs on program/project development. This would enable them develop or conceptualize project proposals for ICC/ODA and new major programs/projects that would replicate/expand the coverage of the successfully implemented projects such as the CHARMP.

9. Continuing assessment of AFF plans/programs/projects with end-in-view of accelerating productivity improvements, increasing farm enterprises and incomes, and generally addressing rural poverty.

This is to identify the PPAs adequacy, responsiveness, relevance and effectiveness in advancing the KFA which would contribute in accelerating

productivity improvement and generally addressing rural poverty through increasing farm enterprises and incomes. Likewise, through monitoring and assessment, the KFA would be able to identify gaps in the existing PPAs where the region can go into project conceptualization and development.

D. Broad Program Packages

Traditional Organic Agriculture Modernization Program

- Organic agriculture development and certification
- Niche marketing exploration and development

High-value Agricultural Development Program

- Genetic Material Conservation and Development Program
- Soil condition and fertility improvement
- Production of quality seeds, fingerlings and stocks
- Agro-forestry production
- Implementation of DRR/CCA in agricultural planning

Agricultural Infrastructure and Facilities Support Program

- Construction/installation/rehabilitation and maintenance of irrigation facilities
- Construction, improvement and rehabilitation and maintenance of farm-to-market roads/ footpaths and bridges
- Installation and maintenance of tramlines
- Establishment/distribution and maintenance of post-harvest facilities and trading centers in strategic locations
- Establishment/rehabilitation of R, D & E stations

Agriculture Investments Promotion Program

- Packaging of ready propositions for investments
- Agriculture development financing scheme
- Rural farm-based enterprises development

Agriculture Extension, Research and Program/Project Development Support Program

- Conduct of R & D studies
- Establishment of techno-demo projects
- Integrated farming systems development
- Information support
- Conceptualization and development of Cordillera appropriate intervention programs/ projects, e.g., CHARMP-like programs for other areas

Marketing and Agri-business Promotion Program


- Market Information Development
- Market Promotion Activities
- Market-oriented agricultural pursuits development, e.g., contract growing


Integrated Agro-forestry Development Program


- Agro-forestry area development
- Agro-forestry production expansion
- Agro-forestry production areas erosion control and slope protection/stabilization


Figure 3. 7
SAFDZ Development Convergence Zones


LEGEND

 Temperate Vegetables, Fruits & Root crops

 Lowland Crop, Livestock

 Cutflower & agro-industrial crops
(cutflower production and packaging;
vegetables/ fruits trading and packaging;
vegetable/fruits rootcrops processing)

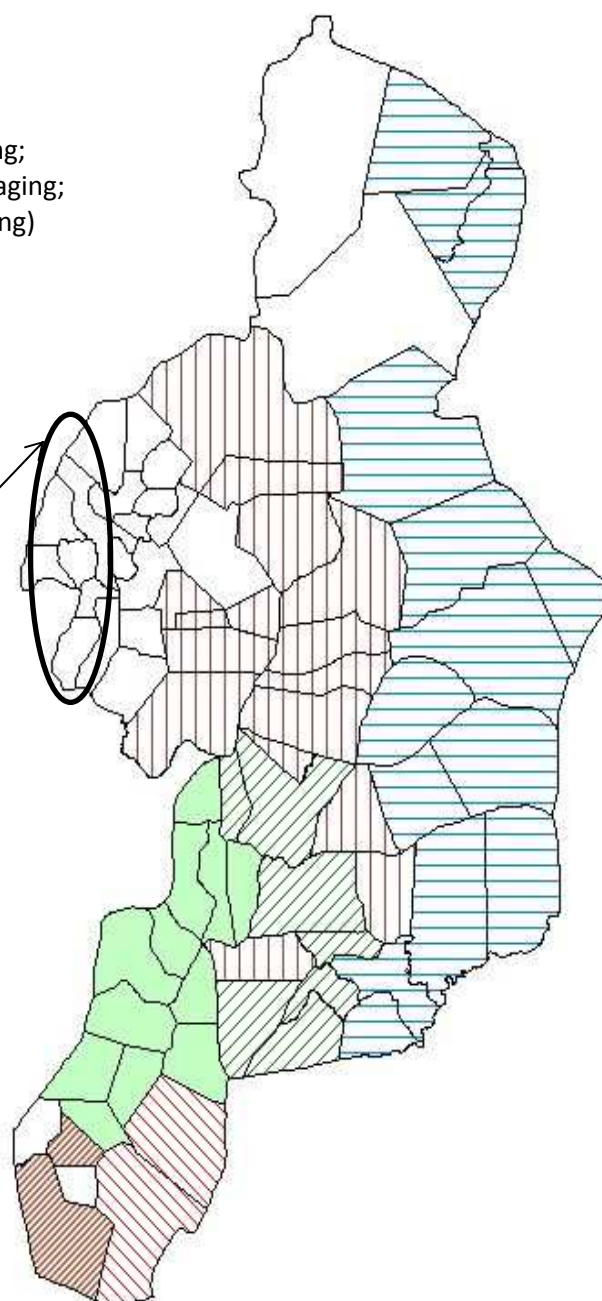
 Upland crops, livestock
(Upland/fancy rice, industrial crops,
upland)

 Rice Terraces Agro-Ecotourism

 Reservoir Agro-Fisheries Dev't.
& Management

Abra Lowland municipalities

Lowland crops, livestock (rice/corn,
cattle/goat, lowland vegetables,
mango & citrus fruits)



Source: Department of Agriculture-CAR

Off-Farm/Off-Season Agricultural Enterprise and Livelihood Development Program. The intent is to develop profitable agricultural enterprises as upstream livelihood activity of farmers and their families. The enterprises build on series of value-creating activities to be added on the farm produce as raw material of marketable/tradable agricultural goods/products. The endeavor shall be carried out with assistance from DOST and the various agricultural schools including food product processing/curing, developing/fabrication of farm implements, among others.

National Rural Development Convergence Initiative. This is a national initiative for sustainable rural development with support from local government units through an integrated ecosystem management approach. The regional convergence shall provide necessary support needed by the local convergence agro-enterprise clusters to include but not limited to financing, market information, linkages, networking, capability building and other strategies to develop the cluster.

Second Cordillera Highland Agricultural Management Project (CHARMP II). The project aims to reduce poverty in the indigenous upland communities of CAR. It introduces the value-added approach to agricultural development - an approach that links the producers to ready and premium markets. CHARMP II coverage is extended from CHARMP 1's coverage of 3 provinces (Abra, Benguet, Mt. Province), 16 municipalities and 82 barangays to the entire region or 6 provinces, 37 municipalities, and 170 barangays in CAR. This expansion leads to more effective production areas for agriculture and fishery, hence a support to the agriculture sector's goal of developing two million hectares of new agri-business lands by 2010.

Agrarian Reform Infrastructure Support Program, Phase III (ARISP III). The ARISP III aims to improve the quality of life of the ARBs using the concepts of: (a) Agrarian Reform Communities (ARCs), and (b) KALAHI Agrarian Reform Communities Zones (KARZones). The project components are: construction of irrigation systems, farm-to-market roads, bridges, potable water supply; ARC agrarian information and marketing center (AIM-C); and institutional development.

3.1.5 CAR as Prime Education Center

A. Assessment and Challenges

The Cordillera Region, specifically Baguio City has sustained, even enhanced over the years its role as a prime education center in North Philippines.

This is seen by the number of colleges and universities or higher education institutions (HEIs) operating in the region, from a total of 36 in 2001-2002 to 47 in 2008-2009 or a 23 percent increase during the six year period. Most of the HEIs are private institutions found in Baguio City that hosts 40 percent of the total HEIs and capturing 70 percent of total enrollment in the region. Kalinga and Benguet also showed significant increases in HEIs showing the emergence of other urban areas apart from Baguio in catering to higher education such as Tabuk City and La Trinidad.

Over the years, leading colleges and universities in Baguio City have continually upgraded and modernized their educational facilities (including buildings, classrooms, libraries, laboratories, lodging and sanitation facilities) and thus capturing not only students from nearby regions but international students as well. The fields of medical and allied courses, Business Administration and related courses, Engineering and Technology, Education and Teacher training as well as IT-related disciplines have the highest number of enrollees and have consistently shown remarkable performance in licensure examinations.

Table 3.6
Number of HEIs and Enrollees, CAR : SY 2008-2009

Province/City	Number of HEIs			Enrollees	
	Public	Private	Total	Total	Percent Share
Abra	2	4	6	4,932	5%
Apayao	2	-	2	1,132	1%
Baguio City	1	17	18	67,625	70%
Benguet	3	5	8	9,678	10%
Ifugao	4	-	4	4,049	4%
Kalinga	2	4	6	4,734	5%
Mountain Province	2	1	3	4,583	5%
CAR	16	31	47	96,733	100%

Source: Commission on Higher Education-CAR

Table 3.7
Classification and Number of TVET Providers by Province, CAR: 2009-2010

Classification of TVET Provider	Number of Institutions						Total
	Abra	Apayao	Baguio-Benguet	Ifugao	Kalinga	Mountain Province	
TESDA Technology Institute	1	-	2	1	1	1	6
Technical-Vocational Institute	1	-	82	2	3	2	90
Higher Education Institute	7	2	14	3	4	3	33
Secondary School	2	7	2	1	5	4	21
LGU-Run Training Center	1	1	1	1	2	1	7
TOTAL	12	10	101	8	15	11	157

Source: Technical Education and Skills Development Authority-CAR

Table 3.8
School-Based TVET Enrollees and Graduates, CAR: 2006-2009

Province	2006		2007		2008		2009	
	Enrolled	Graduates	Enrolled	Graduates	Enrolled	Graduates	Enrolled	Graduates
Abra	1,122	244	1,261	418	2,273	2,273	997	997
Apayao	100	20	100	51	114	114	167	167
Baguio-Benguet	9,665	5,719	18,669	12,499	13,286	13,286	12,295	12,295
Ifugao	759	581	594	749	451	451	938	938
Kalinga	498	175	773	132	1,142	1,142	842	842
Mountain Province	862	535	595	708	2,823	2,823	2,886	2,886
CAR	11,784	7,010	20,631	14,088	20,089	20,089	22,125	22,125

Source: Technical Education and Skills Development Authority-CAR

Meanwhile, competencies of the different colleges and universities in the areas of instruction, research and extension and other disciplines related to skills requirements have yet to be realized. The target for Centers of Excellence (COEs) for CAR which is the main feature of the educational quality development program of the Commission on Higher Education (CHED) was five and the region was able to only have two. The target for Centers of Development (CODs) was 18 but only two were realized. The target for accredited programs

was 58 but the region achieved less than that implying more efforts have yet to be done to improve college and university facilities, programs and faculty. In the field of technical-vocational education and training (TVET), the exceptional performance of the region is noteworthy. From a total of 41 TVET providers in 2001-2002, this increased to 136 in 2009 with two providers – the Baguio City School of Arts and Trades (BCSAT) and Regional Training Center-Baguio (RTC-Baguio) - classified as Centers of Technical Excellence since 2005.

Along with the significant increase in TVET providers is the sustained increase in the registration of TVET programs, and number of enrollees and graduates particularly by private technical-vocational institutions (TVIs). This indicates the growing demand for skilled workers particularly for overseas labor markets. The most popular programs belong to the Information Communication Technology (ICT) and Health and Community Services sectors resulting from increased labor demand by offshore BPOs companies including call centers and medical transcription.

Despite the remarkable performance of both HEIs and TVIs, their challenge remains that of developing highly-skilled, locally and globally competitive manpower. Specific problems for both HEIs and TVIs include: (1) the mismatch of manpower needs with HEIs courses and TVET training programs; (2) the lack of social advocacy/marketing; (3) the need to ensure world-class quality of education and training; and (4) limited investments.

Table 3.9
Elementary Education Performance Indicators (Target vs. Actual),
CAR: 2004-2009 (In percent)

Indicators	2004-2005		2005-2006		2006-2007		2007-2008		2008-2009	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Participation Rate	89.16	78.48	89.20	74.57	89.23	72.68	89.26	71.20	89.29	71.21
Survival Rate	65.86	60.75	66.15	57.09	66.44	62.62	77.19	63.67	67.02	61.63
Retention Rate	93.13	92.40	93.31	91.31	93.49	92.99	93.67	92.98	93.96	93.19
Completion Rate	64.72	59.52	65.01	55.76	65.31	61.41	65.61	62.26	65.91	60.66
Transition Rate	97.35	96.18	97.73	95.99	98.12	96.98	2.84	96.28	98.90	96.84
Drop-out Rate	0.55	0.78	0.53	0.64	0.68	0.81	0.67	0.52	0.66	0.55

Source : Department of Education-CAR and CAR RDP 2004-2010

Table 3.10
Secondary Education Performance Indicators (Target vs. Actual),
CAR: 2005-2009 (In percent)

Indicators	2005-2006		2006-2007		2007-2008		2008-2009	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Participation Rate	65.07	40.34	69.16	39.49	73.50	38.38	78.11	37.04
Survival Rate	62.13	54.95	78.22	61.79	79.10	58.11	80.00	64.23
Retention Rate	88.80	85.72	91.92	87.10	93.35	86.37	92.87	90.86
Completion Rate	57.70	50.78	73.46	57.84	74.62	54.07	75.80	59.78
Transition Rate	66.88	89.91	100.00	85.02	100.00	84.48	100.00	98.19
Drop-out Rate	5.15	5.47	4.60	5.15	4.52	5.05	4.43	4.55

Source : Department of Education-CAR and CAR RDP 2004-2010

While both HEIs and TVIs performed significantly well the previous years, the basic education sector needs to improve its performance specifically in increasing the participation rate. Improving performances in English, Math and Science subjects also needs to be addressed to ensure total quality education and increased competitiveness.

Between 2004-2009, there was below target accomplishment in all elementary education performance indicators specifically in the participation rate with a double-digit underperformance. Also, there was no improvement in all the indicators across years except for a minimal increase in survival rate.

Secondary education performance also shows below target accomplishments in all indicators especially for participation rate, completion rate and transition rate. In fact, there is a decreasing trend in most indicators except for survival rate and retention rate.

For CAR to be a prime education center in the Philippines, there is a need to continually upgrade educational facilities to “world class” standards and improve performance at all levels. This is in line with President Benigno C. Aquino III’s vision for education - *“to make education the central strategy for investing in our people, reducing poverty and building national competitiveness.”*

B. Goal/Objectives/Targets

The Cordillera as a prime education center of the Philippines where quality, relevant and responsive basic, tertiary and technical vocational education shall be provided. This involves: (1) improved access to quality education and manpower development services; (2) enhanced public-private partnership in the delivery of education and manpower programs and services; and (3) improved provision of market-driven, development-oriented tertiary and technical-vocational education, training and research extension services.

Targets for higher education institutions:

- 100 percent compliance of HEIs with minimum standards for every program offered;
- development of 12 HEIs as COEs and 21 HEIs as CODs;
- increase in accredited programs to 122% from their 2005 level;
- 20 percent increase in the passing rate in all licensure examinations;
- increase in networking with other schools of higher learning, both local and international, by at least 10 percent annually.

Targets for technical-vocational education and trainings are presented in Table 3.11; basic education (elementary and secondary) in Table 3.12 and Table 3.13.

On Alternative Learning Systems (ALS), a notable increase is expected due to enhanced teaching learning strategies, production of more learning materials, deployment of more mobile teachers and allotment of more ALS Contracting Scheme Program. Thus, the expansion of pilot ALS programs to all divisions will contribute to increased performance as shown in Table 3.14.

C. Strategic Interventions

1. On improving the provision of market-driven, development-oriented tertiary and technical-vocational education, training and research extension services:

- promoting private sector-led and market-driven tertiary and technical-vocational education and trainings;
- pursuing the academic freedom of HEIs in CAR to upgrade their educational system, facilities and equipment into world class standards to enhance the international marketability of the university communities;
- enhancing the responsiveness of tertiary education courses and tech-voc training programs to local and global market demands and sustaining the regular conduct of proactive job-skill matching;
- pursuing the development/achievement of COEs, CODs, Distinctive Areas of Competence (DACs) accreditation programs;
- developing the BLISTT (Baguio-La Trinidad-Itogon-Sablan-Tuba-Tublay) University Community as a model university area;
- developing and enforcing institutional policies for the promotion, protection and publication of research outputs and enhancing the role of research and extension units of the educational institutions to make it more responsive and relevant to the region by contributing to development policies and knowledge build-up in the region;
- mainstreaming of relevant regional and social concerns to school curricula by integrating Cordillera history and culture, regional development and autonomy, disaster risk reduction/climate change adaptation and other emerging concerns;
- expanding scholarships and other incentive support services.

Table 3.11
Performance Targets for TVET, CAR: 2010-2012

Program/Project	Performance Indicator	Target			TOTAL
		2010	2011	2012	
Competency Assessment and Certification	No. of assessed individuals	15,000	15,000	15,000	45,000
Program Registration and Accreditation	No. of Registered WTR Programs	18	20	20	58
	No. of audited programs	57	60	60	177
Scholarship Programs (Training for Work Scholarship and PESFA)	No. of trained individuals	895	895	895	2,685
School-based TVET	No. of trained individuals	14,170	14,500	14,500	43,170
Center-based TVET	No. of trained individuals	5,450	5,650	5,650	16,750
Enterprise-based TVET	No. of trained individuals	1,195	1,200	1,200	3,595
Community-based TVET	No. of trained individuals	10,140	11,000	11,000	32,140
Trainers Development Program (NTTAQP)	No. of trained individuals	40	25	25	90
Career Guidance	No. of YP4SC –profiled students	4,700	4,800	4,800	14,300
Skills Competitions/Fairs	No. of competitions/fairs	4	6	6	16
Incentives and Awards	No. of provincial and regional winners	13	28	28	69

Source: Technical Education and Skills Development Authority-CAR

Table 3.12
Performance Indicator Targets for Elementary Education, CAR: 2010-2015 (In percent)

Performance Indicator	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Survival Rate	65.82	66.48	67.15	67.82	68.50
Retention Rate	97.73	98.71	99.70	100.69	101.70
Transition Rate	101.73	102.75	103.77	104.81	105.86
Repetition Rate	3.04	3.01	2.98	2.95	2.92
Completion Rate	64.28	64.92	65.57	66.23	66.89
Dropout Rate	0.65	0.64	0.63	0.62	0.61
Failure Rate	5.29	5.24	5.19	5.13	5.08
Graduation Rate	97.80	97.90	98.00	98.10	98.20
Participation Rate	83.24	84.08	84.92	85.77	86.62
Achievement Rate	61.42	62.65	63.91	65.18	66.48
Enrollment (Total)	214,692	216,797	218,902	221,007	223,112

Source: Department of Education-CAR

Table 3.13
Performance Indicator Targets for Secondary Education, CAR: 2010-2015 (In percent)

Performance Indicator	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Survival Rate	70.56	71.26	71.97	72.67	73.40
Retention Rate	95.50	96.45	97.41	98.39	99.37
Transition Rate	87.23	88.10	88.92	89.84	90.63
Repetition Rate	2.45	2.42	2.39	2.36	2.33
Completion Rate	65.94	66.59	67.26	67.93	68.61
Dropout Rate	4.91	4.86	4.81	4.76	4.71
Failure Rate	8.57	8.49	8.40	8.32	8.23
Graduation Rate	93.02	93.12	93.22	93.32	93.42
Participation Rate	43.16	43.58	44.02	44.46	44.91
Achievement Rate	48.25	49.22	50.20	51.21	52.23
Enrollment (Total)	88,745	89,632	90,528	91,434	92,348

Source: Department of Education-CAR

Table 3.14
Performance Indicator Targets for ALS, CAR: 2010-2015

Performance Indicator	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Enrolment:					
Elementary	6,060	6,121	6,182	6,244	6,306
Secondary	6,888	6,957	7,027	7,097	7,168
Completers:					
Elementary	60.32%	58.32%	76.32%	84.32%	92.32%
Secondary	60.32%	68.32%	76.32%	84.32%	92.32%
A & E Test Passers:					
Elementary	22.82%	23.82%	24.82%	25.82%	26.82%
Secondary	22.82%	23.82%	24.82%	25.82%	26.82%

Source: Department of Education-CAR

2. On improving access to quality basic education and manpower development services:

- adoption by all CAR schools of a responsive and relevant education curriculum and rationalizing the “additional years to basic education” to keep up with global standards and requirement;
- ensuring total community commitment to the attainment of basic education competencies for all;
- establishing linkages with various stakeholders to coordinate and integrate educational pursuits and activities for technical, material, financial and other forms of assistance in the provision of necessary support services, infrastructure and general environmental conditions conducive to education;
- developing quality teachers and administrators and enforcing quality standards towards “improving teacher and administrator competence” and equipping them with up-to-date instructional materials;
- enforcing the equitable geographic distribution of quality educational sub-centers within the region for teacher and student access and effective educational curriculum delivery;
- developing alternative education such as the mobile multi-grade teaching concept, integrating CAR indigenous knowledge and practices, development and autonomy in school curricula and values formation.

D. Broad Program Packages

A. For Higher Education Institutions and Technical Vocational Education and Training:

The broad program packages for higher educations include both the programs and projects enrolled by the public and private institutions of higher learning (both HEIs and TVET) as well as inter-agency sectoral programs intended to further enhance existing programs currently being implemented. As contained in the regional Prime Education Master Plan, an EMD (Education and Manpower Development) Task Force shall be established by the CAR-RDC to identify CODs, COEs, DACs, and autonomous or deregulated schools at all levels for recommendation to CHED, among others. This will help facilitate accreditation and encourage schools of higher learning to continually improve, upgrade and modernize their facilities and services.

Cordillera Regional Development and Autonomy Program (CRDAP). While this program is an inter-agency and inter-sectoral RDC coordinated program, the component of the education sector is the achievement of academic freedom to further enhance quality education at all levels in the Cordilleras. Specifically for HEIs, the activities will include autonomy in opening programs and curriculum development for new courses. Integration of regional concerns such as indigenous knowledge, systems and practices, regional development and autonomy and other values formation subjects in the school curricula shall also be covered.

University Community Development Program. For CAR to improve access to quality higher education, the various provinces are encouraged to develop and establish their own University Community. This strategy intends to establish quality programs in existing HEIs or establish new HEIs in strategic locations. The establishment of the BLISTT University Community (BUC) shall serve as a model university community in the Philippines that will provide responsive and quality education. The pre-feasibility study of the BUC concept has been completed and efforts are underway to coordinate with the concerned local government units for a possible private-public partnership in the implementation of the project.

Centers of Excellence (COE) and Distinctive Area of Competence (DAC) Development Program. This program aims to promote and enforce best practices and quality standards and shall be established in key priority disciplines among HEIs and TVETs in the region.

Information Technology Development Program. This calls for the promotion and establishment of local and international linkages through the information superhighway among higher and technical-vocational education institutions. A regionwide intra-school networking/linkage shall be set up for easier and faster exchange and sharing of appropriate technological breakthroughs and information.

Instructors Capability Enhancement Program. A comprehensive training program shall be formulated to provide higher and technical-vocational education instructors with adequate training and exposure particularly in the field of sciences and technology. A tie-up with training institutions both local and international shall also be pursued.

Curriculum Development and Upgrading Program. The higher and technical-vocational education curriculum shall be upgraded and be made consistent and responsive to the actual needs of employment/industry sectors. Inherent in this shall be the integration of environmental concerns such as climate change and disaster risk reduction and gender equality concerns in the school curriculum.

Research and Extension Development Program. Higher and technical-vocational institutions in the region shall pursue extensive research and extension programs specifically in the field of sciences and information technology. These activities shall be in support to the wealth-creating key focus areas of the region such as knowledge-based industries and agri-industrial activities; greens, fruit and ornamental grocer; watershed cradle; and hydropower producer.

School-Industry Tie-up Program. A strong collaboration and partnership between the educational sector and the industry sector shall be established especially along the areas of Apprenticeship, On-the-Job Training and Job Placement.

English Proficiency Program. It is the intention of this program to support the basic education program to improve English proficiency and increase the percentage of Board Passers as well as have more teachers and students speak better English.

Scholarship Programs. This calls for the provision of adequate incentives for students to pursue scientific, engineering and technology programs and other programs related to the strategic needs of the region.

B. For basic education including Alternative Learning Systems:

Educational Reform Program. This refers to the implementation of the long advocacy of the Cordillera Education Master Plan on the “additional years to basic education” supporting the national government proposal on the “K+12 Education in the Philippines.”

Complete Elementary/Secondary Schools in Every Barangay and Municipality Program. All incomplete elementary and secondary schools will be completed that will include provision of more teachers and classrooms as necessary and not merely the increase in the teaching load of teachers.

Mobile and Multi-Grade Services Delivery Development Program. The multi-grade classes through mobile teaching will be sustained and more teaching items will be provided to open more mobile centers especially in remote areas. Continuous advocacy to generate support of local governments and other sectors of society will be a continuing activity.

Nonformal Education and Informal Education of the Alternative Learning System. Nonformal education is any organized systematic education activity carried outside the framework of formal system through the Basic Literacy Program (BLP) and the Accreditation and Equivalency System (A&E) to provide learnings to out of school youth or adults. Competencies offered are comparable to formal education system. Passers of the elementary level A&E test are qualified to enrol in the secondary formal education while secondary A&E passers are qualified to enrol in tertiary education. Informal education is a lifelong process by which one acquires and accumulates knowledge skills, attitudes and insights from daily experiences at home, at work, at play or from life itself. Example of this are the livelihood skills training and other short learning programs offered to OSYa and adults or to all interested sector of society.

Special Education Program (SPED) for Special Children Improvement Program. The SPED Program that addresses the educational needs of mentally/physically handicapped and gifted children will be expanded to cater to needs of other special children such as children in labor, abused and exploited children, and street children. SPED centers shall be established in each of the capital towns and other key areas of the region.

Teachers and Administrators' Capability Building Program. This program will consist of pre-service and in-service training components. Teachers shall be required to undergo training during summer vacation to further enhance their knowledge transfer capability. Education students and graduates shall also be provided with adequate exposure to actual teaching practice.

Instructional Materials Development and Upgrading Program. A regular curriculum review will be conducted to make the existing curriculum particularly on social sciences subjects consistent with Cordillera culture and tradition. This shall also include the integration of gender equality concerns, climate change adaptation/disaster risk reduction and other regional concerns such as Cordillera regional development and autonomy in the school curriculum.

Scholarship Programs. A substantial portion of the education budget shall be allocated for the purpose of granting scholarships to intellectually capable but financially incapable students.

School/Institution Construction, Rehabilitation and Facilities Upgrading Program. This program covers the construction of new school buildings and classrooms and/or the renovation of dilapidated school buildings. This also covers the modernization of educational facilities such as libraries, laboratories, dormitories, school sanitation facilities, classrooms, conference and training centers, sports facilities and equipment and putting up a regional center for Cordillera ethnic arts, culture, sciences and technology.

3.1.6 CAR as Major Site of Agri-Industry, Technology- and Knowledge-Based Industries

A. Assessment and Challenges

The industry sector contributed an annual average share of more than 60 percent to regional output from 2006 to 2009. These were the combined outputs from mining and quarrying, manufacturing, construction, and electricity and water sub-sectors. The

manufacturing industries dominantly operate at the Baguio City Economic Zone (BCEZ) administered by the Philippine Export Zone Authority (PEZA), Loakan, Baguio City, provided about 62 percent average annual share to the overall industry output. These industries primarily cater to world markets making them highly volatile to external economic shocks such as the global financial crisis that hit in 2008 which affected the global demand for electronics causing the sub-sector's dismal performance.

The services sector, on the other hand, contributed an average annual share of 25 percent to the economy from 2006-2009 with its private services and trade components contributing the most shares to the sector more so these are growing amid global economic recession.

Employment in the Industry and Services Sectors

The industry sector contributing the most to regional economic output employs the least number of workers compared to the other two sectors of the economy. It employs an annual average of 64 thousand workers or about ten percent of the average annual employment from 2006 to 2009. Majority or 44 percent of these workers are found in the construction sub-sector. Manufacturing sub-sector gets an annual average of 19 thousand workers or 30 percent of the total industry sector employment. Employment in the electricity, gas and water sub-sector gets the least share of five percent to the industry sector employment.

On the other hand, more than one-third or 36 percent of the region's work force is in the services sector. The employment for the sector progressed over the years reaching 247 thousand workers which accounts to 36 percent of the region's total employment in 2009. Majority of the services sector employment are in wholesale, retail trade and repair of motor vehicles sub-sector.

In terms of jobs generation, the services sector produces more jobs than the industry sector. Notwithstanding the decline in the services sector employment by six thousand in 2008, it managed to generate an annual average of almost seven thousand jobs from 2006 to 2009. This was in contrast with the industry sector with jobs generation of only two thousand jobs during the same period except 2007 where the manufacturing and mining and quarrying sub-sectors lost four thousand jobs.

Consequently, the labor productivity of industry sector is 24 times higher than AFF and 9 times higher than services sector, respectively. Of the three major sectors of the economy, AFF has the least labor productivity as it employs the most but contributes the least to output.

Moreover, due to the high volatility of the industry sector to global economic shocks, the region sees the development of local home-grown resource-based industries and the services sector which includes the IT and IT-enabled services as potential drivers for economic growth of the region.

List of Establishments

Based on the 2008 Annual Survey of Philippine Business and Industry (ASPBI) of the National Statistics Office, CAR has a total of 14,121 establishments regardless of the number of employment, with AFF sector having the lowest with only 19 establishments, followed by the industry and the services sectors with 1,585 and 12,517 establishments. This indicates direction of investments toward the services sector instead of the other two sectors.

Table 3.15
Industry and Services Sector GVA and Growth Rates, CAR: 2006-2009
(In million pesos at constant 1985 prices)

	2006	2007	2008	2009	AAGR
INDUSTRY	17,859	18,753	18,776	19,166	2.48
Mining & Quarrying	2,665	2,997	2,840	2,595	(2.63)
Manufacturing	11,629	11,495	11,386	11,362	0.71
Construction	1,956	2,407	2,572	3,170	16.14
Electricity & Water	1,608	1,853	1,978	2,038	5.78
SERVICES	6,919	7,319	7,696	8,014	5.00
Transport, Comm., Storage	582	594	611	629	2.99
Trade	1,737	1,855	1,889	1,926	3.78
Finance	129	140	142	152	5.46
O. Dwellings & Real Estate	1,040	1,065	1,095	1,106	2.61
Private Services	2,270	2,478	2,738	2,923	8.35
Government Services	1,161	1,186	1,221	1,277	3.11
TOTAL	24,777	26,072	26,472	27,179	3.19

Source: National Statistical Coordination Board

By type of establishments, wholesale, retail trade and repair services captures the highest number of establishments accounting to almost 51 percent of the total, followed by hotels and restaurants and manufacturing with 15.8 percent and 10.7 percent share, respectively.

However, for establishments with employment of not less than 20 employees, the education institutions employ the most with around 5,666 workers. About 5,321 workers are under the manufacturing sector while 4,123 workers are in the mining and quarrying sector.

In terms of value added shares, the top three sub-sectors are manufacturing, mining and quarrying and education with combined value added of 27.5 billion pesos in 2008.

IT and IT-related services

The IT industries are fast becoming a major source for CAR's economic growth. This comprises of five main business and IT service segments, namely; contact centers, medical transcription, animation, application outsourcing (application development, maintenance and management), and business process outsourcing including shared service centers for multinational companies. The business process outsourcing (BPOs) is a phenomenon that is currently taking center stage in the global business community. It is an innovative and creative way for companies to respond to globalization.

Based on the 2009 Information and Communication Technology (ICT) Survey conducted by the Department of Trade and Industry, the result showed that there were about 15 PEZA and non-PEZA call centers, 7 medical transcription companies and 6 other outsourcing companies operating within Baguio City and La Trinidad, Benguet.

While electronics registered a slowdown in production, the PEZA-registered IT companies posted a progressing trend in terms of output and employment from the period 2006-2009.

PEZA Performance

The region's exports basically come from PEZA. Electronics, the most volatile to external economic shocks, comprised of 96 percent of PEZA's total production. The slowdown in 2008 and 2009 was caused by a slowdown in demand for electronic products in the world market. The machinery except electrical industry output is the next highest output value produced by PEZA followed by IT companies. The combined outputs of the two industries make up almost four percent of the total exports. The remaining share of less than one percent are shared by the other manufacturing industries of textile, wearing apparel, plastic products, wood products and services enterprises.

Current manufacturing employment of industry is 18 thousand persons. Of these number of employed, almost half 8,512 people are with PEZA where nearly 40 percent are in the IT companies. Electronics is the second employment generator of PEZA. However, comparing to the regional employment of 679 thousand, PEZA contributes less than two percent (1.2%) to regional employment since majority or 53 percent are found in the agriculture sector while the rest are distributed in the services sector as well as the other industry sub-sectors (mining and quarrying, construction and electricity, gas and water).

The level of investments infused by PEZA consistently declined every year from 2006 to 2009 which concentrated mainly in the electronics as well as IT companies. Due to the limited land area of Baguio to provide the expansion of PEZA for new locators, the BLISTT areas are seen as potential expansion areas especially for the IT and IT-related industries.

Table 3.16
PEZA Exports by Industry Classification, CAR: 2006-2009 (In million US\$)

Industry Classification	2006	% Share 2006	2007	% Share 2007	2008	% Share 2008	2009	% Share 2009
Electronics	3,477.92	97.84	3,171.72	97.11	2,610.97	95.29	2,736.74	95.82
Machinery except Electrical	44.59	1.25	52.86	1.62	75.85	2.77	68.88	2.41
IT Companies	13.40	0.38	19.57	0.60	37.64	1.37	38.04	1.33
Others	18.92	0.53	22.06	0.68	15.56	0.57	12.49	0.44
TOTAL	3,554.82	100.00	3,266.21	100.00	2,740.02	100.00	2,856.15	100

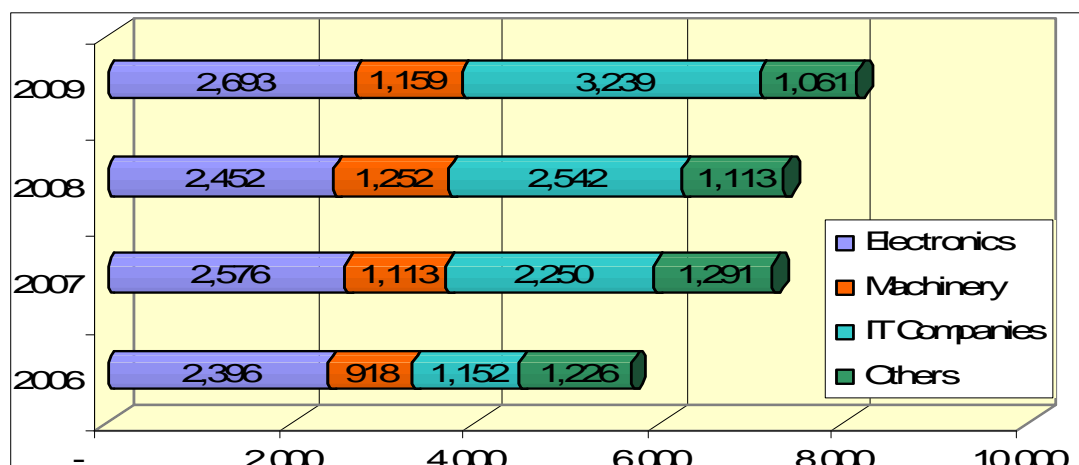
Note: Others include textiles, wearing apparel, plastic products, wood products and services enterprises.

Source: Philippine Economic Zone Authority-Baguio

Baguio's Inclusion in Top Ten Next Wave Cities

The good standing of BPO operation in the region pursues its role as the north node of Cyber Philippines. In fact, Baguio City was included (rank 9th) in the "Top Ten Next Wave Cities (NWC), 2010" in the Philippines by the Commission on Information and Communications Technology (CICT) together with the Business Processing Association of the Philippines (BPAP) and the Department of Trade and Industry (DTI). This initiative becomes a major catalyst to spur the region's economic growth. The rating is based on four major criteria; namely, talent, infrastructure, cost of doing business, business environment and risk

Figure 3.8
PEZA Employment by Industry Classification, CAR: 2006-2009



Source: Philippine Economic Zone Authority-Baguio

management (BERM). These criteria define the environment conducive for the conduct of outsourcing businesses.

While Baguio got certainly above average in terms of talents or skills, Davao got an almost 100 percent rating. This calls for Baguio City to accelerate increase of readiness of its I.T. related graduates for locally available jobs. Further, the City to partner with other academic institutions and training schools to strengthen the skills/capabilities of the graduates on IT-related jobs, specifically in the BPO industry.

Baguio fared well in infrastructure. The presence of adequate power, telecommunications facilities, presence of real estate, good roads and an airport although not having any international transport service, altogether contributed to Baguio's high rating for infrastructure consideration. However, the City should look into establishing on a regular basis, as appropriate, having air transport both international, as well as domestic flight services. For the cost of doing business consideration, i.e., space rentals and power rates, etc., the city is considered relatively a high cost alternative compared to other NWC's top ten preferred areas.

The absence of ICT Council in the City and its high vulnerability to natural disasters affects its assessment rating on the BERM criterion. With the presence of PEZA sites causes the City to provide zones, parks, buildings attractive to I.T. locators. However, with the limited land area of the City for PEZA expansion, the adjacent municipalities of La Trinidad, Itogon, Sablan, Tuba and Tublay of the province of Benguet should be explored as potential expansion areas subject to feasibility assessment. Added consideration is the organization of Baguio ICT Council to attend to IT concerns in the City. The Council shall be comprised of academe, telcos, real estate providers, power providers, chamber of commerce and concerned private sector including government representatives.

B. Goal/Objectives

CAR shall be the preferred site for agri-industry, technology- and knowledge-based industries.

Objectives:

- a. To increase number of local MSMEs and knowledge-based industries and their production.
- b. To increase MSMEs' employment absorption.
- c. To increase regional investments.
- d. To increase local exports and expand locally produced goods and services market reach.
- e. To increase number of industry technology solutions developed.
- f. To improve MSMEs and knowledge-based industries' productivity.

C. Strategic Interventions

1. Agribusiness clustering.

By definition, agribusiness cluster is comprised of industries supporting farm production (animal and crop), farm-related industries and indirect agribusiness which act as one body to achieve economies of scale and strengthen networking with large markets.

For the region, agribusiness clustering shall be done by type of business along enterprise operational requirements. The intent is to render enterprise operations cost-efficient access to raw materials, inputs including output markets - an approach of reducing the cost of doing business thus enterprises become profitable. This shall be carried out inter- and intra-regional/provincial/municipal area jurisdictions.

2. Product development, prototyping and promotion.

Aggressive market research shall be pursued to gain insights on consumers' preferred products. Consumers' product ideas match with available local supply of raw materials prompt development of new products and subsequently its prototyping, promotion for commercial production. Techno-managerial assistance to entrepreneurs in terms of production/packaging technology, investment financing, and market referral assistance shall be provided by regional line agencies, i.e., DTI, DOST, academe, etc. The product lines for development shall be sector-focused and aligned with the resource comparative advantage of each LGU. Major industrial craft for promotion include bamboo craft for Abra, banana for Apayao, semi-temperate fruits and vegetables and cutflowers for Benguet, woodcraft for Ifugao, coffee packing for Kalinga and Mountain Province and loom weaving also for Mountain Province and selected OTOP products from various municipalities.

3. "Roadmapping" the region for priority technology- and knowledge-based industries.

CAR is the north node of Cyber Philippines. Requirements supportive to the establishment of technology and knowledge-based industries in the region shall be instituted and continuously improved. This promotes the region become the preferred destination for technology- and knowledge-based industries.

The region shall conduct an inventory of and map the existing IT and IT-enabled sites. The sites in the Baguio-La Trinidad-Itogon-Sablan-Tuba-Tublay (BLISTT) area shall be promoted as potential areas for technology- and knowledge-based industries' expanded operations. Among others, Business Process Outsourcing operation, initially engaged in the customer care and technical support services now moving to the high-end undertakings, i.e., animation or software development, etc. Other potential IT industry priority sectors for investment promotion include customer

contact centers or call centers, business process outsourcing, software development, medical transcription, and animation. Space requirement including support facilities/utilities for these industries shall have to be mapped out and allocated over the planning period.

Technology-based industry locators in CAR catering to the outsourcing needs of multinational companies such as Moog Controls Corporation, a worldwide designer and manufacturer of motion and fluid controls and control systems for applications in aerospace, defense, industrial and medical device markets, shall likewise be assisted. These industry locators provide employment opportunities to locals and other pecuniary benefits to the region. Their continued existence in the region is encouraged.

4. Promote and provide support for the establishment of MSMEs.

Investment incentives shall be provided to MSME entrepreneurs. In addition, techno-managerial assistance shall be extended to these entrepreneurs. These assistance include subsidized credit, production/processing technology, product promotion and marketing support services, etc. LGUs, DOST, DTI and academe shall be tapped for the provision of extension services, i.e., product development, prototyping, packaging and labeling, etc., to make their products globally competitive. Continuing R & D in support to local industrial development shall also be carried out.

5. Reduce cost of doing business and promote investments.

Implementation of incentive package to investments by the LGUs shall be encouraged. In addition, administrative requirements in availing permits and clearances in putting up business enterprises shall be streamlined/ simplified. Complimentary services for market referrals and industry raw material sources shall be provided. Along with these is the provision for investments support facilities and utilities, i.e., roads, transportation and communication lines, water and power services and these shall be continuously improved. The LGUs are encouraged to engage in private-public partnership schemes in the provision of these support facilities/utilities. Continuing capacity building on project development shall be provided to RLAs/LGUs to enable them to develop their investment-ready portfolios to encourage more public-private partnership projects in relation to industrial development.

A peaceful and secured environment in the region shall also be maintained.

6. Enterprise cooperative development.

This intends to group local entrepreneurs to pool their resources together to come up with products competitive with the local as well as global market. Technical support shall be provided by regional line agencies and LGUs in line with entrepreneurial capacity building and project development.

D. Broad Program Packages

Industrial Sites Development Program. This program intends to tap potential locations for MSMEs and IT and IT-related industries expansion that are cost-effective and give due consideration to the fragile ecosystem of the region. Industrial sites development shall gear towards undertakings that will not stress the ecological balance in areas concerned through the implementation of Environmental Impact Assessment (EIA) system.

Investment Facilities/Utilities and Services Support Program. This refers to the provision of necessary facilities and services support that would serve the development of industries of the region. The support services include provision of cost-efficient transportation and communication facilities (including internet communication facilities), water and power utilities and other related services.

Enterprise Cooperative Development Program. This covers specific programs/projects/activities that would strengthen cooperatives of small enterprises through capacity building and provision of technical assistance to enable them become competitive at the local as well as global market.

Product Development and Marketing Support Program

- Technology, product development, prototyping, laboratory testing and packaging, labeling and promotion support services to entrepreneurs
- Marketing and promotion program including web-based marketing
- OTOP and souvenir products development support to rural areas with undeveloped product potentials
- Financing and technical assistance programs on MSMEs
- Develop technology-based entrepreneurship
- Training and livelihood development programs to local entrepreneurs

Investments Promotion Program

- Packaging of ready-propositions for investments
- Crafting of local investment incentives schemes for investors
- Local resource-based enterprises development, e.g., forest-based industry
- Capacity building on investment promotion and program/project development

Technology- and Knowledge-Based Industry Development Program

- Technology- and knowledge- based training programs
- Industry-academe collaboration in producing related skilled graduates to ensure steady pool of qualified workers for the immediate, medium and long term growth and development requirements of the IT industry.
- Infrastructure and facilities support development

3.2 Requisite Key Focus Areas for Regional Development

3.2.1 Physical Integration

A. Assessment and Challenges

CAR's banner project—the Cordillera Roads Improvement Project (CRIP) has significantly advanced in the past planning period 2004-2010 with several of CRIP's key road components already completed, ongoing or in the pipeline. Despite this, CAR's transportation system continues to be difficult, inadequate and among the worst nationwide. Also, the goal of physically integrating the region by interconnecting all the provincial capital towns and key growth centers in and out of the region through an affordable, safe and reliable transportation system is yet to be significantly realized.

On the other hand, remarkable progress was noted in the area of telecommunications. Coverage for cellular mobile service has tremendously increased in the past Plan period along with the rise in internet connectivity among the provinces.

Transportation

Significant gains in regional mobility but CAR's road system still the worst in the country. Notable accomplishments in the implementation of the CRIP include the newly rehabilitated Benguet-Nueva Vizcaya Road (Baguio-Kayapa Section), a 66-kilometer stretch that forms part of the region's southern east-west lateral connecting Regions I and Region II via Baguio. This section brought closer to Baguio the remote but tourist-drawing municipalities of Bokod and Kabayan in Benguet as well as the world-famous Banaue Rice Terraces in Ifugao. Ongoing and almost reaching completion is the rehabilitation of the region's trunk line particularly the 50-kilometer Mt. Data-Bontoc and 150-kilometer Bontoc-Lubuagan-Tabuk sections. Also in progress is the 50-kilometer Bontoc-Banaue Section. Once completed, the capital towns of Bontoc in Mountain Province, Lagawe in Ifugao and Tabuk in Kalinga shall be linked to Baguio through a shorter and more comfortable travel.

Also currently underway is the rehabilitation of two interregional roads—the substantially completed 22-kilometer Abatan-Mankayan-Cervantes and the 25-kilometer Sabangan-Cervantes corridors which when finished, shall enhance interregional trade between CAR and the Ilocos, boosting agriculture, trade and tourism industries while accelerating the delivery of basic goods and services in the remote barangays in the municipalities of Buguias and Mankayan in Benguet and Sabangan, Bauko and Tadian in Mountain Province. These interregional roads may also serve as alternate routes from CAR to the Ilocos region especially during the rainy season when the main regional trunkline, the Halsema Road, is temporarily closed due to landslides.

An increase in the percentage of paved national roads was noted as a result of these developments. At present, of the region's 1,877 kilometers, 41 percent has been paved, rising from 29 and 36 percent in 2004 and 2007, respectively (see Table 3.17 and Figure 3.9). Notwithstanding this, CAR's paved roads record is still below the country's average of 75 percent, Region 1's 94 percent, and Region's 2's 72 percent. Across provinces/city, Baguio registered the highest percentage in paved national roads at 100 percent, followed by Benguet at 65.81 percent, while the northern provinces of Apayao and Kalinga obtained a low 16.30 and 26.50 percent, respectively.

Table 3.17
Existing Road Surface Condition by Province/City, CAR: 2009 (In kilometers)

Province/ City	Existing Road Surface Condition					Paved		Unpaved	
	Concrete	Asphalt	Gravel	Earth	TOTAL	Km	%	Km	%
Baguio City	66.282	25.822	0	0	92.104	92.104	100.00%	0	0.00%
Abra	57.971	26.927	72.216	0.995	158.109	84.898	53.70%	73.211	46.30%
Benguet	244.537	34.116	172.996	0.009	451.658	278.653	61.70%	173.005	38.30%
Ifugao	112.595	3.795	112.077	4.69	233.157	116.39	49.92%	116.767	50.08%
Apayao	24.867	0.814	203.227	2.531	231.439	25.681	11.10%	205.758	88.90%
Kalinga	84.418	0	314.781	1.463	400.662	84.418	21.07%	316.244	78.93%
Mountain Province	76.297	14.077	220.354	0	310.728	90.374	29.08%	220.354	70.92%
CAR	666.967	105.551	1095.651	9.688	1877.857	772.518	41.14%	1105.339	58.86%

Source: Department of Public Works and Highways-Cental Office

With the anticipated completion of the ongoing road sections in the CRIP, the region is left with the challenge of directly interlinking the provincial capital towns of Bangued in Abra and Kabugao in Apayao with Baguio City and the BLISTT via a safe, fast and affordable road network.

Presently, the Abra-Kalinga Road is in the pipeline for Official Development Assistance (ODA) financing while a Korean-supported feasibility study through KOICA (Korean International Cooperation Agency) has recently been completed for the rehabilitation of the Tabuk-Pinukpuk-Conner-Kabugao section.

CAR roads are prone to road cuts/closures and accidents. CAR roads are highly susceptible to road cuts/closures and accidents. The roads in CAR incurred the highest in the annual number of road closures at 981 from 2004-2005, affecting some 238 kilometers of national roads and resulting in roughly Php1.171 billion in losses. Moreover, CAR roads are accident prone with the region placing 6th nationwide in 2007 in road accident frequency at 312, with eight incidents or 3 percent traced to road defects.

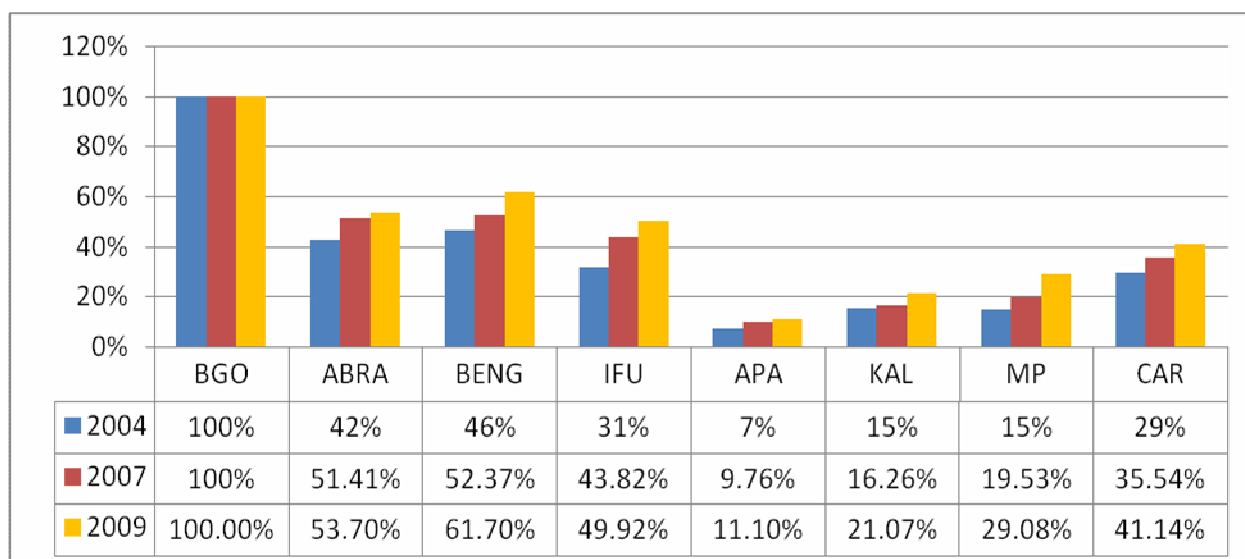
State of national road bridges is among the worst in the country. With respect to national road bridges, CAR ranks 2nd nationwide in the magnitude of temporary and unreliable national bridges numbering 75 or 24.35 percent, compared to the national average of 9.98 percent and Regions 1 and 2 at 3.10 and 5.26 percent, respectively.

National infrastructure policies and standards are inappropriate to local conditions. National infrastructure policies and standards are inclined to favor lowland regions over mountainous upland areas. With respect to maintenance, the Department of Public Works and Highways (DPWH) uses the Equivalent Maintenance Kilometer policy that allocates a standard maintenance cost per kilometer on all roads in the country irrespective of location, and to the detriment of the Cordilleras. It is a known fact that maintenance in mountain roads is much more expensive than in lowland areas because of additional slope protection facilities, bio-engineering stabilizers, more sophisticated drainage structures, factors that are aggravated by the region's vulnerability to rain-induced landslides with CAR receiving the most rainfall nationwide at 500-3,500 mm annually. It is worth noting that CAR receives the most annual rainfall nationwide at 500-3,500 millimeters. Furthermore, national policies classify almost all CAR roads as "Secondary National Roads (SNR)" despite their vital role in national development, thus rendering CAR roads at the backseat in terms of priority funding. Roads classified as "Other Roads of Strategic Importance" like the Baguio-Bontoc Road, are given more attention for urgent improvement over SNRs (see Figure 3.10).

Inadequate land transport facilities and generally light traffic flow on Cordillera roads. A basic requirement for an efficient and effective transportation system is the availability of public conveyances and motor vehicles sufficient enough to ferry and move people, goods and services in and out of the region. In terms of land transport service, CAR lies within the ranks of the least served regions, with a motor vehicle density of 47 vehicles per 1000 population in 2007, way below the country's average of 70 and that of Regions 1 and 2 of 77 and 73, respectively.

Likewise, with the exception of the Baguio and La Trinidad Roads and the Bangued-Nueva Era Road, DPWH reveals a generally very Light to Light Traffic Flow on most Cordillera roads. Accordingly, these urban roads are characterized with a High Traffic Flow with an annual average daily traffic (AADT) ranging from 8,001-20,000 in 2009. Meanwhile, Medium Traffic Flow with an AADT of 2,501-8,000 was recorded along Kennon Road, Marcos Highway, Naguilian Road, Tabuk-Rizal Section, Lagawe-Bagabag Road, Pudtol-Luna Road, Abra-Kalinga Road, among others. Across provinces, more or less 75 percent of the motor vehicles plying the region are registered in the Baguio-Benguet area with the rest of the fleet

Figure 3.9
Status of Paved National Roads by Province/City, CAR: 2004, 2007 and 2009 (In percent)



Source: Department of Public Works and Highways-Cental Office

servicing the other five provinces. The relatively Light Traffic Flow on the region's roads results from among others the bad and poor condition of existing roads.

Absence of a commercial flight in the region and inefficient use of the Loakan Airport. In terms of air travel, despite recent air navigational facility upgrades at the Loakan Airport, Baguio City, a premier tourist destination, is yet to be serviced by a permanent commercial flight for the Manila-Baguio-Manila route. Moreover, flights to and from other key destinations are yet to be established in support of the City's role as the country's summer capital and its being host to multi-national companies and ICT-related businesses. Most international tourists skip Baguio in their itinerary due to accessibility concerns. The five to seven hour long drive to reach the City from Manila is very tiring and is not reasonable especially for international tourists.

Disparity in the provision of rural roads and urban transportation facilities and the need to build local capability for alternative transport systems (ATS) development and management. In terms of local access, only 12 percent of CAR's provincial roads are classified as good by the DILG. The rest are from fair to bad, lagging behind the national average as well as those for Regions 1 and 2 levels at 16, 46 and 25 percent, respectively. Also, year round access in several municipal poblaciones and a good number of barangays in CAR is yet to be ensured. On the other hand, urban roads as well as pedestrian facilities in Baguio City and La Trinidad are often congested with motor vehicles and pedestrian traffic. These issues are compounded by the lack of local capability in the development and management of alternative transport systems including water-based transport, cable/tramline/ropeway facilities, air transport services, among others.

Communications

Substantial improvements in telecommunications service. In terms of communications, the Cellular Mobile Telephone (CMT) service coverage in 2009 greatly improved with 306 operational cellular sites erected as against 262 in 2008, increasing municipal CMT service coverage from 60 percent in 2004 to 97 percent in 2008 and barangay service coverage reaching over 86 percent in 2008 (Tables 3.18 and 3.19).

Table 3.18
Cellular Mobile Telephone Service Coverage by Province/City, CAR: 2008

Province/City	SERVICE COVERAGE					
	TOTAL NUMBER		Municipality		Barangay	
	Municipality	Barangay	No.	%	No.	%
Abra	27	303	26	96.30%	276	91.09%
Apayao	7	133	7	100.00%	93	69.92%
Baguio	1	129	1	100.00%	129	100.00%
Benguet	13	140	13	100.00%	130	92.86%
Ifugao	11	175	10	90.91%	136	77.71%
Kalinga	8	152	8	100.00%	122	80.26%
Mountain Province	10	144	10	100.00%	128	88.89%
CAR	77	1,176	75	97.40%	1,014	86.22%

Source: National Telecommunications Commission-CAR

Despite these outstanding accomplishments, the communications sector is still beset with issues on social acceptability, difficult access and right-of-way conflicts, thereby slowing down the expansion of CMT service coverage.

In the area of broadband connection, internet access has been made possible through the rise in the number of internet providers like PLDT-DSL, SMART/SMART BRO, GLOBE/GLOBE TATOO, BAYANTEL, and DIGITEL among others. In 2009, 10 Community eCenters currently operated by the Commission on Information and Communication Technology (CICT) and local government units were established providing encoding, printing, scanning, compact disc burning and tutoring services. Community eCenters were put in place: three in Benguet (Kabayan, Kapangan and Tublay), one in Abra (Villaviciosa), one in Kalinga (Tabuk), four in Ifugao (Alfonso Lista, Hungduan, Lagawe and Tinoc), and one in Mountain Province (Bontoc). Notwithstanding these accomplishments, interconnection issues among telecommunication providers are yet to be resolved.

State-of-the-art information infrastructure (including fiber optics, micro wave radio, next generation network) in the BLISTT area is also being established to cater to the growing needs of the BPO industry, e-business, e-government propositions and other electronic-based business outfits.

With respect to television and radio, there are 26 operational cable television (CATV) stations and 31 radio broadcast stations registered in 2008 covering most provinces. AM and FM radio stations however are yet to be provided to serve the provinces of Ifugao and Apayao especially in times of disaster.

B. Goal/Objectives/Targets

The KFA on Physical Integration aims to attain enhanced inter and intra regional access and mobility through a reliable and efficient transportation network and communications system accelerating the delivery of basic goods and services in the countryside while boosting regional trade and commerce, industry and tourism. This shall be carried out by directly linking CAR's provincial capitals and key growth centers in and out of the region through a reliable transportation system as well as by adequately providing dependable and disaster-resistant support information and communications infrastructure.

Table 3.19
Number of Cellular Sites by Province/City, CAR: 2009

Province/City	No. of Cities	No. of Mun	No. of Bgys	OPERATORS			TOTAL	STATUS	
				GLOBE	SMART	SUN CELLULAR		Operational	Non-Operational
Abra	0	27	303	25	21	1	47	44	3
Apayao	0	7	133	10	7	0	17	17	0
Baguio	1	N/A	129	25	46	29	100	100	0
Benguet	0	13	140	32	36	17	85	83	2
Ifugao	0	11	175	15	8	3	26	26	0
Kalinga	0	8	152	5	9	3	17	16	1
Mountain Province	0	10	144	10	11	0	21	20	1
TOTAL	1	76	1,176	122	138	53	313	306	7

Source: National Telecommunications Commission-CAR

At the end of the planning period, the following shall have been attained:

1. Increased the percentage of paved national roads from 41 percent in 2009 to 70 percent by 2016; increased the percentage of permanent road bridges from 75 to 100 percent; reduced the incidence of road closures by 50 percent and accidents by 50 percent.
2. Improved the distribution of and access to motor vehicles and public utility vehicles (PUVs) across provinces/LGUs.
3. Improved interregional access through air travel made possible by upgrading the facilities of the Loakan Airport and installing the Instrument Landing System to ensure safety during inclement weather as well as restoration of a permanent commercial flight for the Baguio-Manila-Baguio route, and establishing other viable commercial flights from Baguio to other local destinations.
4. Enhanced urban and rural mobility by increasing the proportion of good roads by 30 percent in 2016 and implementation of project-ready alternative transport systems like the Apayao River Transport System, Baguio Trolley Bus System, among others.
5. Expanded the CMTS barangay service coverage to 100 percent, municipal internet connectivity to 100 percent, Community e-Center service coverage in 50 areas more; radio and CATV service to 100 percent and establishment of AM and FM radio stations in Ifugao and Apayao.

C. Strategic Interventions

1. Fast track completion of the two major sections of the Cordillera Roads Improvement Project (Mt. Data-Bontoc-Banaue and Bontoc-Lubuagan-Tabuk sections).

Financed from local funds (GOP-SONA), these major ongoing projects i.e., Baguio-Bontoc-Lubuagan-Tabuk Section is part of the Cordillera Trunk Line Road which when completed shall directly connect the capital towns of Tabuk, Kalinga and Bontoc, Mountain Province together. The Bontoc-Banaue Section on the other hand shall improve the linkage between the capital towns of Lagawe, Ifugao and Bontoc, Mountain Province and promote tourism along that circuit.

2. Vigorously push for the rehabilitation, upgrading, improvement of the rest of the CRIP especially the regional trunkline road, major laterals (inter-regional roads) and other critical national road sections directly linking together the provincial capital towns of Bangued in Abra and Kabugao in Apayao and other key growth areas (i.e., production areas, tourism sites) with Baguio City and the BLISTT area.

Priority roads for immediate funding are the Kalinga-Abra Road (Tabuk-Balbalan-Bangued Section) and the Tabuk-Pinukpuk-Conner-Kabugao Section. When completed, this shall improve access to the capital towns of Bangued, Abra and Kabugao, Apayao through the Cordillera road system.

3. Press for the adoption of sound, safe, disaster-resistant and sustainable engineering technologies consciously integrating roadway aesthetics to enhance local scenery and landscape.

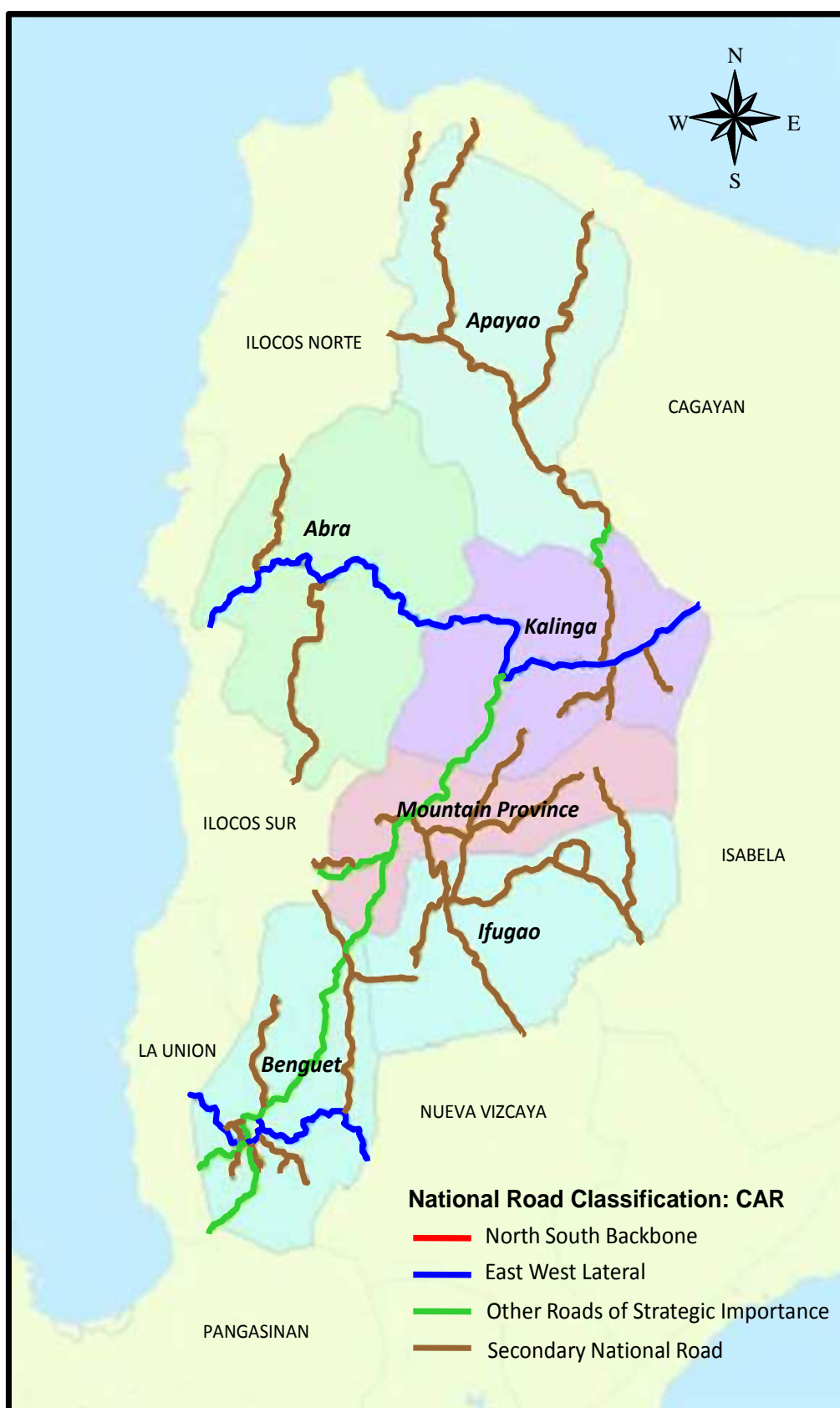
Supporting the National Strategic Framework on Climate Change, explore other engineering technologies best suited to the region's environment and local conditions to ensure stability and safety of infrastructure facilities. Such technologies include road tunneling, pavement cantilevering, viaducting, rock shedding, building of one lane roads with adequate passing bays, among others. Moreover, to enhance the local tourism industry, integrate roadside ornamental tree-planting, bio-engineering works, hillside/roadside flower gardening and the building of view decks, rest areas, lodging houses, restaurants, filling stations, as appropriate, as adaptable to local conditions and in conformance with existing government policies.

4. Collaborate with LGUs for the expedient resolution of road right-of-way issues to ensure smooth project implementation.

Road building and rehabilitation have been hampered by right-of-way issues. DPWH shall partner with LGUs to fast track the resolution of right-of-way conflicts.

5. Push for the legislative agenda on the conversion and upgrading of all Secondary National Roads into the level of Other Roads of Strategic Importance, and provincial roads into Secondary National Roads to secure national attention and priority funding while proposing amendments to existing DPWH policies to suit local conditions. National policies that tend to favor the lowlands over upland areas include standard highway designs, Equivalent Maintenance Kilometer (EMK) policies, Highway Development Management – 4, budget allocation criteria, among others.
6. Advocate for the rationalized allocation of PUVs resulting in an equitable distribution of traffic flow among CAR provinces, vigorously push for public-private partnerships in the provision of PUVs especially in unserved rural communities, as well as encourage investments for roadside amenities to service motorists and commuters.
7. Upgrade and modernize the facilities of the Baguio Airport ascertaining its safety, reliability and efficiency at all times, installing an appropriate Instrument Landing System to ensure safety during inclement weather.
8. Rehabilitate/improve/upgrade local roads in rural and urban areas to include barangay, municipal/city and provincial roads and when deemed appropriate, partnering with private entities such as telecommunication groups, IPPs, mining companies to improve local access in exchange of tax incentives. This also includes pushing for projects that will decongest urban roads.

Figure 3.10
National Roads by Class, CAR: 2009



9. Build the capability of RLAs and LGUs in developing appropriate ATS to improve urban and rural mobility focusing on the development and management of tramline/cable systems, water-based systems and air transport facilities.
10. Advance/develop appropriate and viable alternative transport systems adaptable to the uniqueness of the region. Explore the possibility of building a tramline-based urban transport system in Baguio to ease traffic congestion and pollution.
11. Aggressively advocate for the expansion of information infrastructure investments in the region to support e-commerce, e-government, BPOs and other ICT-related activities by:
 - a. Encouraging LGUs and other entities to collaborate and work out a system for the establishment of one-stop-shops or similar facilities to
 - b. speed-up processing and release of clearances, permits, right-of-way acquisitions and other requirements.
 - c. Legislating tax incentives to promote telecommunications infrastructure investments and other necessary support facilities.
12. Campaign for the resolution of interconnection issues among the major telecom providers. 12. Seek to improve and ensure the dependability of the information infrastructure in the BLISTT to support Baguio's bid as first among the country's Next Wave Cities.
13. Advocate the use of citizen's band radios as alternate modes of communication especially during disasters while updating/amending policies and regulations on radio use.

D. Broad Program Packages

Cordillera Roads Improvement Project. This includes several road components consisting of the Regional Trunk Line Road, East-West Laterals, Other Roads of Strategic Importance, Secondary National Roads, Interregional Roads, Tourism Roads and others. The suggested priority activities are given in Figure 3.11.

National Road Bridges Improvement Project. This focuses on improving/replacing the 74 Bailey Bridges and 1 Timber Bridge along CAR national roads into permanent bridges made of concrete or steel.

Pubic Utility Vehicle (PUV) Franchise Rationalization Program. The aim of this project is to review the existing franchises and redistribute/re-allocate as practicable to attain a balanced and equitable PUV distribution especially for the rural areas.

Baguio City/BLISTT Urban Transport Improvement Project. This includes urban transport improvement projects such as transforming sidewalks into walkable areas, construction of bicycle lanes, tramline system or cable system for urban transport, pedestrianization, etc.

Baguio Airport Modernization Project and Intensive Marketing Program. This aims to upgrade the facilities at the Loakan Airport to allow safe movement andmanuevering of aircarfts even during inclement weather. It also includes an intensive marketing program to encourage various air carriers to service the City other key destinations in the country.

Local Roads/Rural Roads Improvement Project. This project intends to pave barangay, municipal, provincial and other local access roads for greater mobility in the countryside. Priority shall be given to the yearround access of municipal poblaciones and barangays.

Capability Building Program for the Development and Management of Alternative Transport Systems (ATS). This project includes trainings and capacitation programs on project development and packaging, financing, and operation and maintenance for other modes of transport like water, air and other nonconventional systems such as tramlines, cables, urban pedestrian lanes/walkways, among others.

Roads Upgrading Program. This program pertains to the upgrading/elevation of existing Secondary National Roads to the status of Other Roads of Strategic Importance or higher. Priorities for conversion are inter-regional corridors and tourism-related roads. (Figure 2 shows the existing road classification in CAR). The roads that may need to be upgraded are included but not limited to the following: (1) Abra-Cervantes Road; (2) Abra-Ilocos Norte Road; (3) Kabugao-Pudtol-Luna-Cagayan Boundary Road; (4) Abbut-Conner Road; (5) Conner-Kabugao Road; (6) Claveria-Calanasan-Kabugao Road; (7) Apayao (Calanasan)-Ilocos Norte Road; (8) Gurel-Bokod-Kabayan-Buguias-Abatan Road; (9) Baguio-Itogon Road; (10) Itogon-Dalupirip-San Manuel Boundary Road; (11) Acop-Kapangan-Kibungan-Bakun Road; (12) Mt. Province-Ifugao-Nueva Vizcaya Road; (13) Banaue-Hungduan-Benguet Boundary Road; (14) Banaue-Mayoyao-A. Lista-Isabela Boundary Road; (15) Junction Potia-Mt Province Boundary; (16) Lubuagan-Batong Buhay-Abra Boundary Road; (17) Bulanao-Paracelis Road; (18) Nambaran-Isabela Road; (19) Tabuk-Banaue via Tanudan-Barlig Road; (20) Mt. Province Boundary-Calanasan-Pinukpuk-Abbut Road; (21) Otucan Diversion Road; Mt. Province-Ilocos Sur via Kayan Road; (22) Junction Talubin-Barlig-Natonin-Paracelis-Callacac Road; (23) and Mt. Province-Ifugao Road (Kiling-Paracelis Section).

This program also covers the conversion of strategic provincial roads to the category of Secondary National Roads.

ICT Expansion Program. This includes erecting additional cellular sites to cover the whole region, expansion of more secure and disaster-resistant broadband connectivity, establishment of more Community e-Centers to cover all municipalities in the region.

Communications Development Program. The project includes the expansion of CATV and radio stations service coverage on all municipalities as well the establishment of radio stations in Ifugao and Apayao. Other communications program such as improvement of postal services is also covered.

3.2.2 Indigenous Culture and Knowledge

A. Assessment and Challenges

The Cordillera region's priority development agenda focusing on the protection of lands and natural resources and the continuing desire for self-governance are the basic essence of indigenous peoples rights as embodied in the Indigenous Peoples Rights Act (IPRA) : (a) rights to ancestral lands and domains; (b) rights to self governance and empowerment; (c) rights to social justice and human rights; and (d) rights to cultural integrity.

Thirteen years since the passage of IPRA in October 1997, major breakthroughs have yet to be done especially on areas of significant concerns among the IPs especially on ancestral lands and territories and the right to self governance and empowerment.

The IPRA recognizes the right of the IPs and ICCs to their ancestral lands and domains based on the doctrine that the land they occupy has been held, occupied and utilized since time immemorial by them. This recognition of ancestral land claims can be determined in terms of the issuance of CADTs (certificate of ancestral domain titles) and CALTs (certificate of land titles) and the following are the region's highlights of accomplishment:

Status of CADT processing and issuance. The total land area covering the ancestral domains in the country is estimated at 7.7 million hectares or roughly 25 percent of the total land area of the Philippines. For the Cordillera region, ancestral domains occupy 96 percent of the total land area based on initial identification by NCIP-CAR. Practically most of the provinces in the region are ancestral domain areas.

In terms of the total number of initially identified domain areas, the total for CAR is 111 with 62 ancestral domains within the provinces of Abra, Apayao, Benguet, Ifugao, Mt. Province and Baguio. Kalinga has 48 'bugis' or domain areas eligible for CADT application. So far, only 20 CADTs were already approved giving a percentage accomplishment of 17 percent. This gives a total of 92 CADTs yet to be issued for the whole region.

Nationwide, a total of 138 CADTs were issued and of these 20 CADTs or 14 percent were in CAR. Most of the CAR provinces have very minimal CADT issuances except for Benguet with 87 percent accomplishment due mainly to the National Power Corporation-Funding Assistance for Benguet.

Status of ADSDPP formulation. The ADSDPP (Ancestral Domain Sustainable Development and Protection Plan) is a mechanism to ensure that indigenous peoples' knowledge and systems remain intact amidst the rapid intrusion of development activities in the region. The ADSDPP operationalizes the IPRA provision concerning the right of the IPs to develop and manage the land and natural resources within their ancestral domain. As such, the ADSDPP is a powerful tool to gauge whether proposed development projects such as responsible mining, hydro power plants, among others are viable, and more importantly acceptable to the IP communities.

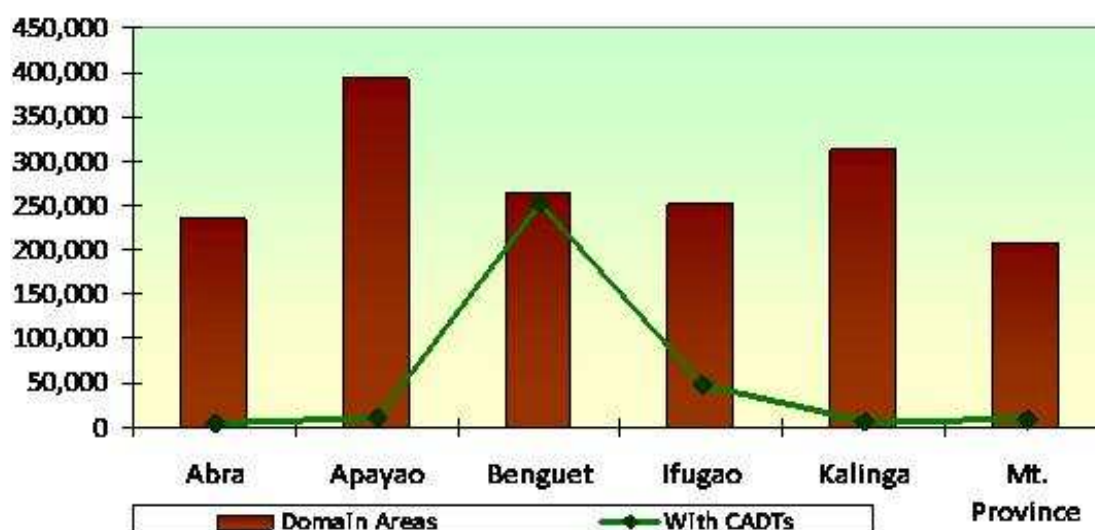
Table 3.20
Ancestral Domain Areas by Province, CAR: As of May 2010 (In hectares)

Province	Total Area	Ancestral Domain Area*		With CADTs	
	(Has)	Area (Has)	% Distribution	Area (Has)	% Distribution
Abra	397,555	294,191	74	3,918.70	1.15
Apayao	392,790	392,790	100	11,268.03	2.87
Benguet	265,538	265,538	100	251,492.03	94.71
Ifugao	251,778	251,778	100	47,187.53	18.74
Kalinga	311,974	311,974	100	7,112.35	2.28
Mountain Province	209,733	209,733	100	9,476.53	4.52
Baguio City				146.42	
CAR	1,829,368	1,726,004	95.6	330,601.58	19.33
Philippines	30,000,000	7,700,000	25.6	3,584,123.73	46.55

*NCIP-CAR's initial estimates of ancestral domain areas

Source: National Commission on Indigenous Peoples-CAR

Figure 3.12
Domain Areas with CADTs Issued by Province, CAR: As of May 2010



The estimate number of ancestral domains for the whole region was 111 indicating that a total of 111 ADSDPPs have to be formulated. So far, only 29 ADSDPPs were completed giving a percentage accomplishment of 29 percent. For the next Plan period, the NCIP is targetting 48 ADSDPPs to be formulated to cover at least 68 percent of the total domain areas.

A milestone noted in ADSDPP preparation is the support extended by the local officials at the LGU level. For provinces with completed ADSDPPs such as Abra and in most parts of Benguet, the ADSDPPs were adopted by the LGUs and incorporated in their municipal development plans. This ensures that the LGUs' development funds would flow into the implementation of programs and projects identified in the ADSDPPs.

The greater challenge however in ADSDPP formulation is the need to harmonize the ADSDPP with existing LGU and other sectoral plans to ensure a concerted policy in the protection and sustainable utilization of land and natural resources as well as IKSPs. This entails the need for a wider stakeholders' participation in the ADSDPP formulation and implementation process not only among the NCIP and the IP communities but also the LGUs and other concerned agencies such as DENR, DAR, DA, DILG and other stakeholders.

Table 3.21
Status of CADT Issuances by Province, CAR: As of May 2010

Province	Number of Ancestral Domain*	CADT Approved	Percent Accomplishment
Abra	17	1	6%
Apayao	8	1	13%
Benguet	15	13	87%
Ifugao	11	2	18%
Kalinga	48	1	2%
Mountain Province	11	1	9%
Baguio City	1	1	100%
CAR	111	20	17%
Philippines		138	

*Number of domain areas initially identified by NCIP CAR

Source: National Commission on Indigenous Peoples-CAR

Table 3.22
Status of ADSDPPP Formulation and Implementation, CAR: As of May 2010

Province	Ancestral Domains*	No. of ADSDPP Formulated	Percent Accomplishment
Abra	17	7	41%
Apayao	8		0%
Benguet	15	13	87%
Ifugao	11	3	27%
Kalinga	48		0%
Mountain Province	11	5	45%
Baguio City	1	1	100%
CAR	111	29	26%

*Number of domain areas initially identified by NCIP CAR

Source: National Commission on Indigenous Peoples-CAR

Status of CALT processing and issuance. In terms of the issuance of CALTs, CAR is far advanced than the rest of the other regions. NCIP records showed that as of 2010, 258 CALTs were issued nationwide and 224 CALTs or 87 percent of these are in CAR. In fact, for the whole of the Luzon area covering Regions 1 to 5 and CAR, 224 CALTs were issued and all of these are in CAR.

Still, these significant achievements are far below the target land tenure instruments (LTIs) that the NCIP ought to deliver. The 224 CALTs issued for CAR represents only 74 percent of the total targeted CALTs for the past planning period.

It should also be noted that most of the CALTs issued were in Baguio City and Kalinga. The other CAR provinces have no or minimal CALT issuances primarily because of the lack of information on the need for and the process of land titling. Very few applications are being filed at the provinces as compared to Baguio City. Hence, current efforts by the NCIP are focused on information dissemination on the need, the processes involved and the requirement for CADT and CALT processing. The RDC-CAR also took the cudgels and coordinated the activities and resources of NCIP, DA, DENR and the Register of Deeds (ROD) to maximize the implementation of their mandates on land titling.

Table 3.23
Status of CALT Issuance (Actual vs. Target*), CAR: As of May 2010

Province	2005-2010 CALT Target*	CALT Awarded/ Approved	Percent Accomplishment
Abra	13	0	0
Apayao	10	0	0
Benguet	120	15	11
Ifugao	11	1	9
Kalinga	51	41	80
Mountain Province	12	4	33
Baguio City	120	163	122
CAR	302	224	61
Philippines		258	

*CAR-RDP 2004-2010 target.

Source: National Commission on Indigenous Peoples-CAR

Specifically, through the RDC-CAR Regional Development and Autonomy Program (CRDAP), a project on ancestral lands and domains titling was conceptualized with the objective of facilitating the issuance of land tenure instruments to the IPs/ICCs of the region. Under this project, a handbook on Land Tenure Instrument covering all titles, leasehold/permits, agreements decrees of LTI-issuing agencies (NCIP, DAR and DENR) was prepared to integrate, harmonize and simplify the issuance of land titles to the IPs in the region. A series of IEC on LTI was conducted in the provinces adopting the inter-agency approach thus giving the IPs the option to choose the land title appropriate for them.

The RDC-CAR also took the initiative to coordinate the harmonization of policy differences and conflicting laws issued by various government entities affecting the IPs including the following:

On the Joint DENR-NCIP Circular implementing section 12 of IPRA. In 2004, the NCIP-CAR and DENR-CAR prepared a draft circular on the implementing guidelines of section 12 of IPRA. However, to date the final draft which is now on its 9th version is still under review by the central office of DENR. The said joint circular on section 12 provides the option to IPs to secure certificates of ancestral land titles under the provisions of Commonwealth Act 141 as amended. In the meantime, there is an urgency to issue the joint DENR-NCIP circular since said option shall be exercised within 20 years from the approval of the IPRA or until October 2017 only.

On policy dialogues to resolve issues on CALT and CADT registration by the Register of Deeds (ROD). A series of consultation and meetings were conducted to resolve the lingering issue on CADT and CALT registration with the ROD. The issue on CALT registration was however resolved with the issuance of a Department of Justice (DOJ) Resolution dated August 29, 2008 stating that section 78 of RA 8371 does not bar the registration of CALTs of lots within the Baguio Townsite. On the CADT registration however, the NCIP raised the expensive, tedious, time consuming segregation requirement in the registration of CADTs with the ROD. Relative to this, an RDC resolution and a CAR aide memoire was sent to DENR and the Land Registration Authority (LRA) to waive the segregation requirement in the registration of CADTs with ROD and instead annotate on the CADT all titles already issued or hereinafter to be issued.

On the preparation of a regional implementing guideline on the DENR-NCIP Administrative Order (AO) on indigenous forest management systems. The NCIP and DENR formulated a regional implementing guidelines on forest management and this was already validated by the IPs and ICCs in Tadian, Mt. Province, the selected pilot area.

However, despite regional efforts to come up with working solutions on differing/conflicting policies on lands and natural resources, long delays in the approval of already harmonized policies were experienced due to the need for national application and approval causing further delays in the implementation of critical IP programs and projects in the region.

The greatest challenge however is the need to improve the institutional and resource capability of the NCIP amidst resource constraints of the national government on IP concerns. As it is, the NCIP does not only have limited resources to implement the provisions of IPRA but it has also been transferred as an attached agency of various offices from the Office of the President, to DAR and to the DENR.

B. Goal/Objectives/Targets

The region shall endeavor to be a model of Indigenous Peoples' self determination and sustainable development in the Philippines. It shall capitalize on enhancing the attainment of the basic rights of IPs by pursuing the following strategic policy directions:

- addressing issues on lands and natural resources;
- documenting and integrating indigenous knowledge, systems and practices to attain sustainable regional development;
- strengthening IP participation in governance and capability for self governance;
- promoting peace, exercising social justice and human rights utilizing indigenous knowledge and practices;
- strengthening the institutional and resource capabilities of NCIP to fast track the implementation of IPRA.

Under its Ancestral Domains and Land Titling Program, the NCIP-CAR has targeted the following CADTs, ADSDPPs and CALTs to be issued for 2011-2016 are shown in Table 3.24.

Table 3.24
CADT, ADSDPP and CALT Targets: 2011-2016

PROVINCE	CADT	ADSDPP	CALT
Abra	4	10	90
Apayao	7	8	90
Benguet	3		90
Ifugao	5	8	90
Kalinga	7	12	90
Mountain Province	7	10	90
Baguio City			75
CAR	33	48	615

Source: National Commission on Indigenous Peoples-CAR

C. Strategic Interventions

1. On lands and natural resources management:

- fast track harmonization of differing policies on lands and natural resources and work out its immediate implementation in order to facilitate the issuance of land titles;
- adopt inter-agency/LGUs collaboration on the mapping, delineation and titling of ancestral domains/lands and in the conduct of IEC on LTI;
- facilitate the formulation of ADSDPPs for all domain areas and ensure the harmonization of ADSDPP with other existing LGU and agencies' plans;
- recognize and protect communal forests/watersheds identified by the IP communities;
- acceptance of the native title concept that all ancestral lands/domains are private property.

2. On Indigenous Knowledge, Systems and Practices:

- strengthen inter-sectoral/institutional (including HEIs) partnership in the documentation, promotion, recognition and utilization of IKSPs;

- prepare a data base on existing IKSPs by preparing an annotated bibliography and compendium of existing researches and documentations on the rich ethnic culture and traditions of the Cordilleras;
 - utilize indigenous forest management systems and other customary laws to protect the watersheds;
 - incorporate/mainstream IKSPs in the educational system at all levels, health sector, infrastructure sector, and agricultural sector.
3. On IP participation in governance and capability for self governance:
- strictly implement statutory requirement of FPIC in all development projects affecting IPs;
 - strict and judicious enforcement of the Intellectual Property Rights (IPR) to safeguard the interest of IPs;
 - adopt separate planning standards appropriate for the Cordillera Region and its people;
 - strictly implement section 16 of IPRA on the mandatory representation of IPS in policy-making bodies and other local legislative councils;
 - recognize traditional structures (i.e. Council of Elders, Indigenous Peoples' Organizations) and systems of governance within the tribes (e.g. peace process negotiations);
 - pursue regional autonomy recognizing the provisions of IPRA.
4. On maintaining peace and order and exercising social justice and human rights:
- design benefits of corporate ownership and management to make IPs partners and not merely beneficiaries of development programs and projects;
 - respect, recognize, promote and accept indigenous conflict resolution systems;
 - integrate gender sensitivity in all development concerns.
5. On strengthening the institutional and resource capability of NCIP in implementing IPRA and other IP concerns:
- coordinate the conduct of a research agenda to determine how far the region has achieved its objectives of implementing IPRA in the Cordilleras;
 - coordinate fund sourcing mechanisms to augment/support the limited budget of NCIP in addressing IP concerns especially on ancestral domains and lands;
 - facilitate the passage of the following legislative actions to fast track the implementation of IP programs and projects in the region:
 - a. approval of the Joint Circular implementing section 12 of IPRA and passage of a bill or resolution extending the implementation period provided beyond 2017;
 - b. undertake appropriate measures for the implementation of section 71 of IPRA on the ancestral domain fund;
 - c. initiate measures to waive the segregation requirement in the registration of CADTs from Joint MC No. 01-2007 and instead annotate on the CADT all titles already issued or may hereinafter be issued;
 - d. support the bill on the direct payment to LGUs of the 40 percent national wealth tax and expanding the definition of host communities to include upland IP communities;
 - e. support the passage of a 3rd Organic Act on regional autonomy recognizing the provisions of IPRA.

D. Broad Program Packages

Policy Harmonization, Formulation and Implementation Program. This refers to the continuing harmonization of policy differences on lands to help facilitate the titling of ancestral lands and domains and advance other IP concerns specifically on natural resources management. This also covers advocacy programs on IPRA and regional autonomy. This shall be undertaken to advance the CAR as a champion of indigenous knowledge and culture and a model of IP self-determination and sustainable development.

Research and Legislative Agenda Development Program. This covers the formulation of a research agenda to determine the status of IPRA implementation in the region as basis for the formulation of legislative actions to further advance IP concerns in the Cordilleras. This also includes activities towards the passage of a 3rd Organic Act on Cordillera autonomy recognizing the provisions of IPRA.

Ancestral Domains and Land Titling Program. This covers inter-agency/LGUs programs and projects on the mapping, delineation and titling of ancestral domains/lands and in the conduct of IEC activities on land titling. The inter-agency approach will not only give the IPs the option to choose the land titles appropriate for them but will likewise protect the integrity of the certificates of titles.

Ancestral Domains Sustainable Development and Protection Program. This involves not only the preparation of the remaining ADSDPPs in the domain areas but also: (1) ensuring that the ADSDPPs are harmonized with existing LGU and sectoral plans; and (2) involving a wider stakeholders' participation in the preparation and implementation of the ADSDPPs.

Preservation of Cultural Knowledge Heritage Program. This involves the documentation and data banking of existing researched on Cordillera IKSPs, documentation and dissemination of IPs' best practices, the establishment of Cordillera museums and libraries to house archives and artifacts, mainstreaming of IKSPs in school curricula, and other advocacy programs.

Attainment of IP Self-Governance and Participation in Governance Program. This covers specific programs, projects and activities dealing with the strengthening of IP institutions and leadership for self governance, representation of tribal leaders in existing governments structures and other development undertakings, documentation and dissemination of successful models of indigenous local governance, and the conduct of forum/discussions on regional autonomy.

Promotion of Peace, Social Justice and Human Rights Program. This program will include programs and projects on the strict enforcement of the law on FPIC and IPR, respect and enhancement of tribal-based peace process, mechanisms to make IPs partners and not merely beneficiaries of development programs and projects.

Institutional Capability and Resource Development Program. This program will cover the continuing capability-building of NCIP, LGUs, NGOs, Council of Elders, Indigenous Peoples' Organization and other IP agencies/institutions especially in terms of ADSDPP formulation, project development and resource mobilization. This will cover not only the regular PPAs of NCIP but involves NCIP forging partnerships with other LGUs, RLAs, NGOs for purposes of (1) technical transfer/sharing of technology and knowledge and (2) fund sourcing through the formulation of inter-agency/LGU project proposals for local, ODA or private/corporate funding that will benefit IP communities in the region.

3.2.3 ***Social Development***

A. **Assessment**

Poverty Situation

Poverty has always been a continuing challenge in the region. Using the estimates generated based on the refinements in the official poverty estimation methodology of the National Statistical Coordination Board (NSCB), poverty incidence increased from 16.1 percent in 2003 to 18.6 percent in 2006 then slightly decreasing to 17.1 percent in 2009. This means that in 2009, almost two out of every ten Cordillerans live below the poverty threshold of P16,122.

Two of the region's provinces, Apayao and Mountain Province, were in the ten poorest provinces in 2006 but both have graduated in 2009. In stark contrast, Benguet consistently belongs to the ten least poor provinces in the country.

The same situation is reflected using the Human Development Index (HDI). Table - 3.25 below shows that in 1997, the HDI of four of CAR's six provinces (Benguet, Kalinga, Abra and Apayao), belonged to the upper half of the country's 77 provinces. In 2006, however, only Benguet and Abra, ranking 1st and 24th, respectively, remained in the upper half. Kalinga slid down from rank 21 to 65, and Apayao from 33 to 64. Although Mountain Province rose from rank 52 to 48, and Ifugao from 50 to 45, both still remained at the bottom half.

With regards the Millennium Development Goals, Cordillera has a high probability of attaining its 2015 targets in poverty reduction. This does not, however, mean an ideal situation for the Cordillerans. Attaining the regional target of 16.0 percent of families below the national poverty threshold by 2015 means that we still have a long way to go in terms of improving the socio-economic well-being of Cordillerans.

Health Situation

Health is another major area of concern in CAR. Health facilities and personnel require upgrading and should be made more accessible to all, especially the marginalized and disadvantaged sectors of society. Degenerative, communicable and lifestyle diseases afflict a significant portion of its people. There is also a need for an expanded, extensive, preventive and coordinated approach to the provision of health education for everybody.

Table 3.25
Human Development Index by Province, CAR: 1997, 2000, 2003 and 2006

Province	1997		2000		2003		2006	
	Rank	HDI	Rank	HDI	Rank	HDI	Rank	HDI
Benguet	8	0.676	3	0.708	1	0.743	1	0.787
Abra	23	0.573	15	0.639	21	0.618	24	0.604
Ifugao	50	0.512	65	0.483	29	0.578	45	0.503
Kalinga	21	0.581	29	0.558	46	0.542	65	0.509
Mountain Province	52	0.511	22	0.581	48	0.537	48	0.542
Apayao	33	0.546	34	0.55	44	0.545	64	0.515

Source: Philippine Human Development Report 2008/2009

CAR has a regional population density of 84 per sq.km. (the national figure is 55 per sq.km.), a physician-population ratio of 1:20,000, a nurse-population ratio of 1:20,000, and a midwife-population ratio of 1:50,000. These and the problems of difficult terrain, cultural barriers, and transportation expenses make health services delivery closer to the people even more challenging for the region.

In terms of meeting the MDG targets, the region has a lot of catching up to do. Noted was the region's slow progress in the reduction of maternal mortality and infant mortality, immunization of children under one-year old, increasing proportion of births attended by skilled health personnel, and prevention of malaria and tuberculosis.

In 2009, 79 out of every 1000 mothers died during pregnancy, childbirth or in the period after childbirth, a far cry from the regional 2015 target of 24.80. The Department of Health – CAR reports that the top causes of maternal deaths are retained placenta, postpartum hemorrhage, pre-eclampsia, sepsis and uterine atony – all preventable had the mothers sought earlier maternal care services. Although a policy on Facility-based Delivery was implemented to help improve the situation, the geophysical characteristics and socio-economic situation of the region has made compliance with this policy difficult.

While the region had a low infant mortality rate (IMR) in 2003 (14 per 1,000 livebirths), the 40 percent increase from 2008 to 2009 from 8 to 11 deaths is alarming. This translates to 319 infants dying from all causes. As with the MMR, IMR is largely influenced by socio-economic and demographic factors. High IMR is noted among infants of mothers with low education on pregnancy, no antenatal and delivery care, and mothers aged below 20 and above 40.

There is also a low probability of attaining the region's MDG targets in environmental sustainability. In 2009, only about 75 percent of Cordillera households have access to safe water supply and sanitary toilet facilities. The region's 2015 target is 87.5 percent and 87.8 percent, respectively. More investments in water and sanitation facilities is called for.

In contrast, the region has performed well where improving nutritional status is concerned. It has a very high probability of cutting by half the prevalence of underweight children noted in 1990. From a baseline of 16.1 percent, the region posted a 7.4 percent prevalence in 2009, only 0.7 percent shy from the 2015 target. However, it should be noted that this regional average was pulled by Benguet and Baguio City, with 3.81 and 4 percent underweight children, respectively. There is still a need to intensify the implementation of the Nutrition Program in provinces with consistently high rates of underweight children, particularly Abra and Apayao, which averaged 16.46 and 15.5 percent in the last five years.

Education

The basic literacy rate in the region is 91.6 percent while functional literacy rate is 85.4 percent, slightly higher than the national rate of 84.1 percent. The table below shows the performance of the basic education sector from 2005 to 2009. Both the participation and cohort survival rates among the elementary pupils have been declining. Even more alarming is the participation rate of the students at the secondary level which indicates that less than half of the school-going age children who are supposed to be in high school are either not enrolled, in private schools, or are out-of-school youths.

Another concern is the lack of school buildings and classrooms. The Department of Education in CAR reports that as of 2008, 21 municipalities/districts in the region have no elementary schools and six municipalities/districts were without secondary public schools. Further, a total of 1,129 classes employ the multi-grade system, combining as much as three levels (Grades 1-3 and 4-6) in a class. Multi-grade levels are present in Lagangilang, Abra;

Kabugao and Sta. Marcela in Apayao; Southern Tabuk and Tanudan in Kalinga; and Natonin, Mountain Province. Aside from classrooms, adequate teachers and teachers with the appropriate specialization have been long-felt needs.

Pupils' and students' performance in English, Science and Mathematics continues to be a challenge to Basic Education teachers. It is at this level that the foundation of their pursuit for higher education depends and improving the teaching and learning of these subjects need to be responded to specially by the public schools. The use of the multi-lingual means of instruction has also been identified as a need in the region so as to improve teaching and learning.

Table 3.26
Performance Indicators of Government Elementary and Secondary Schools,
CAR: 2005-2009 (In percent)

Indicator	2005-2006	2006-2007	2007-2008	2008-2009
ELEMENTARY LEVEL				
Participation Rate	74.57%	72.68%	71.20%	71.21%
Cohort Survival Rate	86.40%	60.42%	62.94%	60.38%
Completion Rate	85.98%	59.45%	62.53%	60.14%
SECONDARY LEVEL				
Participation Rate	40.34%	39.49%	38.48%	37.04%
Cohort Survival Rate	54.95%	61.79%	58.11%	64.23%
Completion Rate	50.78%	57.84%	54.07%	59.78%

Source: Department of Education-CAR

On the MDG targets related to Education, in 2008 only 62 percent of pupils starting Grade 1 reached Grade 6. The region's target for 2015 is 100 percent. The same is also true for primary completion rate which, having a target of 100 percent in 2015, was only 61.6 in 2008.

The region also has low probabilities of attaining the 2015 targets for the promotion of gender equality and empowerment of women. For CAR, gender gap in education appears to be in favor of girls. While in the elementary education boys seem to have a slight advantage, they are overtaken by the girls in the secondary level.

B. Challenges

1. High poverty incidence and wide disparity of income.

Three of every ten Cordillera families are considered poor. Four of the region's provinces belong to the country's top 20 poorest provinces, while two belong to the 27 least poor. In terms of Human Development Index, while two of CAR's provinces belonged to the upper half (Benguet as number 1, and Abra as number 24), the rest of CAR belonged to the bottom half. Much has to be done if the Cordillera wants to increase the income of its people and reduce income disparities.

2. Inaccessibility and/or unavailability of quality basic social services.

There are huge gaps in terms of the region providing its people with the needed basic social services, particularly in the health, education, and social protection sectors. Aside from intensified investments in social and physical

infrastructures, the region must, among others, push for innovative approaches that will make these services more accessible and available and thus reduce further marginalization of people in the rural and far-flung areas.

3. Low performance in the attainment of most of the Millennium Development Goals in education, health and environmental sanitation.

As of 2010, 16 of the region's 32 MDG indicators have low probability of being attained by 2015. It lags in meeting targets in education, maternal and child health, the detection, treatment and cure of tuberculosis, and access to safe water and sanitary toilet facilities.

C. Goal/Objectives/Targets

The over-all goal of the KFA on Social Development is for all the Cordillerans to have an improved quality of life. To achieve this goal, the region shall endeavor to:

1. Reduce poverty and income inequity;
2. Improve access and expand availability of quality basic social services in remote areas of the region; and
3. Intensify the implementation of MDG-related programs and projects.

D. Strategic Interventions

1. Intensified implementation of MDG-related programs and projects.

To accelerate efforts towards meeting the region's MDG targets that have a low and medium probability of achievement, there should be an intensified and converged implementation of existing programs and projects. Increased budgetary allocation and expenditures for MDG-related programs and projects should also be worked out. There should also be a closer link between the NGAs, the LGUs, the NGOs and CSOs in project implementation and monitoring.

2. Improved focused targeting of vulnerable and marginalized sectors of society

Recognizing that vulnerable and marginalized groups have to be uplifted first to be able to access services with the rest of the population, they shall be prioritized for program implementation. The system of DSWD's National Household Targeting Survey for Poverty Reduction (NHTS) shall be further refined and used as a common tool for identifying target beneficiaries and for program planning. On the other hand, the Community Based Monitoring System (CBMS) of the DILG shall be used as a tool for more effective local poverty reduction planning at the LGU level.

3. Strengthened complementation and integrated convergence of poverty alleviation and social protection programs and projects to priority beneficiaries and target areas to improve delivery of basic social services

This entails the comprehensive and integrated delivery of social services to the communities with provision for asset reform, human development services and social protection, livelihood and employment, institutionalization and capability-building. Direct intervention programs, such as credit and capital assistance, shall be aggressively pursued to help generate self-employment opportunities for the poor. This also involves the provision of capability-building programs, appropriate technology development and transfer, product marketing nicheing, and other similar strategies.

Table 3.27
Regional Millennium Development Goals Targets*

MDG Goal/Indicator		Baseline	2015 Target
Goal 1: Eradicate extreme poverty and hunger			
1a	Poverty incidence	32.0% (1991)*	16.0%
1b	Subsistence incidence	31.8% (1991)	15.9%
2	Poverty gap	13.3 (1991)	6.7%
4	Prevalence of underweight children under 5 years old	16.1% (1990)	8.1%
Goal 2: Achieve universal primary education			
6	Net enrolment ratio in primary education	90.3%(19903)	100.0%
7a	Proportion of pupils starting Grade 1 who reach Grade 6	60.5% (1990)	100.0%
7b	Primary completion rate	77.8% (1991)	100.0%
8	Literacy rate of 15 to 24 year-olds	88.8% (1994)	100.0%
Goal 3: Promote gender equality and empowerment of women			
9a	Ratio of girls to boys in primary education	93.4% (1993)	100.0%
9b	Ratio of girls to boys in secondary education	108.2% (1992)	100.0%
9c	Ratio of girls to boys in tertiary education	131.2% (2002)	100.0%
10	Ratio of literate females to males of 15-24 year-olds	87.5% (1994)	100.0%
11	Share of women in wage employment in the non-agricultural sector	69.2% (2003)	50.0%
Goal 4: Reduce child mortality			
13	Under-5 mortality rate	90.0% (1990)	30.0%
14	Infant mortality rate	13.7 per 1,000 (1990)	4.6 per 1,000
15a	Proportion of 1 year old children immunized against measles	74.0% (1990)	91.3%
15b	Proportion of fully immunized children under 1 year old	82.5% (1990)	95.0%
Goal 5: Improve maternal health			
16	Maternal mortality rate	99 per 100,000 (1990)	24.8 per 100,000
17	Proportion of births attended by skilled health personnel	80.3% (1990)	100.0%
Goal 6: Combat HIV /AIDS, malaria and other diseases			
19	Condom use rate	38.5% (1990)	100.0%
21a	Prevalence associated with malaria	37.3% (1991)	0.0%
21b	Death associated with malaria	7.55%	0.0%
23b	Death rate associated with tuberculosis	15.6% (1991)	0.0%
24b	Proportion of TB cases cured under DOTS	77.0 (1999)	85.0%
Goal 7: Ensure environmental sustainability			
25	Proportion of land area covered by forest	4.2%	Increase
26	Ratio of area protected to maintain biological diversity to surface area	7.7%	Increase
29	Proportion of households using solid fuels for cooking	62.5% (1990)	Decrease
30	Proportion of population with access to potable water	75.0% (1996)	87.5%
31	Proportion of population with access to sanitary toilet	75.5% (1992)	87.8%
Goal 8. Develop a global partnership for development			
45	Unemployment rate of 15-24 year-olds	6.4% (1990)	Decrease
47a	Telephone line subscribers per 100 population	2.0 (1997)	Increase

*Based on revised estimate using the 2009 methodology.

Source: National Statistical Coordination Board

4. Enhanced capability-building of development stakeholders on program planning and implementation and resource mobilization and management.

LGUs, RLAs, NGAs and other stakeholders shall be capacitated in social sector planning, programming, coordination, monitoring and evaluation, as well as in the sourcing and managing of their own funds. An improved and more coordinated inter-agency data management system for the Social Sector should also be institutionalized.

5. Strengthened people's participation, empowerment and public-private partnerships.

Efforts to strengthen participation of basic sectors in all levels of governance shall be pursued. With the objective of making communities ultimately self-reliant, the cooperation and participation of LGUs, indigenous communities, NGOs, CSOs, and the private sector in the various development processes shall be enhanced. This includes promoting the culture of volunteerism.

6. Improved access to low-cost quality drugs.

This involves providing the vulnerable and marginalized sectors with low-cost quality medicines, with the assistance and supervision of the DOH.

7. Increased coverage of the Universal Health Insurance.

This involves expanding the enrolment of the vulnerable and marginalized in the National Health Insurance Program, increasing availment of quality outpatient and inpatient services, and increasing the support value of health insurance.

8. Provision of improved, more responsive and accessible quality basic education.

This shall include: (1) ensuring improved performance and participation of more pupils and students in basic education; (2) establishing linkages with various stakeholders to coordinate and integrate Education for All (EFA) pursuits and activities for technical, material, financial and other forms of assistance in the provision of the necessary support services, infrastructure and general environmental conditions conducive to education; and (3) adoption by all CAR schools of the *K plus 12 strategy*, making kindergarten compulsory and adding two years in basic education to keep up with global standards and requirements.

9. Legislative Agenda

- a. Push for the approval of the Third Organic Act on Cordillera Autonomy. This will enable the Cordillera Region to chart its own development path according to the region's unique features.
- b. Press for the revision of the policy of using population and land area as basis for planning and budgeting. This will help CAR improve the allotment from national programs that would in turn increase coverage and delivery of basic services to the marginalized and vulnerable groups in the region.
- c. Adoption of a multi-lingual mode of instruction for basic education.

D. Broad Program Packages

A. Regional Poverty Alleviation Program

KALAH! – CIDSS. The KALAH!-CIDSS is a community-driven development (CDD) project that aims to empower communities through their enhanced participation in community projects that reduce poverty. It strengthens community participation in local governance and develops local capacity to design, implement, and manage development activities. Community grants are used to support the building of low-cost, productive infrastructure such as roads, water systems, clinics, and schools.

Self-Employment Assistance-Kaunlaran Program (SEA-K). This is a comprehensive approach and investment in social capital towards poverty alleviation. It aims to provide the marginalized and disadvantaged sectors of the society with timely access to credit and development opportunities, anchored on the belief that as their economic activities grow and their financial capabilities improve, they will be able to leverage other resources from both formal and informal sectors.

Pantawid Pamilyang Pilipino Program (4Ps). Aligned with the DSWD's goal of reducing poverty and empowering the poor and vulnerable groups of the society, the 4Ps aims to attain the MDG in achieving universal primary education, reducing child mortality and improving maternal health following the conditionalities provided in availing the cash grant for the qualified household beneficiaries.

National Household Targeting System (NHTS). The National Household Targeting System for Poverty Reduction (NHTS-PR) is a data management system that makes available a database of poor household as reference in identifying beneficiaries of social services. It aims to come up with a functional, objective and transparent targeting system that identifies who and where the poor are.

Community-Based Monitoring System (CBMS). A tool for improved governance and greater transparency and accountability in resource allocation, the CBMS aims to fill information gaps in diagnosing the extent of poverty at the local level, determining the causes of poverty, formulating policies and programs, identifying eligible program beneficiaries, and assessing the impact of policies and programs.

B. Universal Health Care Program

PhilHealth-Sponsored Program. Considered the heart of the National Health Insurance Program, this program provides health insurance coverage to less privileged families through a partnership where health insurance premiums for a year's coverage are paid in behalf of deserving members.

Strengthening of Local Health Systems. This aims to improve the local health system in CAR by providing better quality health service, improving health governance and management, strengthening health care financial system, improving the overall drug supply system, and enhancing the sharing of information and experiences related to the delivery of health services.

Family Health Program. Through a package of projects and activities, this Program seeks to enhance the health of infants, children, mothers and other sectors of society.

Health Facility Enhancement Program. The program includes the establishment and upgrading of the needed facilities and equipment to ensure greater accessibility and effective delivery of health services in the region.

Non-Communicable and Infectious Diseases Program. This Includes projects and activities that prevent and treat diseases such as cancer, cardio-vascular disease, respiratory obstructive diseases, mental disorders and other chronic illness.

Environmental Health Program. This involves reducing the occurrence of environment- and occupation- related diseases, disabilities and deaths through aggressive health promotion and mitigation of hazards and risks in the environment and workplaces.

Food-for-School Program. Designed to address basic food and socio-economic needs, as well as promote self-sufficiency among Filipinos, this program aims to improve school attendance and academic performance of Grades I and II pupils; mitigate hunger and prevent further decline of nutritional status of learners through short-term subsidy scheme; provide livelihood/employment opportunities to parents of beneficiaries; prepare and enable families to undertake family and community-oriented activities; and instill relevant values and attitudes toward work learners, their families and communities.

Barangay Nutrition Deployment Program. It involves the training, deployment and supervision of volunteer workers on nutrition called the Barangay Nutrition Scholars who are tasked to monitor the nutritional status of children and/or link communities with nutrition and related service providers.

LGU Annual Nutrition Action Plan Formulation. Seeking to translate the Philippine Plan of Action for Nutrition (PPAN) into a dynamic action program at ground level, this program aims to improve the nutritional status of women and children through the delivery of doable, minimum nutrition services to the communities.

Botika ng Bayan. Aimed at promoting equity in health, this program ensures the availability and accessibility of affordable, safe and effective, quality, essential drugs to all, with priority for marginalized, underserved, critical and hard-to-reach areas.

C. Education and Manpower Development Program

Basic Education for All Programs. This is geared towards providing quality basic education to all Filipino learners through various programs and projects of the Department of Education.

Accreditation and Equivalency Program. This program caters to pupils/students who are at least 3 years over-age in a particular grade/year level and also out-of-school youth for placement purposes.

ICT Program. By integrating Information Technology in the curriculum, this program entails the provision of computers to secondary schools and the conduct of the Intel Teach Enhancement.

Establishment of Community Learning Centers. To improve the accessibility of education services, this program aims to establish learning and eskwela centers for out-of-school-youth and adults in each municipality and barangay.

MADRASAH Classes Expansion Program. This pushes for an education program for Muslim children where Arabic language and Islamic values are included in the regular curriculum.

D. Social Protection Program for the Vulnerable Sectors. This includes the provision of services and facilities for the following: Disaster Management, Core Shelter Assistance Program, Emergency Shelter Assistance Program, the Supplemental Feeding Program for Undernourished Children, and the Socialized Housing Program.

3.2.4 Good Governance

A. Assessment and Challenges

With the adoption in 2006 of regional autonomy as the overarching theme of Cordillera regional development, the Key Focus Area on Good Governance will lay down and build on the necessary elements and mechanisms for ensuring an autonomous region as provided in the 1987 Philippine Constitution.

Autonomy is a significant missing link in the region's sustained economic development and fight against poverty. Autonomy, in this context, refers to self-reliant capacities for administration and management of the local human and natural resources, as well as fiscal autonomy towards the goal of providing the enabling environment for sustainable economic and human development. The KFA on Good Governance presents a framework for the development of regional and local capacities to gradually assume the 8-plus areas of regional autonomous governance outlined in Article 10, Section 20 of the Constitution that include:

1. Administrative organization;
2. Creation of sources of revenues;
3. Ancestral domain and natural resources;
4. Personal, family, and property relations;
5. Regional urban and rural planning development;
6. Economic, social and tourism development;
7. Educational policies;
8. Preservation and development of the cultural heritage; and
9. Such other matters as may be authorized by law for the promotion of the general welfare of the people of the region.

Article 3, Section 5 of Republic Act 8438 or the failed second Organic Act for Cordillera regional autonomy further defines and details out the would-be powers and functions of the autonomous region as follows:

Sec. 5. The autonomous region is a corporate entity with jurisdiction in all matters devolved to it by the Constitution and this Organic Act as herein enumerated:

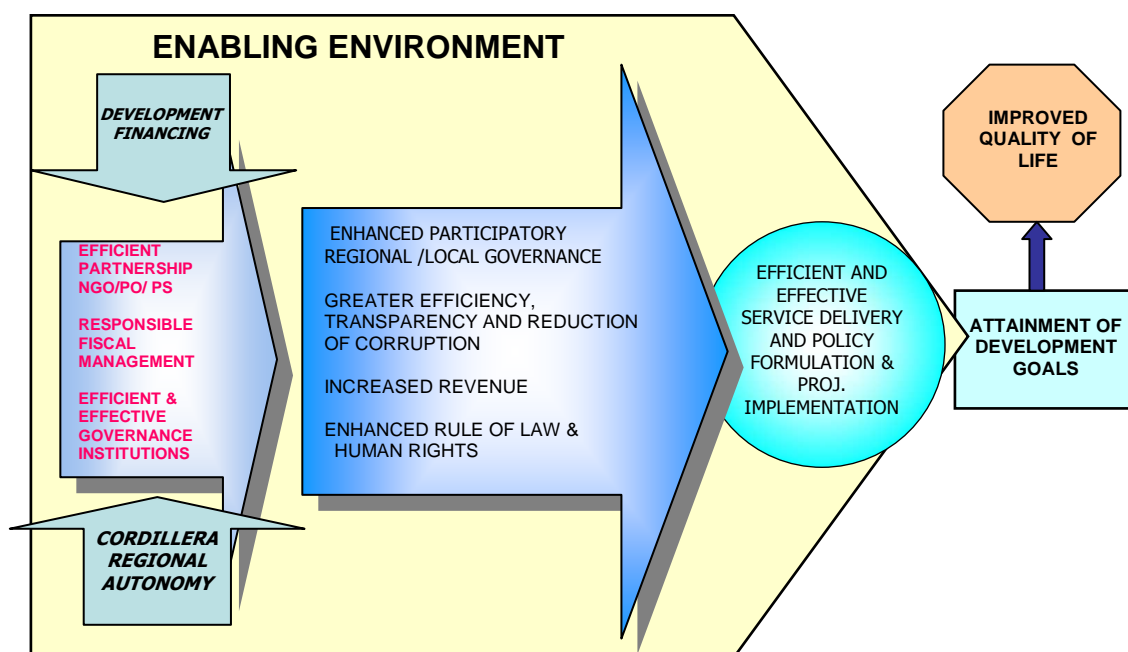
1. *Administrative organization;*
2. *Creation of sources of revenues;*
3. *Ancestral domain and natural resources;*
4. *Personal, family and property relations;*
5. *Regional urban and rural planning development;*
6. *Economic, social and tourism development;*
7. *Educational policies;*
8. *Preservation and development of the cultural heritage;*
9. *Powers, functions and responsibilities now being exercised by the departments of the national government, except:*
 - a. *Foreign affairs;*
 - b. *National defense and security;*
 - c. *Postal service;*
 - d. *Coinage, and fiscal and monetary policies;*
 - e. *Administration of justice;*
 - f. *Quarantine;*
 - g. *Customs and tariff;*
 - h. *Citizenship;*

- i. *Naturalization, immigration and deportation;*
 - j. *General auditing, civil service and elections;*
 - k. *Foreign trade;*
10. *Patents, trademark, trade names, and copyrights; and such other matters for the promotion of the general welfare of the people of the region.*

The KFA on Good Governance will focus on the mandated provisions for: (1) administrative organization; (2) creation of sources of revenues; (3) regional urban and rural planning development; and (4) such other matters for the promotion of the general welfare of the people of the region particularly voice and participation, transparency, and peace and order (Figure 3. 13). The other concerns of the 8-plus areas of governance are captured in other KFAs. As a major strategy, the KFA will integrate, complement and synergize on existing empowerment-related laws and planning approaches including:

- The Local Government Code (RA 7160) which increased the powers of LGUs, as well as their Internal Revenue Allotment (IRA) and provided the avenue for people participation in governance.
- The Indigenous Peoples Rights Act (RA 8371) that recognizes, protects and promotes the rights of indigenous cultural communities, with at least 90 percent of Cordillerans considered as IPs.
- The Right's Based Approach (RBA), a process that looks at development from the viewpoint of people and integrates the norms, standards and principles of the international human rights system into the plans, policies and processes (socio-political and administrative) of development.

Figure 3.13
Good Governance Framework



Executive Order 220 created the Cordillera Administrative Region on July 15, 1987 in an interim capacity to prepare the region for regional autonomy. EO 220 created three bodies - the Cordillera Executive Board (CEB), the Cordillera Regional Assembly (CRA), and the Cordillera Bodong Administration (CBA) - bodies that managed the region from 1987 to July 2000. But with the rejection of two proposed Organic Acts in January 1990 and March 1998, Congress passed the 2000 General Appropriations Act (GAA) or RA 8760 deactivating

the CAR bodies by granting them an annual budget of 1 peso per annum. In July 2000, then President Estrada issued EO 270 ordering the wind-up operations of the CAR bodies. In July 2001, EO 30 mandated the creation of an RDC for CAR following the RDC Law (EO 325). CAR is thus currently managed like any other region, although granted with a Special Autonomy Fund (SAF) included in the GAA for 2007, 2008 and 2010 to support social preparation activities towards regional autonomy.

The major challenge for the region is to settle the issue on the establishment of an autonomous region in the Cordilleras, while still pursuing increased decentralization of powers and functions under the current regional administrative set-up.

Development Financing

Budget allocation across regions. CAR continues to have the least budget share among the regions. In 2010, it had only three percent of the total national budget, or Php16.9 billion out of the total Php560.7 billion. Second least was CARAGA that got a 3.8 percent share at Php21.2 billion, Region 4A at Php22.1 billion and Region 9 at Php22.2 billion. The primary bases for the budget allocation are population and land area where CAR is at a disadvantage.

The meager budget of CAR is highlighted in government consumption expenditures (GCE) in the region that includes expenditures of national government agencies operating in the region. Between 2000 and 2009, CAR had the lowest GCE share among the North Luzon regions with an average share of 2.1 percent (comparable to CARAGA) compared to 3.8 percent for Ilocos, 2.9 percent for Cagayan and 6.6 percent for Central Luzon.

Internal Revenue Allotment allocation. As with the rest of the country, CAR LGUs rely heavily on the internal revenue allotment (IRA) as their main source of revenue. However, CAR remains to receive the least share across regions with only over 3 percent over the years (3.17% in 2006, 3.15% in 2007, 3.30% in 2008, 3.19% in 2009 and 3.19% in 2010). CAR's share is followed distantly by Region 13 at 4.0 percent and Region 4B at 4.7 percent. For 2010, CAR received only Php6.7 billion from the national total of Php214 billion.

Local revenues and tax effort. In terms of tax effort, the collection of the Bureau of Internal Revenue (BIR) in CAR increased in 2008 from 2007 but decreased again in 2009. The highest collection comes from Baguio City and the least from Abra. Apayao still does not have a separate revenue district office. Majority of the regional tax collection comes from income taxes, though this significantly declined from about 75 percent share to total tax collection in the previous years to only 60 percent in 2010.

Local sources of income (that includes tax and non-tax revenue) accounted for just 14 percent of the total income of CAR LGUs, way below the 33.4 percent national average. Tax revenue (that includes real property, business and other taxes) and non-tax-revenue (including fees and charges) contributed 7 percent each as local sources of income. It must be noted that the national average for tax revenues as a source of local income is 24.2 percent, reflecting the very poor performance of CAR in tax revenue generation. The region will continue to find ways to diversify and increase its financial resources while still ensuring its right share in national government subsidies.

In terms of tax revenues, Baguio City tops in the collection with Php336 million in 2010 with Benguet following a distant second with Php134 million. Apayao collected the least of only Php8.5 million. In terms of non-tax revenue with sources from regulatory fees, user charges, income from economic enterprises and other receipts, Benguet leads in the collection of income from economic enterprises with Php137 million in 2010, followed by Baguio City with only Php60.5 million.

Given the low IRA allocation of CAR LGUs and their poor generation of local revenues, most LGUs have very high IRA dependency ratios with the regional average at about 83 percent in 2009. Baguio City and Benguet were the least IRA dependent. While there are noted improvements with slight declines in IRA dependency, the rest of the provinces continue to have almost or above 90 percent ratios, with Apayao obtaining the highest at 98 percent. Among the capital towns, La Trinidad in Benguet and Bangued in Abra are the least IRA dependent with 41.3 percent and 54.5 percent IRA dependency ratios, respectively. On the average, CAR municipalities are 78-96 percent IRA dependent.

Administrative and Fiscal Management Performance

Government personnel in the region. Based on the 2008 Inventory of Government Personnel, 68 percent of the almost 38,000 regional government personnel in the region are with the NGAs, 30 percent are in the LGUs while 2 percent are with Government Owned or Controlled Corporations (GOCCs.) Of the total regional personnel, more than 35,000 are career employees.

Compared nationally, CAR had the fifth smallest government workforce in the country in 2008, next to Regions 2, CARAGA, 10 and 11. Still, this is an improvement from the total of 32,237 in 2004 considering that the number of government personnel in most other regions in the country decreased in 2008.

In terms of government personnel to population ratio, CAR has the second smallest ratio at 1:40. Important NGAs have not been fully decentralized or have not established regional/provincial offices. Among them are the DOE, BIR, NSO and Land Registration Authority (LRA). The presence of these agencies in the region is critical for the efficient delivery of public service. The RDC has passed resolutions for the creation of these offices but are still under review by their respective central offices.

Gross Regional Domestic Product (GRDP) and per capita GRDP. In terms of the GRDP or the amount of goods and services produced in the region annually, CAR contributed 2.2 percent to the country's Gross National Product (GNP) in 2009, ranking 13 among the 17 regions in the country with Regions 8, 2 and 13 as the least contributors.

The economy of CAR accelerated from 1.7 percent in 2008, although still far from the 7.1 percent in 2007. The positive growth in industry and services offset the reversal experienced in agriculture, fisheries and forestry sector during the year. CAR's relative development has picked up in recent years owing to special attention from the government. The industry sector accounted for the bulk of the region's economy with a share of 60.8 percent in 2009, slightly higher than its 60.7 percent share in 2008. The service sector share was 25.4 percent, an increase from its year-ago share of 24.9 percent. Meanwhile, AFF accounted for the lowest share at 13.8 percent – lower than its 14.4 percent share the previous year. In terms of per capita GRDP, the CAR ranked second highest in 2009, with Php19,007. The NCR posted the highest per capita GRDP of Php 40,838.

LGU expenditure by type of service. More than half of LGU total expenditures, or an average 56 percent goes to General Services – covering LGUs' Personnel Services (PS) and Maintenance Operations and Other Expenditures (MOOE). This translates to lesser budget for other expenditure items – only 3 percent goes to social services, 17 percent for health, 4 percent for education and 16 percent for economic services.

LGU expenditure by type of service needs to be improved – spending more to enhance the lives of constituents and meet commitments particularly the MDGs. This also highlights the need for greater IRA allocation since more than 50 percent of allocations are only enough to cover the minimum personnel requirements of LGUs.

Income classification of cities/municipalities in the region. As of 2008, almost half or 48.1 percent percent or a total of 32 out of the 77 city/municipalities of CAR were classified as 5th Class indicating earnings above Php90 million but less than Php180 million annually. Abra's municipalities are mostly 5th class - 22 out of its 27 municipalities - while Ifugao and Mountain Province do not have first class municipalities, reflecting the inability of most of the provinces to generate their own income and revenue for programs and projects.

Human Development Index (HDI). While CAR LGUs have minimal revenue for services, CAR's HDI standing tells a positive story. The HDI is an index reflecting life expectancy, education (basic enrollment rate and high school graduate rate), and income (per capita income). In 2008, Benguet ranked number one across all provinces in the country while the rest of the Cordillera provinces belonged to the lower half of the ladder. The high standing of Benguet is, however, believed to have been pulled up by the inclusion of Baguio City in the provincial computation.

Also, Benguet has a consistently low poverty incidence. While the situation improved in Ifugao, it worsened in the rest of the provinces. Benguet pulled CAR out of the list of the poorest regions where CAR ranked 11 among the 16 regions in the country. The challenge for CAR is how to bring the poverty incidence down.

Peace and order and security. In terms of crime incidence, the average monthly crime rate increased radically in 2009 while the crime solution efficiency rate decreased. It is also worth noting that the Cordillera Philippine National Police (PNP) strength is 3,730 as of September 2010, with police to population ratio of 1:419 as against the ideal ratio of 1:500. The later ratio however is for lowland areas where terrain is not a problem. In Baguio, the police to population ratio is 1:700, and would double during peak months with tourist visits.

While some barangays were cleared of illegal drugs in 2007, 2008 and 2009, there were new barangays affected in 2010 so that the number of barangays affected remains almost unchanged. Baguio has the highest percentage of barangays affected with 22.48 percent or 29 barangays. Being an education center north of Luzon, this causes alarm for Baguio. Apayao, which has no barangays affected in the previous years, has one barangay now affected by drugs.

Overall Assessment

Despite insufficient financial resources coming from the national government, CAR had modest accomplishments in terms of developing its people and contributing to efforts in nation-building. Benguet and Baguio, with nearly a half of the Cordillera population, sustained improvements along the HDI scale and at poverty reduction. However, the other provinces and LGUs are still wanting. Likewise, peace and order also is wanting in the region. With increasing crime incidence and declining solution efficiency rate, the regional police force will need to double efforts to curb criminality.

The limited funding from the national government is a major concern. The basis for fund allocation continues to be population and land area where the region loses out. Considering the unique terrain of the Cordillera, it is more difficult and costly to implement programs and projects in the region. The relatively low budget from the national government is compounded by the poor generation of local income by the CAR LGUs. This translates to low budget for programs and projects to be implemented. Considering the unique terrain of the Cordillera, it is more difficult and costly to implement programs and projects in the region. The relatively low budget from the national government is compounded by the poor generation of local income by the CAR LGUs. This translates to low budget for programs and projects to be implemented.

Figure 3.14
IRA Dependency Rate by Province, CAR: 2009

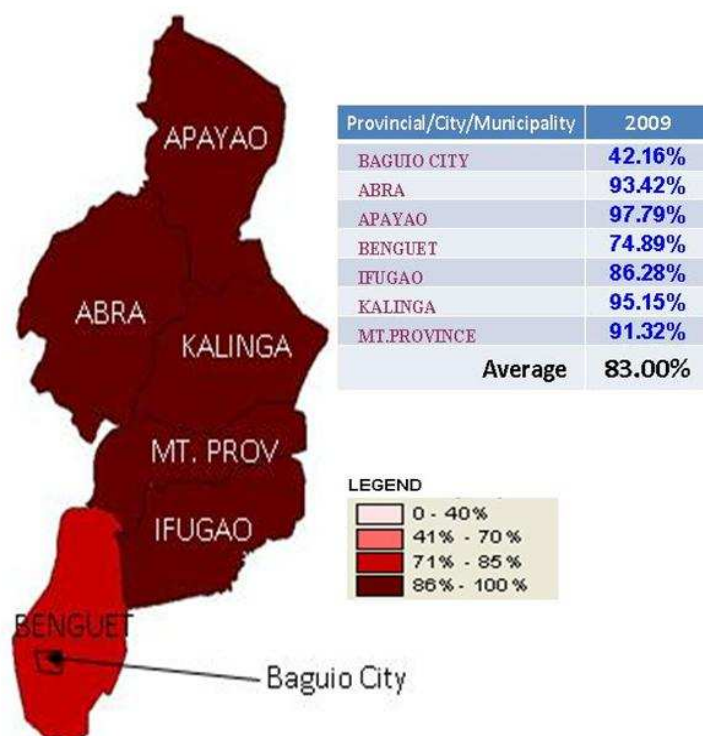
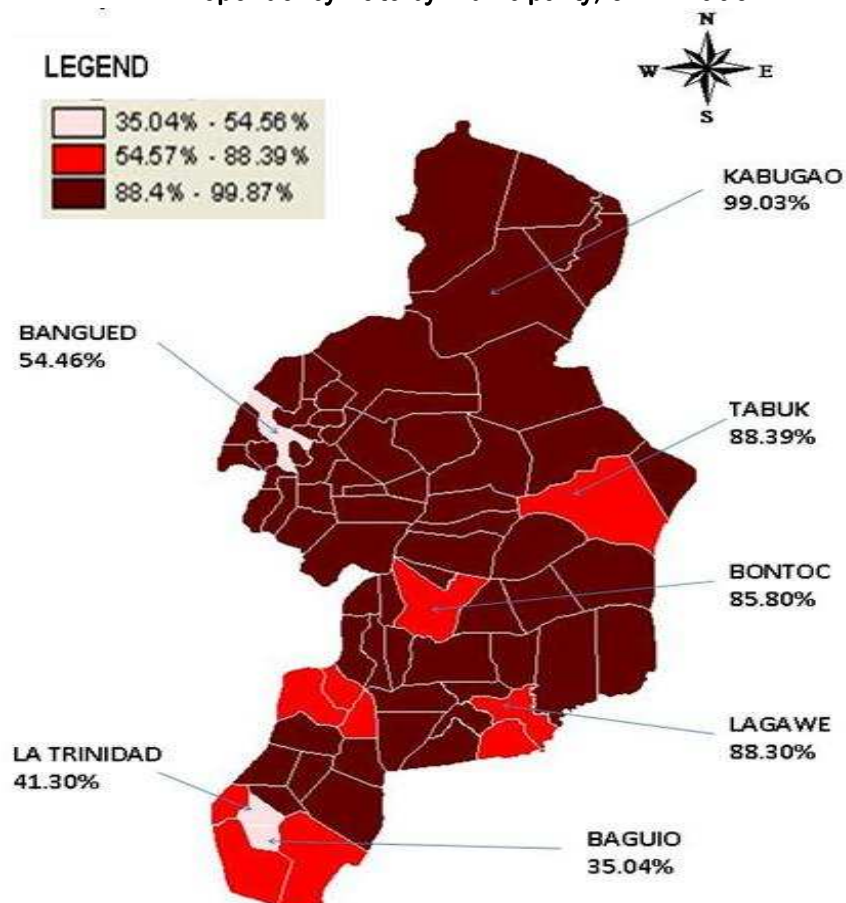


Figure 3.15
IRA Dependency Rate by Municipality, CAR: 2006



By virtue of EO 30, the CAR had been considered as only one of 15 regions and, in many indicators, has been considered among the lowest ranked in the country. Thus, the different national government agencies, LGUs and NGOs within CAR may have to review and re-define their indicators for the development of CAR. For instance, the Cordillera mountain ranges provide the source of energy and water for the lowlands of Regions I, II and III. Yet, the Local Government Code (LGC) provision on “share in national wealth” does not consider this feature in the computation of the revenues that should accrue to LGUs in CAR. Likewise, in 2009, the CAR registered a low GRDP at 2.2 percent. But in terms of the per capita GRDP, CAR ranked on top, second only to NCR. The contribution appears small only because CAR has the smallest land area and population among the regions.

As a measure for financial sustainability, it will be interesting to study how much total annual income was actually generated from businesses operating in CAR in terms of taxes paid to the national government through their main offices in Metro Manila cities. If this income is compared to the amount provided by the national government through the IRA and allocation for NGAs in CAR, presumably, the income will be greater than the allocation. Assuming this to be true, the CAR human and natural resources are contributing much more to the national coffers than what it receives. Developing sustainability mechanisms and indicators will be a giant step towards fiscal autonomy.

The concept of regional autonomy does not only mean political autonomy. The Cordillerans, particularly the IPs, have a rich cultural heritage that had always been autonomous which had led to the constitutional provision on autonomy. Autonomy is a basic human right anchored in the right to development..

B. Goal/Objectives

The KFA on Good Governance as a requisite of CAR regional development will ensure the efficient and effective delivery of public goods and services in the region under a regional autonomous government set-up. The objectives are:

1. Increased devolution/decentralization of powers, functions and resources from the central government to CAR RLAs and LGUs.
2. Strengthened participatory governance at the regional and local levels.
3. Strengthened link of Planning-Programming-Budgeting-Implementation-Monitoring and Evaluation in local development planning.
4. Greater transparency and accountability in both the public and private sectors.
5. Enhanced efficient fiscal management.
6. Ensured peace and security, social justice and human rights.

C. Strategic Interventions

1. On increasing devolution/decentralization of powers, functions and resources from the central government to CAR RLAs and LGUs:
 - Actively advance the RDC agenda on the renewed pursuit of Cordillera regional autonomy with: (a) the possible drafting of a proposed third Organic Act; (b) a strategy for ensuring its acceptance in the national executive department and legislature; and (c) creating greater awareness through information, education and communication (IEC) activities on regional autonomy anchored on regional pride among prospective Cordillera voters.
 - Provide the enabling environment for the transition of the current regional administrative organization to regional autonomy by enjoining regional government functionaries to develop and institutionalize mechanisms and

indicators for sustainability, considering the uniqueness of CAR. This includes ensuring the establishment of regional and provincial offices of all appropriate and relevant NGAs, as well as their complete staff complement and budgets; and capacitating/professionalizing regional and local employees for effective regional governance.

- Promote greater decentralization even under an autonomous regional government, a strong link in planning-programming-budgeting-revenue administration and expenditure management, enhanced peace and security situation, and heightened citizen involvement in regional governance affairs.
2. On strengthening participatory governance at the regional and local levels:
 - Establish and strengthen tripartite partnership among the government, the private (business) sector and civil society organizations (NGOs and POs) in pursuing development.
 - Encourage participation of private sector representatives (PSRs) in the RDC in policy making and in the implementation of development programs and projects.
 - Promote successful partnership models and NGO/PO coalition building at the LGU level as mechanisms for NGO/PO participation in local governance.
 3. On strengthening the link of Planning-Programming-Budgeting-Implementation-Monitoring and Evaluation in regional and local development planning:
 - Continue implementation and monitoring of Joint Memorandum Circular No. 1 of the NEDA-DILG-DBM and DOF/ BLGF and HLURB.
 - Advocate and adopt: (a) the Systems Competency Assessment for LGUs (SCALOG) as basis for developing and institutionalizing an LGU enhancement program in the region; (b) the Community Based Monitoring System (CBMS) as basis for measuring outputs and outcomes of services delivered to communities; and (c) the Rights-Based Approach (RBA) to monitoring development progress.
 - Advocate for separate planning standards appropriate for CAR and their subsequent adoption/institutionalization by the central offices of NGAs.
 - Strengthen the link of Planning-Programming-Budgeting- Implementation-Monitoring and Evaluation in local development planning.
 4. On promoting greater transparency and accountability in both the public and private sectors:
 - Step-up the continuing values formation and capability building enhancement initiatives in the region.
 - Enhance E-governance and greater connectivity among NGAs, LGUs and the PSRs.
 5. On enhancing efficient fiscal management:
 - Spearhead activities to increase the financial resources of the region while ensuring responsible fiscal management specifically in addressing priority human development concerns.
 - Develop/improve revenue generation measures such as efficient tax measures both by the BIR and the LGUs.
 - Lobby for: (a) amendment of the 1991 LGC provision on IRA allocation criteria to include and give emphasis or higher weight to LGUs' development need criterion;

and (b) the Domogan Bill (now Vergara Bill) on the automatic retention of the 40 percent share of LGUs in national wealth taxes.

6. On ensuring peace and security, social justice and human rights:

- Popularize and institutionalize the human rights-based approach to planning and implementation.
- Mainstream “customary laws” and “ethnic participation” in all facets of regional and local governance processes.
- Mainstream the promotion of interfaith and inter-cultural dialogues for peace and development..

D. Broad Program Packages

A. On devolution, decentralization and autonomy:

Cordillera Regional Development and Autonomy Program. This includes the conduct of information, education and communication (IEC) activities, capability-building activities towards gradually assuming the eight-plus areas of regional autonomous governance, the formulation of a working paper as basis for the drafting of a third Organic Act, and activities leading towards the possible conduct of a plebiscite.

Regional Indicators System Formulation Program. This program will help assess the readiness of the region to assume the eight-plus areas of governance towards becoming regionally autonomous.

Reorganization/Monitoring of Local Special Bodies (LSBs). As governance is not only the government, participation of civil society is critical in LSBs where its composition and functionality should be ensured.

LGU Capability Building Program. LGU officials and their partners at the local levels are the frontrunners for the implementation of key programs and projects and their capabilities in handling so should be ensured.

Newly Elected Officials Project. Led by the DILG, the orientation of the newly elected officials on their would be responsibilities should be known to them.

B. On participatory governance:

One-Cluster-One-Vision Project. Contiguous municipalities with common resources to take advantage and come together to form one cluster to fulfill a common vision.

Institutional Development and Capability Building Program. Various agencies and entities shall continue to conduct specialized capacitation programs for LGUs, RLAs, NGOs and civil society organizations (CSOs).

Alliance Building Programs. The partnership of the government – LGUs and RLAs, the Civil society, and the business sector should be strengthened through alliance building programs both at the regional and the local levels.

C. On strengthening the link of Planning-Programming-Budgeting-Implementation-Monitoring and Evaluation in regional and local development planning:

Institutional Development and Capability Building Program. Apart from the capacitation programs to be implemented, the region should ensure that critical agencies not present in the region or its provinces should be established, i.e. DOE, BIR, NSO, LRA.

Natural Resources Accounting Project. This project would urge the conduct of natural resource accounting for the estimation of Regional Income Accounts, regularly supported with data by statistics generating agencies.

Formulation of Planning Standards for Highland Regions. CAR should not lose out on national budget share, the basis being national planning standards uniformly implemented in all regions in the country. The uniqueness of the region with the kind of terrain it has, making it more difficult to implement projects should be considered. Thus, the formulation of planning standards and its subsequent adoption/ institutionalization by the central offices of government agencies.

Documentation and Advocacy of Best Practices Project. Led by the DILG through their GO-FAR project, and the sectoral committee on Development Administration, best practices will be documented and advocated for possible replication of other LGUs.

Disaster Risk Reduction/Climate Change Adaptation (DRR/CCA) Project. Climate change is inevitable and can only be remedied by being prepared. LGU plans should then be DRR-CCA-enhanced.

D. On greater transparency and accountability:

Values Orientation/ Re-orientation and Moral Renewal and Anti-Corruption Program. The conduct of intensified values reorientation programs for government personnel is deemed important. The public perception of government has remained negative because of banner stories on government officials' corruption. While some of these perceptions are true, majority of the criticisms are undeserved. The inculcation and reinforcement of values among civil servants is necessary to fortify government employees to remain true to their sworn oath as public servants.

E-Governance Program. This program package shall include the Promotion and Advocacy of Information and Communication Technology (ICT) and Human Resource Development.

Development Information and Advocacy Program. The Philippine Information Agency (PIA) as the government's information arm in the region coordinates this program together with the different actors of governance. The PIA shall undertake intensified information dissemination through tri-media.

E. On efficient fiscal management:

Fiscal Management Program. The DBM spearheads this program primarily through the Public Expenditure Management (PEM) Program. The PEM focuses on outcomes and considers expenditures as a means to produce the needed outputs to achieve the desired outcomes set forth in the Medium-Term Philippine and Regional Development Plans.

Intensified Internal Revenue and Customs Collection Program. This program covers all LGUs and revenue generating agencies of CAR and entails the enforcement of internal revenue and customs collection laws. The BIR spearheads this program and shall endeavor to improve its

logistical support, mobility and personnel capability to increase revenue collection in the region.

Local Government Financial Resources Enhancement and Mobilization Program. Local government units are targeted by this broad program to be jointly implemented by the BLGF and the BIR. Activities shall include the updating of local revenues code, establishment of LGU financial database, adoption and monitoring of fiscal performance indicators, and the Business Tax Enhancement Program and Real Property Tax Administration.

Local Government Code Amendment Project. This project will push for, among others, the amendment on IRA allocation criteria to include and give emphasis on LGUs development need criterion.

F. On peace and security, social justice and human rights:

IKSP Documentation and Mainstreaming Program. Recognizing that CAR is predominantly IP, IKSPs particularly on maintaining peace shall be documented and mainstreamed.

Crime Prevention and Control Program including Community Policing Program. Since development will better thrive under secure and stable peace and order conditions, the uniformed sector of government shall spearhead the implementation of the Crime Prevention and Control Program. The community shall also be actively involved in maintaining peace and security.

Integration and Amnesty Program. Issues of rebel returnees shall be addressed by appropriate programs and activities using available mechanisms to settle conflicts and promote lasting peace in the Cordilleras.

Interfaith and Inter-Cultural Dialogues/Initiatives. The Cordillera, being a multi-ethnic and multi-religion region may view interfaith and intercultural dialogue as an important dimension to sustain peace and security, social justice and human rights.



Annex A



RDC En Banc Resolution No. 25 - 2010

APPROVING FOR SUBMISSION THE CORDILLERA REGIONAL DEVELOPMENT PLAN 2011-2016

WHEREAS, Memorandum Circular No. 3 issued by Malacañang last September 2, 2010 directs the formulation of the **Medium-Term Philippine Development Plan (MTPDP)** and the **Medium-Term Public Investment Program (MTPIP)**;

WHEREAS, a national guideline for the formulation of the MTPDP-MTPIP was issued last October 6, 2010 focusing on translating His Excellency, President Benigno C. Aquino III's development policy directions for the country as contained in his *"social contract with the Filipino people"* which envisions *"a country with an organized and widely shared rapid expansion of our economy through a government dedicated to honing and mobilizing our people's skills and energies as well as the responsible harnessing of our natural resources"*;

WHEREAS, the Regional Development Councils were tasked to prepare their parallel Regional Development Plans 2011-2016 incorporating the development policy directions as contained in the national guidelines for the MTPDP/MTRDP plan preparation;

WHEREAS, the technical draft of the Cordillera Regional Development Plan 2011-2016 was prepared in coordination and consultation with the various sectoral planning committees of the RDC and was anchored on the recently prepared **Cordillera Regional Development Agenda 2010-2020** which highlights the region's twin regional strategies on:

1. advancing CAR as the Watershed Cradle of North Philippines (to highlight the distinct role of the Cordillera region in national development); and
2. continuing pursuit of regional autonomy (as the proposed alternative governance set-up to fast-track development efforts in the region)

WHEREAS, a series of public consultations were undertaken with the CAR RDC Advisory Committee composed of the CAR Congressional Representatives, the RDC enbanc members comprised by the LGUs, Regional Line Agencies, the private sector and other stakeholders to validate and enhance the draft CAR-RDP 2011-2016;

WHEREAS, the CAR-RDP 2011-2016 shall be the blueprint for the development of the region for the next six years and shall guide the development efforts of all government agencies, local government units and non-government organizations/private sectors operating in the region.

NOW THEREFORE, on motion duly seconded, BE IT:

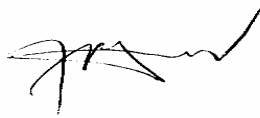
RESOLVED, as it is hereby resolved, that the Regional Development Council (RDC) of the Cordillera Administrative Region (CAR) approves for submission to the national government the Cordillera Regional Development Plan 2011-2016 as the region's over-all guide in its development efforts for the next six years;

RESOLVED FURTHER, that the RDC directs the translation of the CAR RDP 2011-2016 into operational terms to be contained in the Regional Development Investment Program (RDIP) 2011-

2016 and which shall henceforth be the basis for the approval and endorsement of any development programs/projects/activities for the region within the next six years.

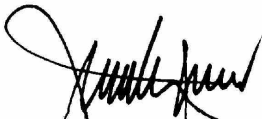
UNANIMOUSLY APPROVED, this 12th day of November 2010 at Baguio City, Philippines.

Certified true and correct:



FLORIDA P. FACULO
Acting RDC Secretary
(OIC-ARD, NEDA-CAR)

Approved:



JUAN B. NGALOB
Acting RDC Chairman
(Regional Director, NEDA-CAR)



Annex B



OFFICERS AND MEMBERS OF THE REGIONAL DEVELOPMENT COUNCIL CORDILLERA ADMINISTRATIVE REGION

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RDC Chair
Provincial Governor, Kalinga

Dr. Virgilio C. Bautista
RDC Co-Chair
Private Sector Representative, Baguio City

Director Juan B. Ngalob
RDC Vice-Chair
Regional Director, NEDA-CAR

Dr. Florida P. Faculo
Acting RDC Secretary
OIC Assistant Regional Director, NEDA-CAR

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Hon. Nestor B. Fongwan (Benguet)

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Hon. Leonard G. Mayaen (Mountain Province)
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Hon. Gregorio T. Abalos, Jr. (La Trinidad, Benguet)

Hon. Ceasario D. Cabbigat (Lagawe, Ifugao)
Hon. Ferdinand B. Tubban (Tabuk, Kalinga)
Hon. Pascual A. Sacgaca (Bontoc, Mountain Province)

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Hon. Robert K. Canuto (Kapangan, Benguet)

Hon. Ceasario D. Cabbigat (Lagawe, Ifugao)
Hon. James S. Edduba (Pasil, Kalinga)
Hon. Simon C. Lacwasan (Bauko, Mountain Province)

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Mr. John C. Bugaling (Economics)
Dr. Peter M. Cosalan (Indigenous Peoples)
Engr. Antonio R. Caluza (Infrastructure)

Mr. Villamor O. Casiquin (Labor)
Ms. Marietta T. Paragas (Social)
Ms. Marlene De Castro (Social)

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Mr. Ferdinand P. Gonzales (Apayao)
Dr. Virgilio C. Bautista (Baguio City)
Mr. Gerry T. Lab-oyan (Benguet)

Ms. Nenita Fontanilla (Ifugao)
Engr. Andres B. Ngao-i (Kalinga)
Ms. Lyn Madalang (Mountain Province)

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Bureau of Local Government Finance

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Department of Environment and Natural
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Department of Tourism

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Department of Public Works and Highways

Dir. Freddie T. Bernal
Commission on Higher Education

Dir. Ben D. Ladilad
Department of Science and Technology

Dir. Cenon M. Querubin
Technical Education and Skills Development
Authority

NCIP REPRESENTATIVE

Dir. Amador P. Batay-an
National Commission on Indigenous Peoples

SPECIAL NON-VOTING MEMBER

Dir. Helen R. Tibaldo
Philippine Information Agency

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