

Foreword

The Provincial Development and Physical Framework Plan (PDPFP) of the Province of Davao del Norte is a planning document prepared by the Provincial Government of Davao del Norte to set out its policy directions guiding the development activities and use of land and available resources in the province. The policies and proposals in the (PDPFP) form a core part of the province's vision of how the area should be promoted and protected in terms of the development and use of land and resources. This plan presents a vision that will take us from now until the year 2013; a period during which significant changes are envisaged in the way we live and work.

The vision is encompassed by the prevailing conditions, issues and problems which the province faces and seeks opportunities for physical, economic, social, environmental and institutional improvement and growth. From the issues and concerns, development goals, objectives and strategies have emerged to guide all planners and program implementers to align their respective management and development endeavors to the vision of development of the province for the ensuing years.

The preparation of the PDPFP was based on the rationalized local planning system which veers from being highly technocratic utilizing a simplified process and encouraging more participation and consultation. This had opened an extensive opportunity for inter-agency, NGO and public involvement. Many comments and objections were received at the issues, consultative draft and plan finalization stages. All of the comments were considered, of which necessary revisions were undertaken so as to improve the quality of the said plan. Salient comments and suggestions were also incorporated in the plan.

The Plan was prepared by the PDPFP Technical Working Group composed of agencies from the national and local offices, the LGUs and the private sector. The preparation was under the technical assistance of the National Economic Development Authority of Region XI (NEDA XI) with the use of the Provincial Local Planning and Expenditure Management (PLPEM) guidebook. The physical, economic, social, environment and institutional sectors were discussed lengthily in the planning environment of this document. It is important to inform the readers and users of this document that since this is a development indicative plan, the land area used in the tables and discussions is not authoritative with due consideration to the boundary conflicts between LGUs that still remain to be settled.

It is hoped that this document will stimulate the interest of our local and national leaders to support and make full use of this plan as basis for further development efforts for the province of Davao del Norte. Furthermore, the realization of the development goals indicated in this plan needs the utmost support from individuals and groups to generate further development contributions in the future. The plan is also a convenient vehicle that can bring in key contributions from wider people participation.

Message



To my beloved Dabaonons,

Contained in this substantial document is our medium-term vision for Davao del Norte. Like a painter who leaves imprints of his imagination on his canvass, we too have expressed in concrete language our dreams for our people in this book.

Part of this describes the present state of our province: its current demography, existing land-use, and socio-economic indicators. These are the outcomes of the past administrations' development thrusts; and we are using these as our solid foundation upon which we shall build yet another bold and daring development plan. These rich descriptive data are can be valuable inputs to our research community to make revealing outputs for our decision-makers.

This document also clearly spells out how we can go about towards the future using our present strengths. As planning is "primarily a way of thinking about the future" according to the economist John Friedmann, we hereby laid our policy directions encapsulated in what is now a widely known acronym RDR WHHEELS. This is the roadmap through which we can arrive at our desired future state.

We believe that the existing degree of underdevelopment is brought about by the growth imbalance; we are convinced that these are due in part to the past public policies which current development knowledge render unsound. Practical adjustments shall lead us towards an ensured balanced growth between the rural and urban sectors. This is the underlying theme that every keen reader must fully grasp.

Through the guidance of the Almighty, we were able to conceive of this; and through the same guidance we shall pin our hope to attain them.

Onward to prosperity! Mabuhay!

A handwritten signature in black ink, appearing to read 'Rodolfo P. Del Rosario'. The signature is stylized with a series of loops and a long horizontal stroke at the end.

RODOLFO P. DEL ROSARIO
Governor



Republic of the Philippines
PROVINCE OF DAVAO DEL NORTE
PROVINCIAL PLANNING AND DEVELOPMENT OFFICE
Mankilam, Tagum City

**Integrity
Competence
Commitment**

E-mail Address: davaonorte@yahoo.com
Telephone Nos. (084) 217-3790; (084) 400-1740

**EXCERPTS FROM THE MINUTES OF THE MEETING OF THE
PROVINCIAL LAND USE COMMITTEE HELD ON OCTOBER 22, 2009
AT THE CEREMONIAL HALL, CAPITOL, MANKILAM,
TAGUM CITY AT 9:00 O'CLOCK IN THE MORNING**

PRESENT:

| | |
|---|---|
| Mr. Felix A. Abangin | PENR Officer (PENRO-LGU)/ Presiding Officer |
| Mr. Rafael I. Erfe | Provincial Planning and Development Coordinator (PPDC), represented by Ms. Brigida Q. Cudal |
| Mr. Gregorio R. Verzosa Mr. Dominador A. Encarnacion | Provincial Director (DILG) Provincial Agriculturist, represented by Engr. Darryl M. Ayado |
| Ms. Ruth A. Tawan-tawan | PENR Officer (DENR), represented by Ms. Alma Millana |
| Engr. Fernando S. Ongkingco, Jr. | District Engineer (DPWH), represented by Engr. Editha G. Montilde |
| Engr. Alejandro L. Alberca | Irrigation Superintendent (NIA-PIO) represented by Engr. Elpidio G. Jose |
| Mr. Nicasio A. Llemente | OIC/PARO II (DAR) represented by Mr. Ernesto Manamotao |
| Ms. Maricar Cervantes | OIC (PGO-Tourism Office) represented by Mr. Virgilio J. Boiser II |
| Ms. Nenita S. Nazareno | Provincial Director (DTI) represented by Mr. Arnulfo Ganaan |
| Mr. Jose J. Advincula | Pres., Hugpong Kinaiyahan PLUC Member |

OTHERS PRESENT:

| | |
|--------------------------|-------------------------------|
| PLUC Secretariat: | |
| Ms. Ma. Theresa V. Catao | Planning Officer IV |
| Ms. Araceli N. Cajés | Planning Officer II |
| Mr. Nelson F. Plata | Project Evaluation Officer II |
| Ms. Mary Jean T. Hermo | Planning Officer I |
| Mr. Lowell S. Gonzales | Artist/Illustrator II |
| Ms. Lalaine C. Balaba | Administrative Aide III |



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PLUC Resolution No. 01, Series of 2009

**A RESOLUTION RECOMMENDING THE APPROVAL OF THE PROVINCIAL
DEVELOPMENT PLAN FOR CYs 2008-2013 AND PHYSICAL FRAMEWORK PLAN
FOR CYs 2008-2022 OF THE PROVINCE OF DAVAO DEL NORTE**

WHEREAS, the Technical Working Group have presented to this body the salient points of the Provincial Development Plan for CYs 2008-2013 and the Physical Framework Plan for CYs 2008-2022 of the Province of Davao del Norte;

WHEREAS, the plan presented have provided very comprehensive information on the existing situation and the proposed development directions of the province;

WHEREAS, this body found the plan to be very commendable in terms of its form and substance;

WHEREFORE, upon the motion of Mr. Jose J. Advincula, seconded by Engr. Darryl M. Ayado of PAGRO and Mr. Arnulfo J. Ganaan of DTI, be it

RESOLVED, as it is hereby resolved to recommend to the Provincial Development Council the Provincial Development Plan for CYs 2008-2013 and the Physical Framework Plan for CYs 2008-2022 of the Province of the Davao del Norte for approval and endorsement to the Sangguniang Panlalawigan.

RESOLVED FURTHER that a copy of this resolution be furnished to the Provincial Development Council for information and appropriate action.

CARRIED UNANIMOUSLY.

I hereby certify to the correctness of the foregoing resolution.

(Sgd.) MA. THERESA V. CATAO
Planning Officer IV/ PLUC Secretary

Approved:

(Sgd.) FELIX A. ABANGIN
PENR Officer/Acting Presiding Officer

Noted:

(Sgd.) RAFAEL I. ERFE
Prov'l. Planning & Dev't. Coordinator/
PLUC Chairman



REPUBLIC OF THE PHILIPPINES
PROVINCE OF DAVAO DEL NORTE

OFFICE OF THE PROVINCIAL GOVERNOR

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RODOLFO P. DEL ROSARIO
Governor

EXCERPTS FROM THE MINUTES OF THE PROVINCIAL DEVELOPMENT COUNCIL MEETING HELD LAST OCTOBER 29, 2009 AT THE BULWAGAN NG LALAWIGAN, CAPITOL COMPOUND, MANKILAM, TAGUM CITY

PRESENT :

- | | |
|--------------------------------|--|
| Hon. Rodolfo P. del Rosario | - Provincial Governor -PDC Chairman and Presiding Officer represented by Mr. Rufo L. Peligro-Provincial Administrator |
| Hon. Arrel R. Olaño | - Congressman, 1 st District represented by Mr. Bel R. Olaño |
| Hon. Demetrio Maligro | - FABC President, represented by Ms. Elenie E. Doble |
| Hon. Nestor L. Alcoran | - Municipal Mayor, New Corella President- Mayor's League, |
| Hon. Joseph Nilo F. Parreñas | - Municipal Mayor, Asuncion |
| Hon. Lolita A. Moral | - Municipal Mayor, BE Dujali |
| Hon. Marcelino A. Perandos | - Municipal Mayor, Carmen represented by Engr. Ronelo C. Fernandez |
| Hon. Rey T. Uy | - City Mayor, Tagum City represented by Mr. Reynaldo Cadeliña |
| Hon. Edgardo L. Timbol | - Municipal Mayor, Kapalong represented by Engr. Alvin D. Agayan |
| Col. Gregorio R. Versoza, MNSA | - Provincial Director, DILG |
| Ms. Aurora B. Cubero | - Schs. Div. Supt., Division of Davao del Norte, DepEd represented by Ms. Cristy C. Epe |
| Mr. Rafael I. Erfe | - Prov'l Planning & Dev'l Coordinator/ PDC Secretary |
| Ms. Nenita S. Nazareno | - Provincial Director, DTI, represented by Mr. Arnulfo Ganaan |
| Mr. Nicasio A. Lemente | - PARO II, DAR, represented by Mr. Allan Langueta |
| Engr. Fernando Ongkingco, Jr | - District Engineer, DPWH, represented by Engr. Editha Montilde |
| Ms. Amparo Tulo | - OIC- Provincial Director, TESDA, represented by Mr. Rodrigo M. Camus |
| Ms. Providencia P. Nuñez | - President, Davao del Norte Council of Women |
| Ms. Norma R. Pereyras | - Director, Tagum Cooperative, Inc. |
| Ms. Rebecca O. Lectura | - President, Rotary Club of Tagum, L.A.C.E.S |
| Mr. Danilo A. Quidato | - Program Coordinator, Tribal Education on Ecological System(TREES) |
| Engr. Rogelio M. Verallo | - Director, Kiwanis Club of Tagum |

| | |
|--------------------------|--|
| Mr. Jose J. Advincula | - President, Hugpong Kinyahan |
| Ms. Providencia P. Nuñez | - President, GSP represented by Ms. Luz Pereyras |
| Ms. Nenita R. Malbas | - Director, PICPA |

ABSENT :

| | |
|-------------------------------|--|
| Hon. Antonio F. Lagdameo, Jr. | - Representative, 2 nd Congressional District |
| Hon. Janet G. Gavina | - SP Member, Chair-Committee on Budget, Finance and Appropriations |
| Hon. Aniano P. Antalan | - City Mayor, Island Garden City of Samal |
| Hon. Jose L. Silvosa | - City Mayor, Panabo City |
| Hon. Tomas R. Abelita, Jr. | - Municipal Mayor, San Isidro |
| Hon. Maximo M. Estela | - Municipal Mayor, Sto. Tomas |
| Hon. Pilar A. Libayao | - Municipal Mayor, Talaingod |

OTHERS PRESENT :

Sangguniang Panlalawigan Members:

| | |
|----------------------------------|--|
| Hon. Victorio R. Suaybaguio, Jr. | - Vice Governor |
| Hon. Gregorio S. Facula | - SP Member |
| Hon. Leopoldo A. Monteroso | - SP Member, represented by Ms. Aileen A. Lanticse |
| Hon. Jose Recarido p. Federiso | - SP Member, represented by Mr. Neil Cuba |
| Hon. Ely S. Dacalus | - SP Member, represented by Ms. Elma G. Yunson |

Provincial Government Offices

| | |
|--------------------------|---|
| Mr. Felix A. Abangin | - P E N R Officer |
| Ms. Regina C. Ricafort | - Provincial Treasurer |
| Ms. Norma A. Lumain | - Provincial Budget Officer |
| Ms. Serlinda C. Atake | - Provincial Accountant |
| Dr. Renato R. Embate | - Provincial Veterinarian |
| Mr. Samson J. Sanchez | - Prov'l. General Services Officer |
| Engr. Joyce T. Gualberto | - Provincial Assessor, represented by Ms. Josephine L. Caligdong |
| Ms. Monica L. Salido | -Prov'l. Human Resource Mgt. Officer represented by Ms. Lydia S. Partol |
| Ms. Arlene I. Semblante | - Prov'l. Social Welfare and Dev't. Officer, represented by Mr. Nestor C. Masinaring |

Line Agencies

| | |
|--------------------------|---------------------------------|
| Engr. Liberato Tan, Jr. | - Asst. District Engineer, DPWH |
| Mr. Albert Lee Cabanting | - DPWH |

PDPFP Technical Working Group

| | |
|-----------------------------|---------------------------------------|
| Ms. Brigida Q. Cudal | - Asst. Planning & Dev't. Coordinator |
| Engr. Darryl M. Ayado | - Supervising Agriculturist, PAGRO |
| Ms. Erlinda D. Hangad | - Administrative Officer, DepEd |
| Ms. Precy D. Oray | - Asst. Prov'l. Treasurer, PTO |
| Ms. Ma. Theresa V. Catao | - Planning Officer IV |
| Ms. Araceli N. Cajés | - Planning Officer II |
| Mr. Nelson F. Plata | - Project Evaluation Officer II |
| Ms. Maria Lourdes D. Lauron | - Statistician II |

PDC RESOLUTION NO. 04, SERIES OF 2009

A RESOLUTION ADOPTIONG AND ENDORSING THE 2008-2022 PROVINCIAL DEVELOPMENT AND PHYSICAL FRAMEWORK PLAN (PDPFP) OF DAVAO DEL NORTE TO THE SANGGUNIANG PANLALAWIGAN FOR CONSIDERATION AND APPROVAL

WHEREAS, the Provincial Technical Working Group, had formulated the Provincial Development and Physical Framework Plan of the Province of Davao del Norte with technical assistance extended from NEDA and the Asian Development Bank using of the new guidelines on Provincial/Local Planning and Expenditure Management;

WHEREAS, the plan of Davao del Norte, was reviewed by NEDA and the Asian Development Bank and was able to get the most favorable comments with no major revision required;

WHEREAS, the Technical Working Group headed by PPDC Rafael I. Erfe as the Team Leader presented the plan to this August Body for further enhancement and appropriate action;

WHEREAS, after thorough presentation and deliberation, this August Body found the plan to be very comprehensive with a very strong linkage in the identified problems, issues and concerns in relation to the development goals, objectives, strategies and the corresponding programs, projects and activities;

WHEREFORE, upon the motion of Engr. Rogelio Verallo, Director of Kiwanis Club of Tagum, duly seconded by Ms. Rebecca O. Lectura, President of Rotary LACES, be it

RESOLVED, as it is hereby resolved to adopt and endorse as it is hereby adopted and endorse the 2008-2022 Provincial Development and Physical Framework Plan (PDPFP) of the Province of Davao del Norte to the Sangguniang Panlalawigan for consideration and approval;

RESOLVED FURTHER, that copies of this resolution be furnished to the Sangguniang Panlalawigan, Province of Davao del Norte, for consideration and appropriate action.

CARRIED UNANIMOUSLY.

I HEREBY CERTIFY to the correctness of the above-quoted resolution.

(Sgd.) RAFAEL I. ERFE
Prov'l. Planning & Dev't. Coordinator
PDC Secretary

Approved :

(Sgd.) RODOLFO P. DEL ROSARIO
Governor
PDC Chairman

Republika ng Pilipinas
Lalawigan ng Davao del Norte
Sangguniang Panlalawigan
Legislative Building, Mankilam, Tagum City, Davao del Norte
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**EXCERPT FROM THE MINUTES OF THE 44TH REGULAR SESSION OF THE
SANGGUNIANG PANLALAWIGAN OF DAVAO DEL NORTE HELD AT THE SESSION
HALL, PROVINCIAL CAPITOL, TAGUM CITY, ON MONDAY, NOVEMBER 23, 2009**

Present:

| | |
|---------------------------------------|--|
| Hon. Victorio R. Suaybaguio, Jr., MPA | (Vice-Governor) Regular Presiding Officer |
| Hon. Janet P. Gavina | Member |
| Hon. Salvador R. Royo | Member |
| Hon. Macario A. Bermudez, II | Member |
| Hon. Gregorio S. Facula | Member |
| Hon. Artemio V. San Juan | Member |
| Hon. Antonio M. Lagunzad | Member |
| Hon. Ely C. Dacalus | Member |
| Hon. Leopoldo A. Monteroso, Sr. | Member |
| Hon. Jose Recarido P. Federiso | Member |
| Hon. Demetrio C. Maligro | Member/FABC |
| Hon. Helario T. Caminero | Member/PCL |
| Hon. Dennis C. Café | Member/SKFP |

On Official Business:

| | |
|-----------------------------|---------------------|
| Hon. Rogelio E. Israel, MPA | Member (Davao City) |
|-----------------------------|---------------------|

Absent: None

*(Sponsors: Hon. Gregorio S. Facula, Hon. Jose Recarido P. Federiso, Hon. Janet G. Gavina
and Hon. Helario T. Caminero)*

RESOLUTION NO. 659

**APPROVING THE 2008-2022 PROVINCIAL DEVELOPMENT AND
PHYSICAL FRAMEWORK PLAN (PDPFP) OF DAVAO DEL NORTE**

WHEREAS, letter dated November 10, 2009 of Hon. Rodolfo P. del Rosario, Governor, this Province, duly received by the Office of the Secretary to the Sangguniang Panlalawigan on November 12, 2009, forwarding to this August Body, PDC Resolution No. 04, series 2009, was presented for appropriate action;

WHEREAS, said measure was referred to the Committee on Human Settlements, Planning and Development for review and recommendation;

WHEREAS, Provincial Development Council (PDC) Resolution No. 04, Series 2009, adopting and endorsing the 2008-2022 Provincial Development and Physical Framework Plan (PDPFP) of Davao del Norte to the Sangguniang Panlalawigan for consideration and approval, supports the said measure;

WHEREAS, after thorough discussion and deliberation on the merits of the said measure, the Committee, in its Committee Report No. 42 dated November 18, 2009, recommended to approve the same for being in order.

WHEREFORE, BE IT RESOLVED, by the Sangguniang Panlalawigan in Session Assembled, to approve, as it is hereby approved, the 2008-2022 Provincial Development and Physical Framework Plan (PDPFP) of Davao del Norte;

RESOLVED, FURTHER, that copy of this resolution be furnished Hon. Rodolfo P. del Rosario, Governor, this Province and let copies of the same be furnished to Mr. Rafael I. Erfe, Provincial Planning and Development Coordinator and all concerned agencies, for their information and record.

CARRIED.

I hereby certify to the correctness of the above quoted resolution.

(Sgd.) **DENNIS DEAN T. CASTILLO, MPA**
(PG Department Head)
Secretary to the Sanggunian

ATTESTED:

(Sgd.) **VICTORIO R. SUAYBAGUIO, JR., MPA**
(Vice-Governor)
Regular Presiding Officer

APPROVED:

(Sgd.) **RODOLFO P. DEL ROSARIO**
Governor

ACKNOWLEDGMENT

The Provincial Development and Physical Framework Plan of Davao del Norte was formulated through the joint effort and cooperation of the various national and local government agencies, non-government organizations/private sectors and several individuals.

In recognition of the various roles played by these agencies and individuals, the Provincial Technical Working Group (PTWG) expresses deep gratitude and most sincere appreciation to the following:

- The National Government for facilitating the technical assistance from the Asian Development Bank in formulating the Provincial Local Planning and Expenditure Management Guidebooks as our guide in the PDPFP formulation.
- The National Economic Development Authority of Region XI for the capability building and technical assistance in the formulation of the Plan; for their patience, dedication and untiring efforts in imparting their knowledge and extending their technical skills and expertise to the PTWG, and for reviewing the technical soundness and acceptability of the plan.
- The Honorable Provincial Governor, Hon. Rodolfo P. del Rosario, for his inspiration, encouragement and financial support in the planning processes.
- The Provincial Land Use Committee (PLUC) for the unwavering support and participation in reviewing the draft Provincial Development and Physical Framework Plan (PDPFP).
- The Housing and Land Use Regulatory Board for reviewing the completeness of the Physical Framework Plan component of the PDPFP.
- The National Statistical Coordinating Board - Unit XI for imparting important techniques to the Provincial Technical working Group in technical writing and reports preparation.
- The following National Government Agencies for providing data and/or technical personnel:

Department of Interior and Local Government (DILG)
Department of Trade and Industry (DTI)
Department of Labor and Employment (DOLE)
National Irrigation Administration (NIA)
Technical Education and Skills Development Authority (TESDA)
Department of Education, Culture and Sports (DECS)
Philippine National Police (PNP)
Bureau of Fire Protection (BFP)
Department of Agrarian Reform (DAR),
National Census and Statistics Office (NSO)
Bureau of Agricultural Statistics (BAS)
Department of Environment and Natural Resources (DENR); and
Department of Public Works and Highways (DPWH).

- The Provincial Government Offices for their cooperation in sharing data and information as well as technical assistance from the personnel, namely:

Provincial Agriculturist's Office
 Provincial Veterinarian's Office
 Provincial Environment and Natural Resources Office
 Provincial Treasurer's Office
 Provincial Budget Office
 Provincial Assessor's Office
 Provincial Accountant's Office
 Provincial Social Welfare and Development Office
 Provincial Governor's Office (Cooperative Development Division, Technology and Livelihood Development Center, Provincial Drug Rehabilitation Center and Tourism Operations Office)
 Provincial Engineer's Office
 Provincial Human Resource Management Office; and
 Provincial Health Office

- The following non-government organizations (NGOs) of the Provincial Development Council :

Tribal Education on Ecological System (TREES)
 Davao Provinces Rural Development Institute
 Hugpong Kinaiyahan; and
 Tagum Cooperative, Inc.

- The City and Municipal Government Units for facilitating the gathering of data as inputs to the Plan and technical assistance of City/Municipal Planning and Development Coordinators.
- The Private Sectors: Banana Plantations, DANECO, Davao Light and Power Company, Inc. CRUZTELCO Telephone, DATELCO, for their support and willingness to share data.
- Those who in one way or the other have contributed their share in the preparation of this planning document.
- Above all, to the Divine Providence whose bountiful blessings and loving guidance made possible the preparation of the Provincial Development and Physical Framework Plan.

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LIST OF ACRONYMS

| | |
|---------------|--|
| AADT | Annual Average Daily Traffic |
| AAGR | Average Annual Growth Rates |
| ADB | Asian Development Bank |
| AFMA | Agriculture and Fishery Modernization Act |
| AIP | Annual Investment Plan |
| ALS | Alternative Learning System |
| APGR | Annual Population Growth Rate |
| BAS | Bureau of Agricultural Statistics |
| BFPMS | Barangay Forest Protection and Management Scheme |
| BLGF | Bureau of Local Government Finance |
| BN | Below Normal |
| BNVL | Below Normal Very Low |
| BPHRE | Bureau of Post Harvest Research and Extension |
| BSWM | Bureau of Soils and Water Management |
| CADT | Certificate of Ancestral Domain Title |
| CARP | Comprehensive Agrarian Reform Program |
| CBFM | Community Based Forest Management |
| CIP | Communal Irrigation Project |
| CIS | Communal Irrigation Systems |
| CM | Corn Mill |
| COPS | Community Oriented Policing System |
| C/RD | Columnar/Recirculating Dryer |
| CS | Corn Sheller |
| DA | Department of Agriculture |
| DANECO | Davao del Norte Electric Cooperative |
| DAR | Department of Agrarian Reform |
| DBM | Department of Budget & Management |
| DENR | Department of Environment & Natural Resources |
| DepEd | Department of Education |
| DD | Diversion Dams |
| DIDP | Davao Integrated Development Program |
| DIA | Davao International Airport |
| DILG | Department of Interior & Local Government |
| DLPC | Davao Light and Power Company |
| DOF | Department of Finance |
| DOH | Department of Health |
| DOT | Department of Tourism |
| DPWH | Department of Public Works & Highways |
| DRICP | Davao Region Industry Cluster Plan |
| DTI | Department of Trade and Industry |
| FIES | Family Income and Expenditure Survey |
| FA | Farmer's Association |
| FBD | Flat Bed Dryer |

| | |
|---------------|---|
| FM | Frequency Modulated |
| GAD | Gender and Development |
| GCI | Global Competitiveness Index |
| GIS | Geographical Information System |
| GK | Gawad Kalinga |
| GOCC | Government Owned and Controlled Corporation |
| HNP | Health and Nutrition Posts |
| IEC | Information, Education and Communication |
| IFMA | Integrated Forestry Management Agreement |
| IRA | Internal Revenue Allotment |
| ISA | Irrigator's Service Associations |
| IGaCos | Island Garden City of Samal |
| KDH | Kapalong District Hospital |
| LGU | Local Government Unit |
| LMU | Land Management Unit |
| LARIS | Land Resources Information System |
| LALIK | Lasang-Libuganon-Kipaliku |
| LGC | Local Government Code |
| LGSEF | Local Government Service Equalization Fund |
| LTO | Land Transportation Office |
| LWUA | Local Water Utility Administration |
| MDG | Millennium Development Goals |
| MBN | Minimum Basic Needs |
| MFD | Mobile Flash Dryer |
| MDP | Multipurpose Drying Pavement |
| MS/T | Multipurpose Sheller/Thresher |
| NAT | National Achievement Test |
| NCRFW | National Commission on the Role of Filipino Women |
| NEDA | National Economic Development Authority |
| NIPAS | National Integrated Protected Area System |
| NPC | National Power Corporation |
| NER | Net Enrolment Rate |
| NPAAD | Network of Protected Areas for Agricultural Development |
| NSCB | National Statistics & Coordinating Board |
| NSO | National Statistics Office |
| PACCO | Provincial Accountant's Office |
| PAGRO | Provincial Agriculturist Office |
| PASSO | Provincial Assessor's Office |
| PBO | Provincial Budget Office |
| PDPFP | Provincial Development and Physical Framework Plan |
| PDC | Provincial Development Council |
| PDIP | Provincial Development Investment Plan |
| PDCC | Provincial Disaster Coordinating Council |
| PEO | Provincial Engineering Office |
| PENRO | Provincial Environment and Natural Resources |

| | |
|--------------|--|
| PESO | Public Employment Services Office |
| PGO | Provincial Governor's Office |
| PGSO | Provincial General Services Office |
| PHO | Provincial Health Office |
| PHRMO | Provincial Human Resource Management Office |
| PIP | Pump Irrigation Project |
| PLO | Provincial Legal Office |
| PLUC | Provincial Land Use Committee |
| PPDO | Provincial Planning & Development Office |
| PNP | Philippine National Police |
| PO | People's Organizations |
| PPFP | Provincial Physical Framework Plan |
| PSWDO | Provincial Social Welfare & Development Office |
| PTO | Provincial Treasurer's Office |
| PVO | Provincial Veterinary Office |
| RAIC | Regional Agri-Industrial Growth Center |
| RDC | Regional Development Council |
| RDPFP | Regional Development and Physical Framework Plan |
| RIS | River Irrigation System |
| RM | Rice Miller |
| RPU | Real Property Unit |
| RT | Rice Thresher |
| RWSA | Rural Waterworks and Sanitation Association |
| SAFDZ | Strategic Agriculture and Fisheries Development Zone |
| SALLE | Saug - Libuganon Left |
| SEC | Security and Exchange Commission |
| SEF | Special Education Fund |
| SME | Small Medium Enterprise |
| SIFMA | Socialized Industrial Forestry Management Agreement |
| SPO | Sangguniang Panlalawigan Office |
| STW | Shallow Tube Wells |
| SSIP | Small Scale Irrigation Project |
| SWIP | Small Water Impounding Projects |
| SUD | Sustainable Upland Development |
| TDA | Tourism Development Areas |
| UMBN | University of Mindanao Broadcasting Network |
| VAW | Violence Against Women |



CHAPTER 1

Introduction



INTRODUCTION

1.0 HISTORICAL BACKGROUND

Davao del Norte was created together with the provinces of Davao del Sur and Davao Oriental taken from the Great Davao Province by virtue of the bill authored by then Congressman. Hon. Lorenzo S. Sarmiento, Sr., which bill was passed into law and became known as R.A. 4867 dated 8 May 1967. It had an initial composition of 13 municipalities, namely: Asuncion, Babak, Compostela, Kapalong, Mabini, Mawab, Monkayo, Nabunturan, Panabo, Pantukan, Samal, Sto. Tomas and Tagum. Six (6) additional municipalities were created on May 6, 1970. These were Carmen, Kaputian, Maco, Montevista, New Bataan and New Corella. In 1996, the province had a total of twenty-two (22) municipalities with the creation of San Vicente (now named Laak) in 1979, San Mariano (now named Maragusan) in 1988 and Talaingod in 1990.

Governor Verulo C. Boiser was appointed by the President as the first governor of the province. He served the province for ten years, which was from July 1, 1967 to July 7, 1977. This corresponds to two years as appointed Governor and two terms as elected Governor.

The second Provincial Chief Executive was Governor Gregorio R. Dujali who was also extended a presidential appointment when the first Governor stepped down from the gubernatorial position on July 7, 1977. Like his predecessor, Governor Dujali also served Davao del Norte as the appointed governor for one year and as an elective governor for two terms until March 31, 1986.

On February 25, 1986, Her Excellency, Mrs. Corazon C. Aquino was installed as President of the Philippines by virtue of the "People Power" otherwise known as the EDSA Revolution. Hon. Prospero S. Amatong was appointed as the OIC-Governor of Davao del Norte on April 4, 1986. And on February 3, 1988, Governor Prospero S. Amatong took his oath as an elected governor of Davao del Norte.

On January 31, 1998, through Republic Act 8740, the province was divided into two (2) with the creation of Compostela Valley Province, and due to its division, 12 municipalities became part of the new province, while 11 municipalities were left to Davao del Norte. Other historical events that transpired in Davao del Norte together with the division of the province are the enactment of Republic Act No. 8471, creating the Island Garden City of Samal which comprise the municipalities of Babak, Samal and Kaputian; Republic Act No. 8472, converting the municipality of Tagum into a City, the seat of the provincial government; and Republic Act No. 8473 creating the municipality of Braulio E. Dujali. On March 31, 2001, the Municipality of Panabo was converted into a City by virtue of Republic Act No. 1015, and then on March 15, 2004, the Municipality of San Isidro was created by virtue of Republic Act No. 9265, taken from the municipalities of Kapalong and Asuncion. With these turn of events the province now has three (3) cities and eight (8) municipalities with 222 barangays and a population of 847,440 based on the 2007 census.

Governor Prospero S. Amatong was able to serve the province for 10 years as an elected governor which ended on March 26, 1998 when he took his Oath of Office as Governor of the newly created province of Compostela Valley on the same day.

The national and local election period from April 1 to June 30, 1999 necessitated the appointment of interim provincial officials headed by Hon. Anecito M. Solis as the Acting Governor.

Hon. Rodolfo P. del Rosario was elected and sworn into office as the first Governor of the new Davao del Norte Province on July 1, 1998. In his term, he institutionalized the “Cluster Development” approach that grouped municipalities and cities for better developmental complementation. When he decided not to run in the 2004 elections, Hon. Gelacio P. Gementiza, the Mayor of Tagum became his successor who served for one term only as Governor.

In 2007, Governor Rodolfo P. del Rosario once again became the governor of the province of Davao del Norte. In his second time around, he leads the province with a much deeper purpose and commitment as he laid down his centre-piece of governance, the “RDR WHEELS” that spells out his strategic goals, development thrusts and directions, to wit:

- R- Roads and Infrastructure Development
- D- Development of Cooperatives in all sectors
- R- Reforms in Governance and Peace and Order
- W- Water and electricity development
- H- Health, Housing, Sanitation and Social Services
- E- Economic Development and Environment Protection/Rehabilitation
- E- Education, Culture, Sports and Human Development
- L- Livelihood and Skills Development Program
- S- Spiritual and Moral Recovery Program

2.0 Plan Objectives and Context.

This Plan is formulated pursuant to Republic Act No. 7160 known as the Local Government Code of 1991 which states that each Local Government Unit shall have a comprehensive multi-sectoral development plan to be initiated by its development council and approved by its Sanggunian.

The Provincial Government of Davao del Norte had its approved 2001 – 2010 Gender-Responsive Provincial Comprehensive Development Plan/Provincial Physical Framework Plan which provided the strategic direction of the province within its plan period. The said plan was supportive to the vision of the Philippine Plan for a gender-responsive development that is equitable, sustainable, free from violence, respectful of human rights, supportive of self-determination and the actualization of potentials, participatory and empowering.

The above mentioned plan has been updated/reformulated based on the issuance of Joint Memorandum Circular (JMC) No. 1, series of 2007 of DILG-NEDA-DBM and DOF, which aims to harmonize and synchronize local planning, investment programming, revenue administration, budgeting and expenditure management. The Plan will now be called the Provincial Development and Physical Framework Plan (PDPFP) of Davao del Norte.

The PDPFP will be the primary technical guide in the development of the province. Its specific objectives are:

1. Integrate the Provincial Development and Physical Framework Plan;
2. Enhance the vertical and horizontal linkages thru a synchronized planning, investment programming, revenue administration and budgeting;
3. Provide the analytical basis for understanding and identifying key development issues, problems, opportunities, goals and objectives;
4. Translate the vision into implementable strategies to attain its goals and objectives;
5. Identify programs, projects and activities that is consistent with the proposed strategies.

This plan merges the traditionally separate physical framework plan and the provincial development plan to integrate both the spatial and sectoral development and provide a connection between the medium and long-term concerns. It contains the long-term vision of the province and identifies development goals, strategies, objectives, targets and corresponding programs, projects and activities which serve as primary inputs to the provincial development investment programming and subsequent budgeting and plan implementation.

It is within the foregoing context that the updating of the previous plan has to be undertaken in accordance with guidelines set under JMC No. 1, series of 2007 and that the Provincial Development and Physical framework Plan (PDPFP) will now serve as the key link in the network of plans covering the national, regional, provincial, city/municipal levels.

At the provincial level, the PPAs derived from the PDPFP will be the basis for a multi-year Provincial Development Investment Program (PDIP) and the Annual Investment Program (AIP), which is the basis for budgetary allocations.

For vertical linkages, the development goals and objectives cited in the PDPFP are aligned to the development goals and objectives of the national and regional government. Thus, there is an assurance that development efforts at the national and regional levels will be implemented at the local level. A close coordination between the province, its components cities and municipalities and all national government agencies is deemed necessary in order that there is unity of vision and to encourage integration and complementation at all levels.

3.0 Coverage of the Plan

3.1 Historical Coverage

The PDPFP is a six-year medium-term development plan, guided by a long-term vision. It is intended to coincide with two political terms of the Governor, each term consisting of three years, and is aligned with a full term of the national leadership. The planning analysis cited in the plan however, extends beyond the medium-term to consider longer-term trends. Such trends are considered necessary inputs to the identification of strategies and PPAs for the six-year plan period.

The Development Plan shall cover the period 2008-2013, while the Physical Framework Plan shall cover the period starting with 2008 and extends to 2022.

3.2 Geographical Coverage

The primary level of geographical analysis is within the political boundaries of the province. Other provinces in the region and the country as a whole are also included as benchmarks in some of the analyses.

The analytical disaggregation used are the cities and municipalities of the province, while in some areas of study will use a barangay disaggregation to truly reflect a more realistic analysis. Grouping or clustering of municipalities as well as geographically delineated areas are used to create a clearer picture of the planning environment.

3.3 Sectoral Coverage

The planning environment of the PDPF under the new guidelines includes all the major sectors relevant to the development of the province. As much as possible and in order to establish comparability and context, sectoral data are consistent with regional/national and city/municipal data.

In terms of the traditional sectors that typically serve as template for public sector planning analysis and implementation, the core elements correspond as follows:

| Core Element | Sector |
|---------------------|---|
| Population | Population |
| Economic Activity | Agriculture, fisheries, forestry, trade, Industry services, tourism |
| Physical resources | Environment, natural resources, transport |

| | |
|---------------------------|---|
| Income/Access to Services | Health, education, housing social welfare , public works, energy, security, other services and facilities (for community groups such as the elderly, children, indigenous peoples, etc.) |
| Land Use | Physical integration of all sectors |

4.0 Outline of the Plan

The FIRST CHAPTER presents the background of the Province and the rationale for the formulation/updating of the Provincial Development and Physical Framework Plan, its Plan objectives, context, and coverage.

The SECOND CHAPTER presents the long-term vision with the corresponding mission of the province formulated through consultation of stakeholders.

The THIRD CHAPTER presents the planning environment which includes all major sectors relevant to the development of the province. To the extent possible and in order to establish comparability and context, sectoral data were made certain to be consistent with the regional, national and city/municipal data. Descriptions and analysis of the social, economic and physical environment of the province served as bases for identifying development challenges, issues and the subsequent course of action. After this an over-all physical framework of the province is presented.

The FOURTH CHAPTER presents the issues/problems//goals and objectives/targets identified during the planning environment process.

The FIFTH CHAPTER presents the identified strategies, PPAs to address development issues and accomplish objectives.



CHAPTER 2

Vision/Mission



VISION:

Davao del Norte, a premier province in agriculture, the banana capital of the Philippines, globally competitive with empowered people living in harmony, social equity, safe environment and high quality of life under a committed and responsive leadership.

MISSION:

We, the women and men of Davao del Norte are committed to uplift the quality of life of all through the MBN approach by providing adequate services and facilities, effective local governance, people empowerment and ensuring sustainable development.



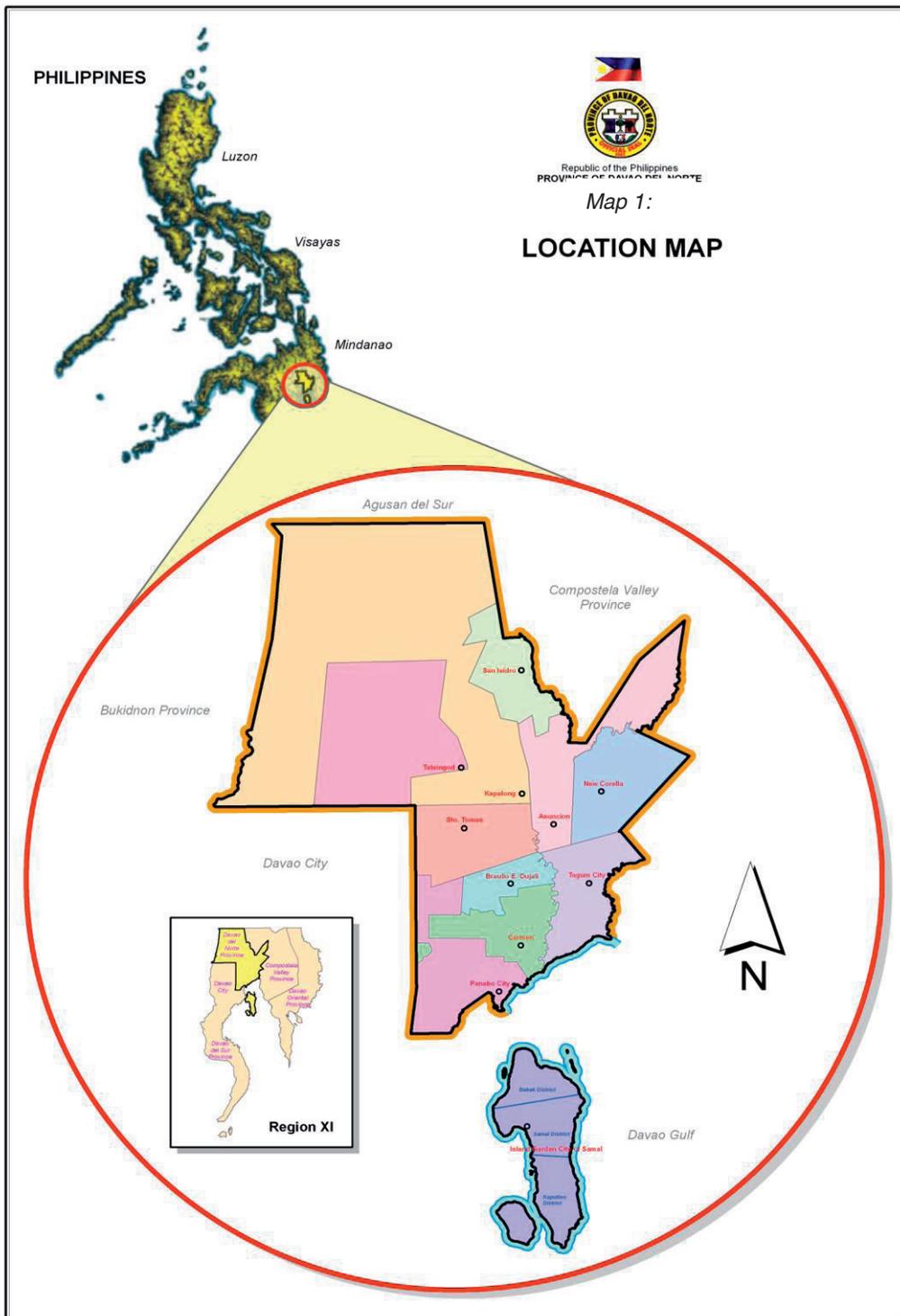
CHAPTER 3

The Planning Environment



1.0 Location, Land area, and Political Subdivision

Davao del Norte is strategically located at the southeastern part of Region XI, bounded by Agusan del Sur on the North, Bukidnon on the Northeast, Davao City on the West, Davao Gulf on the South and the Province of Compostela Valley on the East.



Davao del Norte had an initial composition of 13 municipalities upon its creation on May 8, 1967. However, on May 6, 1970, six additional municipalities were created, and between 1979 and 1990, another three additional municipalities were also created. In 1996, Davao del Norte had a total of twenty-two municipalities. Furthermore, on January 31, 1998, President Fidel V. Ramos signed Republic Act No. 8470 creating the Province of Compostela Valley out of Davao del Norte. Along with the creation of Compostela Valley, were: the enactment of Republic Act No. 8471, creating the Island Garden City of Samal comprising the former municipalities of Babak, Samal and Kaputian; Republic Act 8472 converting Tagum Municipality into Tagum City, the seat of the provincial government center of Davao del Norte; and Republic Act 8473 creating the municipality of Braulio E. Dujali out of some barangays from Carmen and Panabo municipalities. Subsequently, on March 31, 2001 by virtue of Republic Act 1015 the Municipality of Panabo was also converted into a city. And lately, the Municipality of San Isidro was created on March 15, 2004 pursuant to Republic Act 9265. It was taken from six barangays of the Municipality of Asuncion and seven barangays from the Municipality of Kapitalong. At present, Davao del Norte comprises eight (8) municipalities and three (3) cities with 223 barangays, sub-divided into two congressional districts. (Table No.3-1)

One distinguishing landmark in the province is the provincial government center located in Mankilam, Tagum city, which accommodates provincial and national offices particularly the local government unit of Davao del Norte where policies are formulated and enacted into ordinances. These are translated into programs and projects by concerned implementing offices for the benefit of the stakeholders.

Another landmark of the LGU of Davao del Norte is the transformation of the Office of Ministry of Human Settlements/Provincial Action Center into *Tahanan ng Punong Lalawigan*, the official residence of the Provincial Chief Executive of Davao del Norte. Also, adjacent to this edifice is the renovation of the former Department of Interior and Local Government Office into *Bulwagan ng Lalawigan* function hall, which caters most of the significant affairs of the province, like People's Day, seminars and conferences since it can accommodate large crowds. Both buildings are within the compound of the provincial government center, made possible through the initiative of Governor Rodolfo P. del Rosario.

Other landmarks include several commercial centers, within the capital city; public and private schools complete with elementary, secondary and tertiary education, post graduate studies, and vocational schools. In addition to this are the vast banana plantations located in Panabo City, Sto. Tomas and Kapitalong which product is exported to Japan, South Korea, China and Middle East. The residents in the province take advantage of the presence of sports and recreation facilities, communication facilities such as radio, telephone, mails, internet café and others; tertiary public and private

hospitals and clinics. Another showcase is the wide and squatters-free national highway traversing the province. Other important landmarks in the province are the tourist attractions in the Island Garden City of Samal, which offer white sand beaches, water sports, modern resorts and exciting diving facilities.

A recent initiative of the local government unit of Tagum City is to promote the place as a palm city, wherein palm trees are now visible along the national highway, major thoroughfares, and even subdivisions within the area giving popularity not only in the capital city but in the entire Province of Davao del Norte.

**Table No. 3-1: Land Area and Number of Barangays, by City/Municipality
 Province of Davao del Norte, 2007**

| City/Municipality | Land Area (Sq. Km.) | No. of Barangays |
|-----------------------------|-----------------------|------------------|
| District I | | |
| Asuncion | 293.47 | 20 |
| Kapalong | 945.86 | 14 |
| New Corella | 321.48 | 21 |
| San Isidro | 152.49 | 13 |
| Tagum City | 182.54 | 23 |
| Talaingod | 454.96 | 3 |
| District II | | |
| Braulio E. Dujali | 91.00 | 5 |
| Carmen | 166.25 | 20 |
| Island Garden City of Samal | 280.71 | 46 |
| Panabo City | 253.63 | 39 |
| Sto. Tomas | 320.41 | 19 |
| DAVAO DEL NORTE | 3,462.80 | 223 |

Source: DENR XI

Note: Land area is not authoritative, for planning purposes only.

2.0 Population and Settlements

2.1 Population: Regional and National Context

- a. As of August 1, 2007 census, Davao del Norte has a population of 847,440 and a density of 245 persons/sq km. Between 2000 and 2007, its population grew at an annual growth rate of 1.81%, which is lower than the 2.22% rate during the previous years 1995-2000. (Table No.3-2)
- b. Davao del Norte ranks first in population size among the provinces in the region, sharing 20.4% of the regional total. It is the only province with an annual growth rate comparable to that of the region and even exceeds the regional average of 1.71%, and is just 0.23% lower than the national average of 2.04%. (Table No. 3-2)
- c. Based on the 2007 annual growth rate, the Province of Davao del Norte will double its population in 38 years.
- d. Among the provinces, the density of Davao del Norte is comparable to the density of Davao del Sur (209), regional density (209), and even to the national density (295) persons/square kilometer (Table No. 3-2).

Table No. 3-2: Population, Annual Population Growth Rate, Density, by Province, Davao Region, 1990, 2000, 2007

| Province | Population | | | Population (% Share) | | | APGR | | Density | | | Area | |
|--------------------|------------|------------|------------|----------------------|-------|-------|-----------|-----------|---------|------|------|------------|-------|
| | 1990 | 2000 | 2007 | 1990 | 2000 | 2007 | 1990-2000 | 2000-2007 | 1990 | 2000 | 2007 | (Sq. Km.) | % |
| Davao Oriental | 394,697 | 446,191 | 486,104 | 13.3 | 12.1 | 11.7 | 1.23 | 1.19 | 76 | 86 | 94 | 5,164.00 | 26.0 |
| Davao del Norte | 614,308 | 743,811 | 847,440 | 20.8 | 20.2 | 20.4 | 1.93 | 1.81 | 169 | 204 | 245 | 3,462.80 | 18.4 |
| Compostella Valley | 466,286 | 580,244 | 637,366 | 15.8 | 15.8 | 15.3 | 2.21 | 1.30 | 100 | 124 | 137 | 4,667.00 | 23.5 |
| Davao del Sur | 632,688 | 758,801 | 822,406 | 21.4 | 20.6 | 19.8 | 1.83 | 1.12 | 161 | 193 | 209 | 3,934.00 | 19.8 |
| Davao City | 849,947 | 1,147,116 | 1,363,337 | 28.7 | 31.2 | 32.8 | 3.04 | 2.41 | 348 | 469 | 558 | 2,443.60 | 12.3 |
| Davao Region | 2,957,926 | 3,676,163 | 4,156,653 | 100.0 | 100.0 | 100.0 | 2.19 | 1.71 | 149 | 185 | 209 | 19,849.56 | 100.0 |
| Philippines | 60,703,206 | 76,506,928 | 88,574,614 | | | | 2.34 | 2.04 | 203 | 255 | 295 | 299,764.00 | |

Source: National Statistics Office

Computations by Provincial Planning and development Office

2.2 Population Size, Density, and Growth Rate

a. Size and distribution

Tagum City, the seat of the provincial government of Davao del Norte has the largest population among the cities and municipalities in the province. It has a total population of 215,967 or 25.5% share of the total provincial population during the 2007 census, while only occupying a land area of 182.54 sq km. or 5.3% of the provincial land area. (Table No.3-3)

It is followed by Panabo City having a population of 154,329 or 18.2% share, third is the Municipality of Sto. Tomas with 97,210 or 11.5% share fourth is Island Garden City of Samal with 90,291 or 10.7% share, and the fifth is the Municipality of Kapalong with 61,763 or 7.3% share of the total provincial population. (Table No. 3-3)

The rest of the municipalities of Davao del Norte, namely Carmen, rank sixth with 61,656 or 7.3%, Asuncion ranks seventh with 50,731 or 6.0%. Eighth place is New Corella with 46,311 or 5.5%, ninth place is Braulio Dujali with 24,886 or 2.9%, tenth place is San Isidro with 24,696 or 2.9%. The last is Talaingod with 19,600 sharing 2.3% of the total provincial population. (Table No. 3-3)

Table No. 3-3: Population, Annual Population Growth Rate, Density, by City/Municipality Province of Davao del Norte, 1990, 2000, 2007

| City/Municipality | Population | | | Population (% Share) | | | APGR | | Density | | | Area | |
|-------------------|------------|---------|---------|----------------------|-------|-------|-----------|-----------|---------|------|-------|-----------|-------|
| | 1990 | 2000 | 2007 | 1990 | 2000 | 2007 | 1990-2000 | 2000-2007 | 1990 | 2000 | 2007 | (Sq. km.) | % |
| District I | | | | | | | | | | | | | |
| Asuncion | 54,954 | 46,910 | 50,731 | 8.9 | 6.3 | 6.0 | -1.57 | 1.08 | 182 | 156 | 173 | 293.47 | 8 |
| Kapalong | 58,189 | 57,966 | 61,763 | 9.5 | 7.8 | 7.3 | -0.03 | 0.87 | 62 | 62 | 65 | 945.86 | 27 |
| New Corella | 36,138 | 44,590 | 46,311 | 5.9 | 6.0 | 5.5 | 2.12 | 0.52 | 112 | 139 | 144 | 321.48 | 9 |
| San Isidro | 24,511 | 24,100 | 24,696 | 4.0 | 3.2 | 2.9 | -0.16 | 0.33 | 136 | 134 | 162 | 152.49 | 4 |
| Tagum City | 135,440 | 179,531 | 215,967 | 22.0 | 24.1 | 25.5 | 2.85 | 2.58 | 705 | 935 | 1,183 | 182.54 | 5 |
| Talaingod | 7,841 | 16,594 | 19,600 | 1.3 | 2.2 | 2.3 | 7.78 | 2.32 | 17 | 36 | 43 | 454.96 | 13 |
| District II | | | | | | | | | | | | | |
| Braulio E. Dujali | 12,751 | 18,050 | 24,886 | 2.1 | 2.4 | 2.9 | 3.53 | 4.52 | 140 | 198 | 273 | 91.00 | 2 |
| Carmen | 45,133 | 55,144 | 61,656 | 7.3 | 7.4 | 7.3 | 2.02 | 1.55 | 164 | 200 | 224 | 275.16 | 8 |
| IGACOS | 69,640 | 82,609 | 90,291 | 11.3 | 11.1 | 10.7 | 1.72 | 1.23 | 231 | 274 | 322 | 280.71 | 8 |
| Panabo City | 101,795 | 133,950 | 154,329 | 16.6 | 18.0 | 18.2 | 2.78 | 1.97 | 392 | 516 | 608 | 253.63 | 7 |
| Sto. Tomas | 67,916 | 84,367 | 97,210 | 11.1 | 11.3 | 11.5 | 2.19 | 1.97 | 212 | 263 | 303 | 320.41 | 9 |
| DAVAO DEL NORTE | 614,308 | 743,811 | 847,440 | 100.0 | 100.0 | 100.0 | 1.93 | 1.81 | 169 | 204 | 245 | 3,462.80 | 100.0 |

Source: National Statistics Office

Computations by Provincial Planning and Development Office

In comparison to the previous censuses, five cities and municipalities increased their population shares since 1990 and constituted 70% of the provincial population. These are Tagum City, Panabo City, and Sto. Tomas, Island Garden City of Samal, and Kapalong. The rest of the municipalities shared 30% of the total provincial population. These are Carmen, Asuncion, New Corella, San Isidro, Braulio Dujali, and Talaingod. (Table No. 3-4)

With this increasing population trend among the cities and municipalities, it can be observed that population is clustering towards the largest settlements in the province.

**Table No. 3-4: Population Shares, by City/Municipality
Province of Davao del Norte, 1990, 2000, 2007**

| City / Municipality | Population (% share) | | | Cum Population | | | % change | |
|---------------------|----------------------|------|------|----------------|-------|-------|-----------|-----------|
| | 1990 | 2000 | 2007 | 1990 | 2000 | 2007 | 1990-2000 | 2000-2007 |
| District I | | | | | | | | |
| Asuncion | 8.9 | 6.3 | 6.0 | 8.9 | 6.3 | 6.0 | 2.6 | 0.3 |
| Kapalong | 9.5 | 7.8 | 7.3 | 18.4 | 14.1 | 13.3 | 1.7 | 0.5 |
| New Corella | 5.9 | 6.0 | 5.5 | 24.3 | 20.1 | 18.8 | -0.1 | 0.5 |
| San Isidro | 4.0 | 3.2 | 2.9 | 28.2 | 23.3 | 21.7 | 0.7 | 0.3 |
| Tagum City | 22.0 | 24.1 | 25.5 | 50.3 | 47.5 | 47.2 | -2.1 | -1.3 |
| Talaingod | 1.3 | 2.2 | 2.3 | 51.6 | 49.7 | 49.5 | -1.0 | -0.1 |
| District II | | | | | | | | |
| Braulio E. Dujali | 2.1 | 2.4 | 2.9 | 53.6 | 52.1 | 52.4 | -0.4 | -0.5 |
| Carmen | 7.3 | 7.4 | 7.3 | 61.0 | 59.5 | 59.7 | -0.1 | 0.1 |
| IGACOSI | 11.3 | 11.1 | 10.7 | 72.3 | 70.6 | 70.3 | 0.2 | 0.5 |
| Panabo City | 16.6 | 18.0 | 18.2 | 88.9 | 88.7 | 88.5 | -1.4 | -0.2 |
| Sto. Tomas | 11.1 | 11.3 | 11.5 | 100.0 | 100.0 | 100.0 | -0.3 | -0.1 |

Source: Based on Census on Population, 1990, 2000, 2007

Computations by Provincial Planning and development Office

b. Density and urbanization

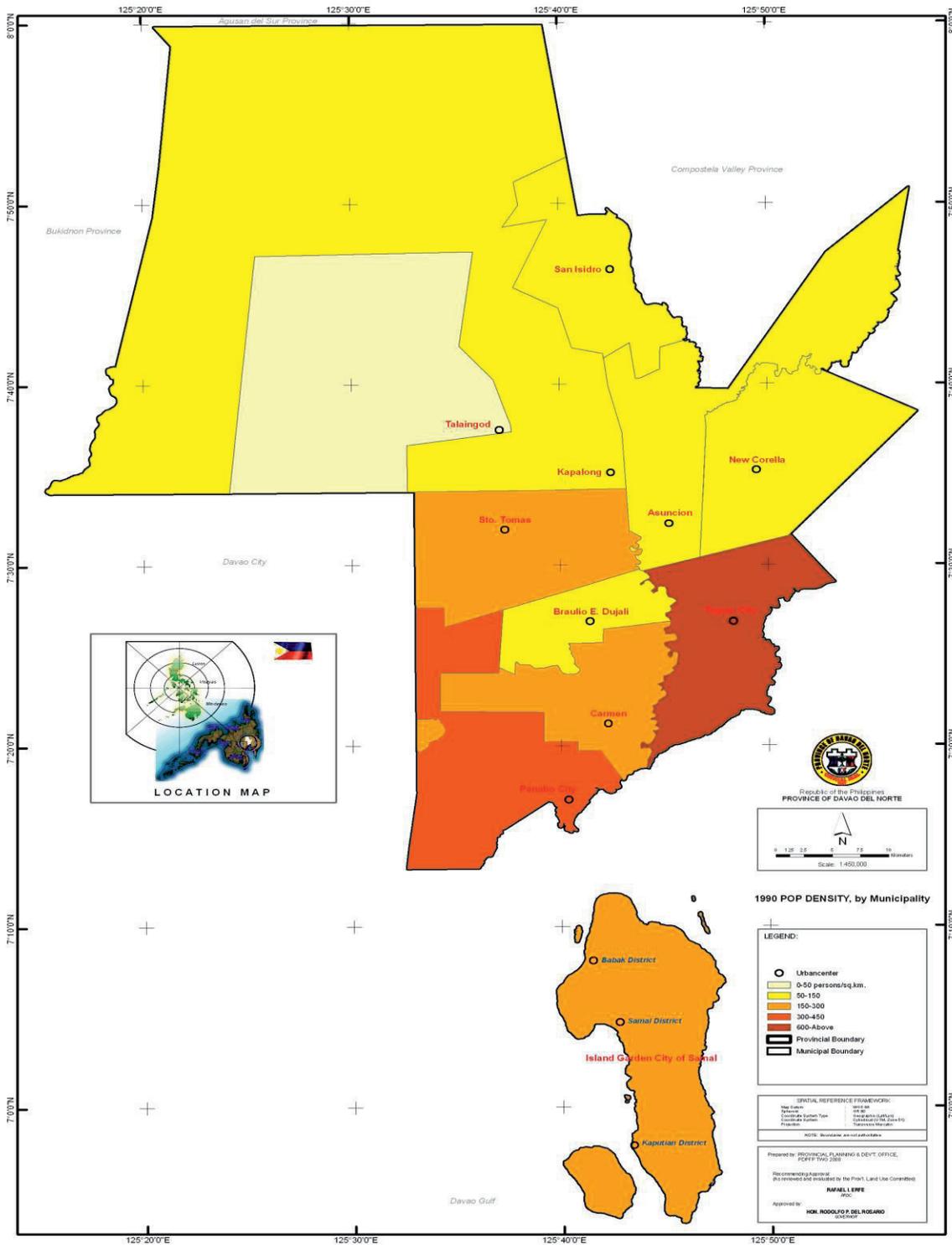
The City of Tagum recorded the highest population density with 1,183 persons/square kilometer in 2007 census. On the other hand, the Municipality of Talaingod has the lowest at 43 persons/square kilometer. The provincial data showed 245 persons while the national figure listed 295 persons/square kilometers. (Table No. 3-3)

Other cities/municipalities with population densities higher than the provincial average are Panabo City (608), Sto. Tomas (303), Island Garden City of Samal (322), and Braulio E. Dujali (273) persons/square kilometer (Table No. 3-3).

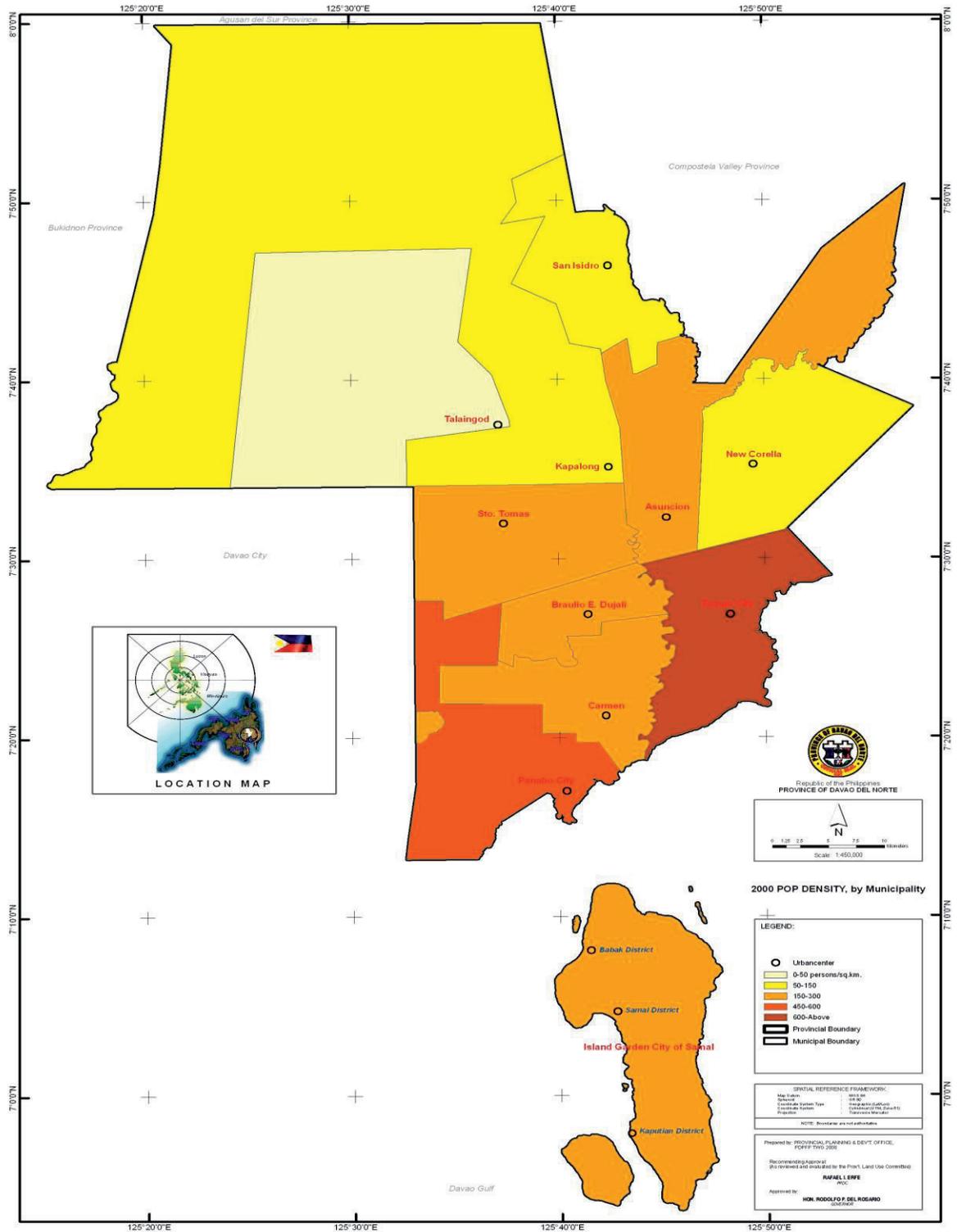
Furthermore, the 1990, 2000 and 2007 density maps, show increasing densities among the Cities of Tagum, Panabo, Island Garden City of Samal and the Municipality of Sto. Tomas. This is an affirmation of highest density settlements among these growth urban centers, industrial and tourism destination areas adjacent to Davao City. Increases in densities are also noticeable in the Municipalities of Carmen, Braulio E. Dujali, Asuncion, and New Corella (Maps 2,3, and 4).

While, the Municipality of Kapalong showed a rapid increase in population during previous and current censuses, it cannot be reflected as a high density municipality because of its large area coverage. Likewise, the Municipalities of San Isidro and Talaingod remained as low density areas.

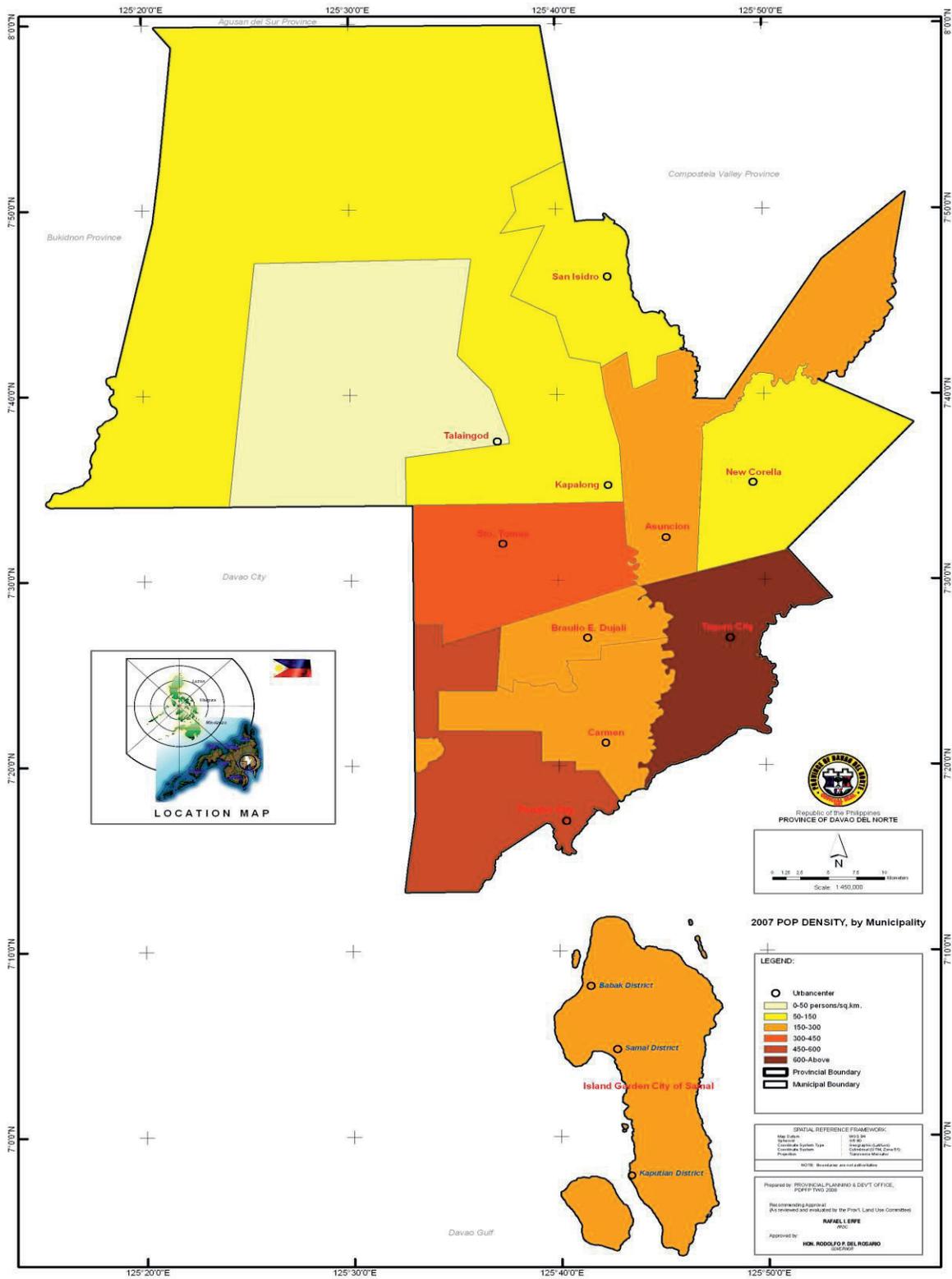
Map 2: 1990 POPULATION DENSITY MAP



Map 3: 2000 POPULATION DENSITY MAP



Map 4: 2007 POPULATION DENSITY MAP



c. Growth rate

Between 1990-2000 censuses, the Municipality of Talaingod exhibited the highest annual population growth rate (APGR) of 7.78% among the cities and other municipalities within the province. This may be the effect of road opening to other provinces for future linkages and exchange of goods and services and the formation of marketing outlets of products. (See Table No. 3-5 and Map 5)

On the other hand, the Municipality of Braulio E. Dujali also experienced a high APGR of 4.52% in 2000-2007, maybe because of the existence of TADECO banana plantation, located in Barangay Tanglaw, as a result there was an increase in the number of employees coming in the area between these years. (See Table No. 3-5 and Map 6)

Densities and growth rates

a. High density and fast-growing settlements: Tagum City, and Panabo City

Tagum City, the center of trade and commerce in the province does not only cater the neighboring cities and municipalities within the province; however its strategic location extended its linkages as far as the Provinces of Davao Oriental, Compostela Valley, Agusan del Sur, and Bukidnon. Panabo City, on the other hand with its proximity to Tagum City and Davao City integrate the development of these big cities and compliment to the industrial activities of Davao City because of its seaport facility.

b. Low density and fast-growing settlements: Braulio E. Dujali, Sto. Tomas and the Island Garden City of Samal.

The Municipality of Braulio E. Dujali is adjacent to Sto. Tomas, and as mentioned earlier, is the fastest growing municipality based on the 2000-2007 censuses. Maybe, one factor that contributed to the increase in its population is the existence of TADECO banana plantation located in Barangay Tanglaw. In like manner, the vast banana plantation in the Municipality of Sto. Tomas definitely boost the municipality's economic condition which is an avenue for population settlement in the area. Growth in the Island Garden City of Samal is attributed to the boom in its tourism industry as it offers pristine white beaches, good diving facilities and panoramic residential sites away from the hustle and bustle of city life.

c. Low density and slow-growing settlements: Carmen, Asuncion, New Corella, San Isidro, Kapitalong, and Talaingod.

The Municipalities of Asuncion and New Corella as neighboring local government units (LGUs) provided agricultural products and services to its big brother, Tagum City. The newly created Municipality of San Isidro also provided agricultural products and services being one of the member and nearest municipality in Tagum cluster.

The Municipality of Carmen located in the midway of two progressive cities of Tagum and Panabo provided services and likewise, covered by the influence area of Panabo City benefited from the economic activities of these cities.

The Municipalities of Kapalong and Talaingod considering its distance from the urban centers of Tagum city and Panabo City also provided agricultural products and support services to these big cities.

These six municipalities of Davao del Norte contributed to the development of the province and further gave support to population growth.

Given the current growth rate of 1.81%, the estimated total population at the end of the plan period (2013) is 944,036 and an overall density of 273 persons/square kilometer. (See Table No. 3-6). This figure implied for an additional population of 15,384 persons every year, or an average increase of 2,564 persons every year. More than one-half of the additional population comes from Tagum City and Panabo City (See Table No. 3-5).

**Table No. 3-5: Estimated Population and Density, by City/Municipality
Province of Davao del Norte, 2008**

| Municipality | Population | | | APGR | | Area (Sq. Km.) | Density 2007 | APGR Factor | | PGR Factor 2000-2007 | Est. Pop 2008 | Est. Density 2008 | Add Pop 2000- 2007 |
|----------------------------|------------|---------|---------|-------|------|----------------------|-----------------|----------------|-----------|----------------------------|------------------|-------------------------|--------------------------|
| | 1990 | 2000 | 2007 | 2000 | 2007 | | | 1990-2000 | 2000-2007 | | | | |
| District I | | | | | | | | | | | | | |
| Asuncion | 54,954 | 46,910 | 50,731 | -1.57 | 1.08 | 293.47 | 173 | -0.0157 | 0.0108 | 1.0109 | 51,283 | 175 | 551 |
| Kapalong | 58,189 | 57,966 | 61,763 | -0.03 | 0.87 | 945.86 | 65 | -0.0003 | 0.0087 | 1.0088 | 62,307 | 66 | 543 |
| New Corella | 36,138 | 44,590 | 46,311 | 2.12 | 0.52 | 321.48 | 144 | 0.0212 | 0.0052 | 1.0052 | 46,552 | 145 | 243 |
| San Isidro | 24,511 | 24,100 | 24,696 | -0.16 | 0.33 | 152.49 | 162 | -0.0016 | 0.0033 | 1.0034 | 24,782 | 163 | 83 |
| Tagum City | 135,440 | 179,531 | 215,967 | 2.85 | 2.58 | 182.54 | 1,183 | 0.0285 | 0.0258 | 1.0258 | 221,539 | 1,214 | 5,575 |
| Talaingod | 7,841 | 16,594 | 19,600 | 7.78 | 2.32 | 454.96 | 43 | 0.0778 | 0.0232 | 1.0232 | 20,055 | 44 | 455 |
| | | | | | | | | | | | | | |
| District II | | | | | | | | | | | | | |
| Braulio E. Dujali | 12,751 | 18,050 | 24,886 | 3.53 | 4.52 | 91.00 | 273 | 0.0353 | 0.0452 | 1.0453 | 26,013 | 286 | 1,127 |
| Carmen | 45,133 | 55,144 | 61,656 | 2.02 | 1.55 | 275.16 | 224 | 0.0202 | 0.0155 | 1.0155 | 62,612 | 377 | 957 |
| IGACOS | 69,640 | 82,609 | 90,291 | 1.72 | 1.23 | 280.71 | 322 | 0.0172 | 0.0123 | 1.0123 | 91,402 | 326 | 1,114 |
| Panabo City | 101,795 | 133,950 | 154,329 | 2.78 | 1.97 | 253.63 | 608 | 0.0278 | 0.0197 | 1.0197 | 157,369 | 620 | 3,044 |
| Sto. Tomas | 67,916 | 84,367 | 97,210 | 2.19 | 1.97 | 320.41 | 303 | 0.0219 | 0.0197 | 1.0197 | 99,125 | 309 | 1,919 |
| DAVAO DEL NORTE | 614,308 | 743,811 | 847,440 | 1.93 | 1.81 | 3,462.80 | 245 | 0.0193 | 0.0181 | 1.0182 | 862,863 | 249 | 15,384 |

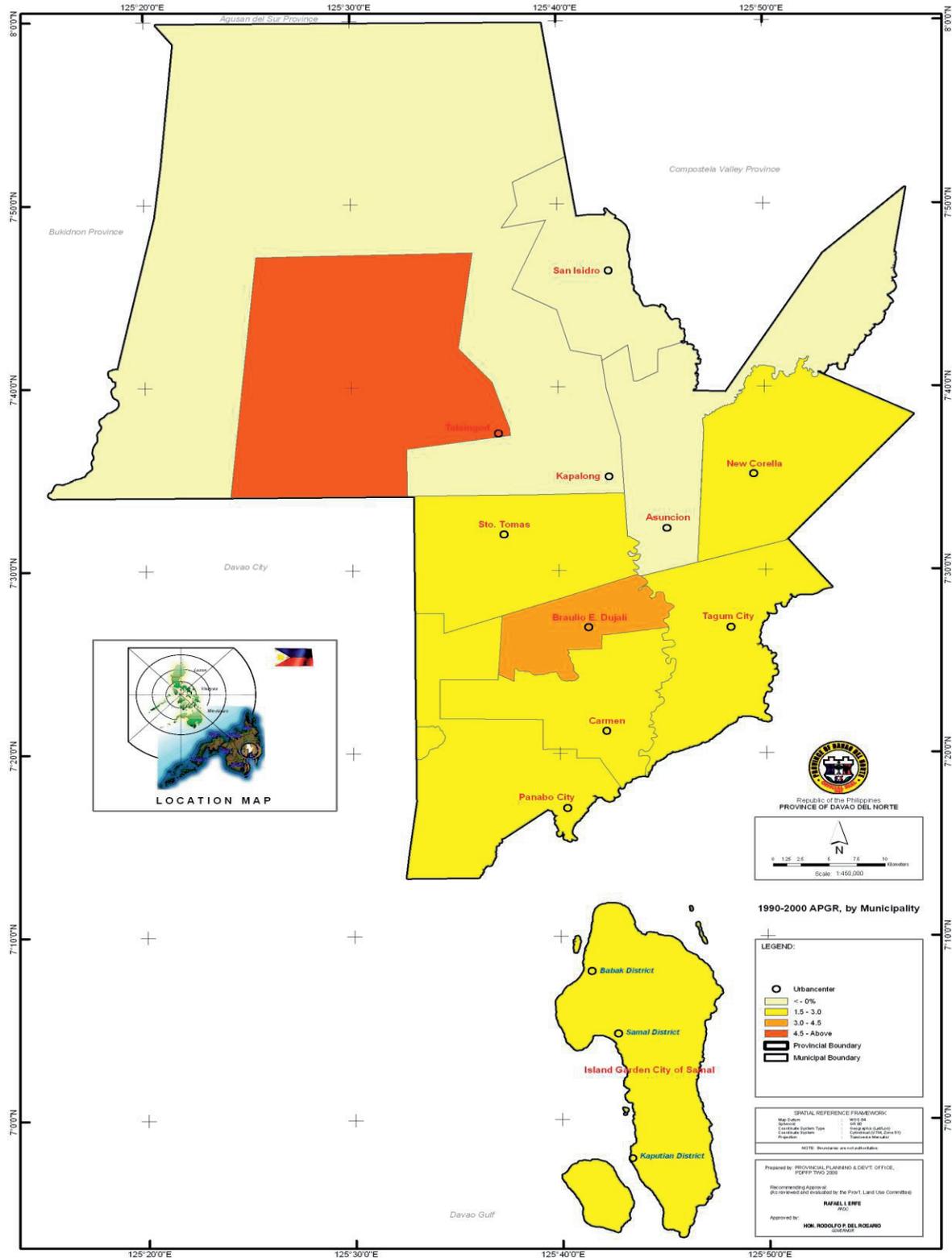
Source: National Statistics Office
Computations by Provincial Planning and Development Office

**Table No. 3-6: Projected Population, by City/Municipality
Province of Davao del Norte, 2008-2022**

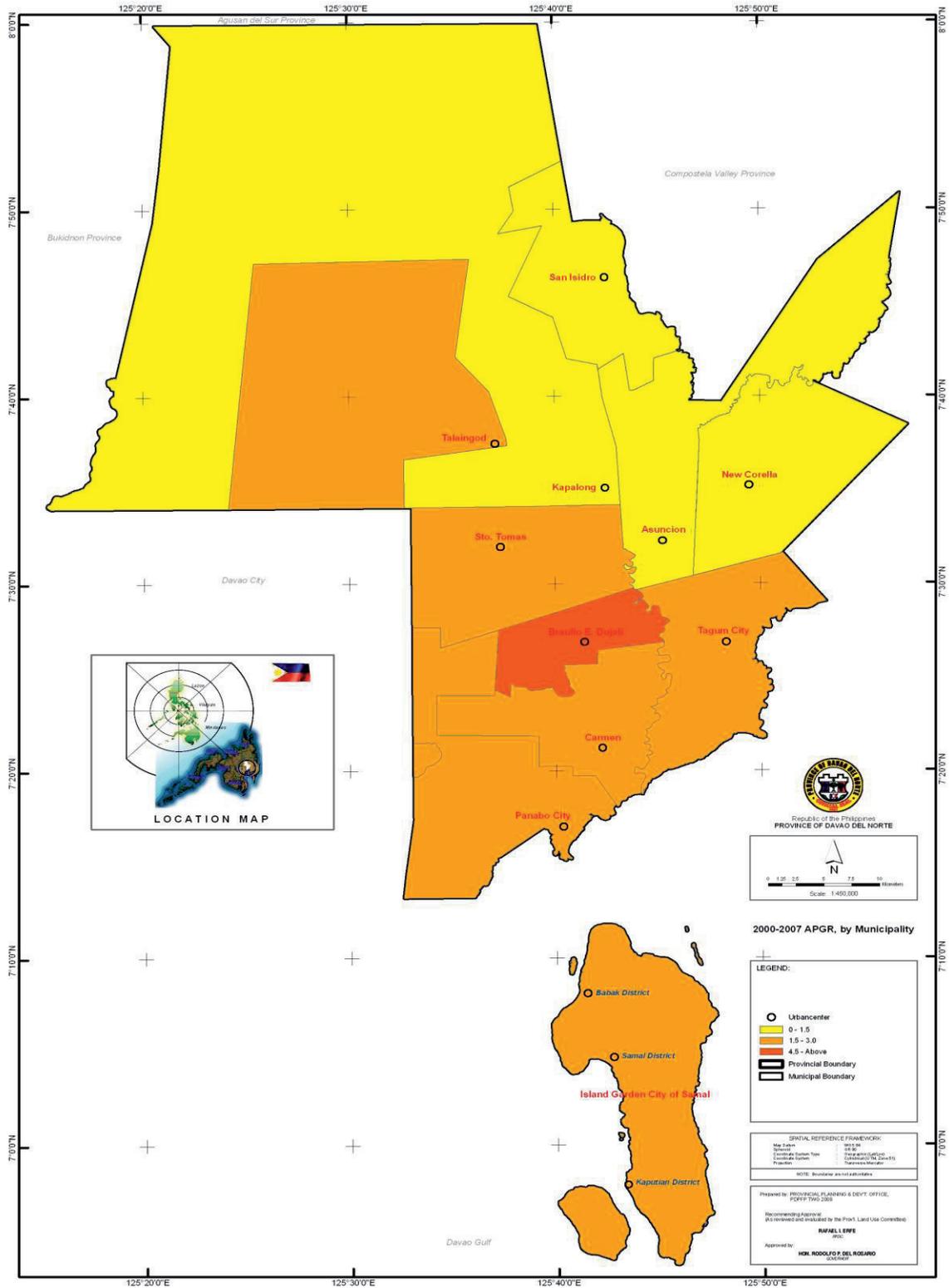
| City/Mun | 2000 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| Asuncion | 46,910 | 50,731 | 51,282 | 51,839 | 52,402 | 52,971 | 53,546 | 54,127 | 54,715 | 55,309 | 55,910 | 56,517 | 57,131 | 57,751 | 58,379 | 59,013 | 59,653 |
| Kapalong | 57,966 | 61,763 | 62,306 | 62,854 | 63,406 | 63,963 | 64,526 | 65,093 | 65,665 | 66,242 | 66,824 | 67,412 | 68,004 | 68,602 | 69,205 | 69,813 | 70,427 |
| New Corella | 44,590 | 46,311 | 46,554 | 46,797 | 47,042 | 47,289 | 47,536 | 47,785 | 48,036 | 48,287 | 48,540 | 48,794 | 49,050 | 49,307 | 49,565 | 49,825 | 50,085 |
| San Isidro | 24,100 | 24,696 | 24,779 | 24,863 | 24,947 | 25,031 | 25,116 | 25,200 | 25,285 | 25,371 | 25,456 | 25,542 | 25,629 | 25,715 | 25,802 | 25,889 | 25,976 |
| Tagum City | 179,531 | 215,967 | 221,542 | 227,261 | 233,127 | 239,145 | 245,319 | 251,651 | 258,148 | 264,812 | 271,647 | 278,660 | 285,853 | 293,232 | 300,802 | 308,567 | 316,532 |
| Talaingod | 16,594 | 19,600 | 20,055 | 20,521 | 20,998 | 21,486 | 21,985 | 22,495 | 23,018 | 23,553 | 24,100 | 24,660 | 25,232 | 25,819 | 26,418 | 27,032 | 27,660 |
| B. Dujali | 18,050 | 24,886 | 26,013 | 27,191 | 28,423 | 29,710 | 31,056 | 32,463 | 33,933 | 35,470 | 37,077 | 38,756 | 40,511 | 42,346 | 44,264 | 46,269 | 48,365 |
| Carmen | 55,144 | 61,656 | 62,613 | 63,584 | 64,571 | 65,572 | 66,590 | 67,623 | 68,672 | 69,738 | 70,820 | 71,918 | 73,034 | 74,167 | 75,318 | 76,487 | 77,673 |
| IGACOS | 82,609 | 90,291 | 91,405 | 92,533 | 93,675 | 94,831 | 96,001 | 97,186 | 98,385 | 99,599 | 100,828 | 102,073 | 103,332 | 104,607 | 105,898 | 107,205 | 108,528 |
| Panabo City | 133,950 | 154,329 | 157,373 | 160,478 | 163,643 | 166,871 | 170,163 | 173,519 | 176,942 | 180,433 | 183,992 | 187,621 | 191,322 | 195,096 | 198,945 | 202,869 | 206,871 |
| Sto. Tomas | 84,367 | 97,210 | 99,129 | 101,085 | 103,080 | 105,115 | 107,189 | 109,305 | 111,462 | 113,662 | 115,905 | 118,193 | 120,526 | 122,904 | 125,330 | 127,804 | 130,326 |
| DDNORTE | 743,811 | 847,440 | 862,824 | 878,487 | 894,435 | 910,672 | 927,204 | 944,036 | 961,174 | 978,623 | 996,388 | 1,014,476 | 1,032,893 | 1,051,643 | 1,070,734 | 1,090,172 | 1,109,963 |

Source: Provincial Planning and Development Office

Map 5: 1990- 2000 ANNUAL POPULATION GROWTH RATES



Map 6: 2000-2007 ANNUAL POPULATION GROWTH RATES



2.3 Existing settlement pattern

Based on the 2007 census on population, a histogram was formulated to illustrate the hierarchy of settlements among the cities and municipalities in the province. The categories are: for small/medium city (primary urban center A) with population more than 100,000; large town (primary urban center B) with population more than 50,000; medium town with population more than 25,000; and small town with population more than 2,500.

As reflected in the 2007 histogram, two cities fall under small/medium city (primary urban center A); these are Tagum City and Panabo City.

Tagum City, an urban center A, is just 55 kilometers from Davao City and 1 hour travel by bus to and from Davao City. It has a fast growing population of 215,967 as of 2007 census. This is attributed to its strategic location for business and commerce. In addition are the presence of various facilities in education complete in elementary, high school and tertiary and even vocational schools, sports and recreation facilities, communication such as radio stations, internet cafes, telephone facilities, tertiary hospitals and clinics, churches for Catholics and non Catholics, including the luxury of shopping malls, market, terminal and other facilities became important factors that attract many people to settle in Tagum City. Being the big brother of Cluster 1, its members and neighboring Municipalities of New Corella, Asuncion and San Isidro, served as the marketing arm, distributor and prime business and social services center among these municipalities.

In the same manner, Panabo City the second urban center A has a growing population of 154,329. It is 23 kilometers away from Tagum City, and is just 30 minutes travel by bus from Tagum City and 35 minutes travel to Davao City, thus making this city a preferred residential area of those working in Davao City and those who find employment opportunities in Panabo City. Like Tagum City, the City of Panabo also has much to offer to its populace. It will take the lead in the development of cluster 3, being the big brother of its member and neighboring Municipalities of Carmen and Braulio Dujali. With its proximity to Davao City, and having a seaport facility, the city is projected as an alternate site for industrial development in the Province of Davao del Norte.

For large town (primary urban center B), we have the Island Garden City of Samal and the Municipalities of Sto. Tomas, Kapalong, Carmen and Asuncion.

The Island Garden City of Samal under cluster 4 and classified as urban center B has a population of 90,291 and tagged as the tourism capital of the province because of its panoramic residential site, wide and alluring beaches where tourist and even local residents of Davao del Norte and neighboring towns and provinces will surely admire. It is an island away from air pollution brought about by industrialization, and noise caused by passenger bus and jeepney. Such advantage is an indicator for population settlement and tourist attraction in the area which definitely will boost the tourism industry in the city.

The Municipality of Sto. Tomas belong in urban center B has a population of 97,210 attributed among vast banana plantation which are abundant in the area. On the other hand, the Municipality of Kapalong classified under urban center B is also rich in banana plantation

and a neighboring Municipality of Sto. Tomas compliment each other's activities. These two municipalities under cluster 2 provide services and facilities not found in rural settlements, in effect a good reason for population settlement in these areas.

The Municipality of Carmen in between two big Cities of Tagum and Panabo and has a population of 61,656 benefited from the economic activities among these cities.

Under medium town is the Municipality of New Corella, which has a population of 46,311 and is just 21 kilometers more or less from the urban center of Tagum City. Such distance is an advantage to the municipality since it can benefit from the economic activities of Tagum City and likewise, in the marketing of its agricultural products and services.

And for small town category comprises the Municipalities of Braulio E. Dujali, San Isidro and Talaingod. The Municipality of Braulio E. Dujali belong to Panabo Cluster and covered by the influence area of Panabo City.

Figure No. 3-1

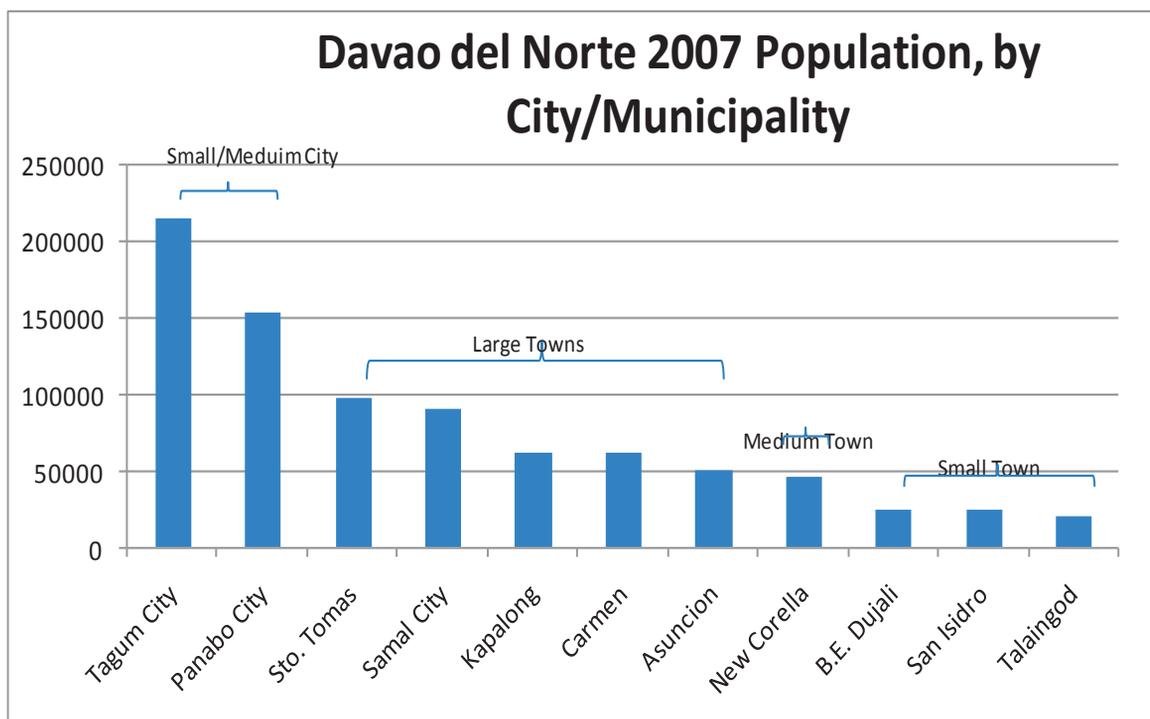


Figure No. 3-2

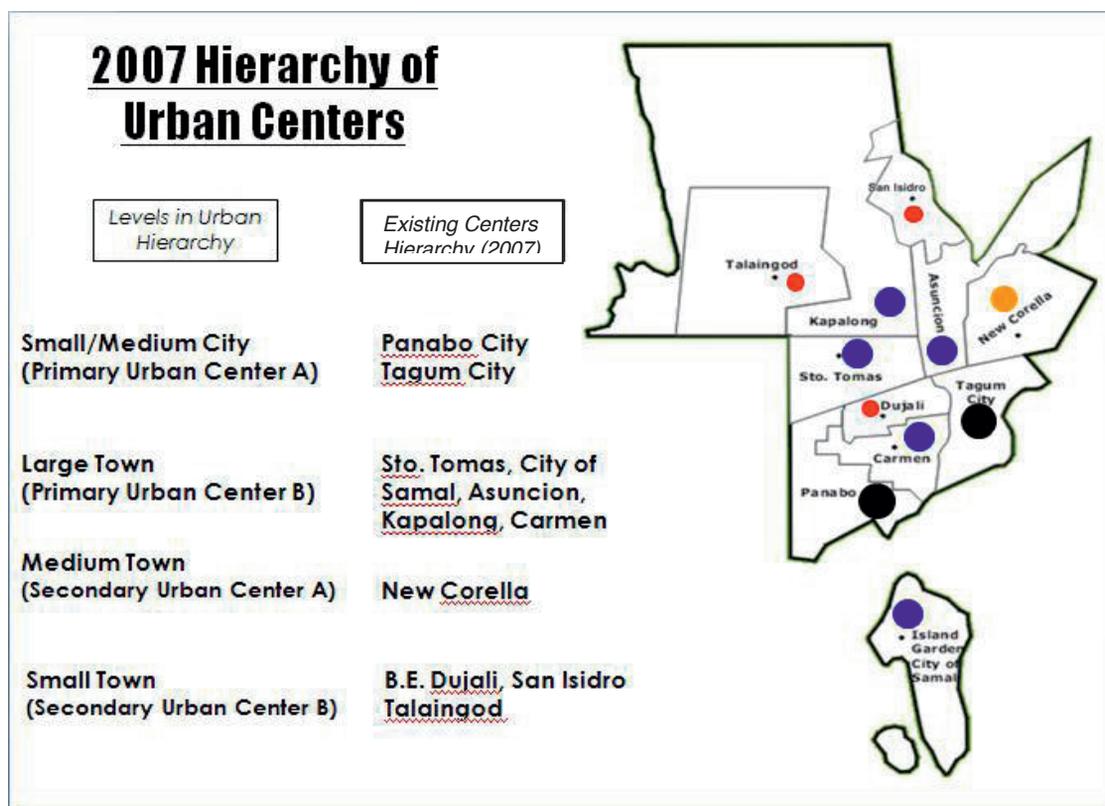


Figure No. 3-3

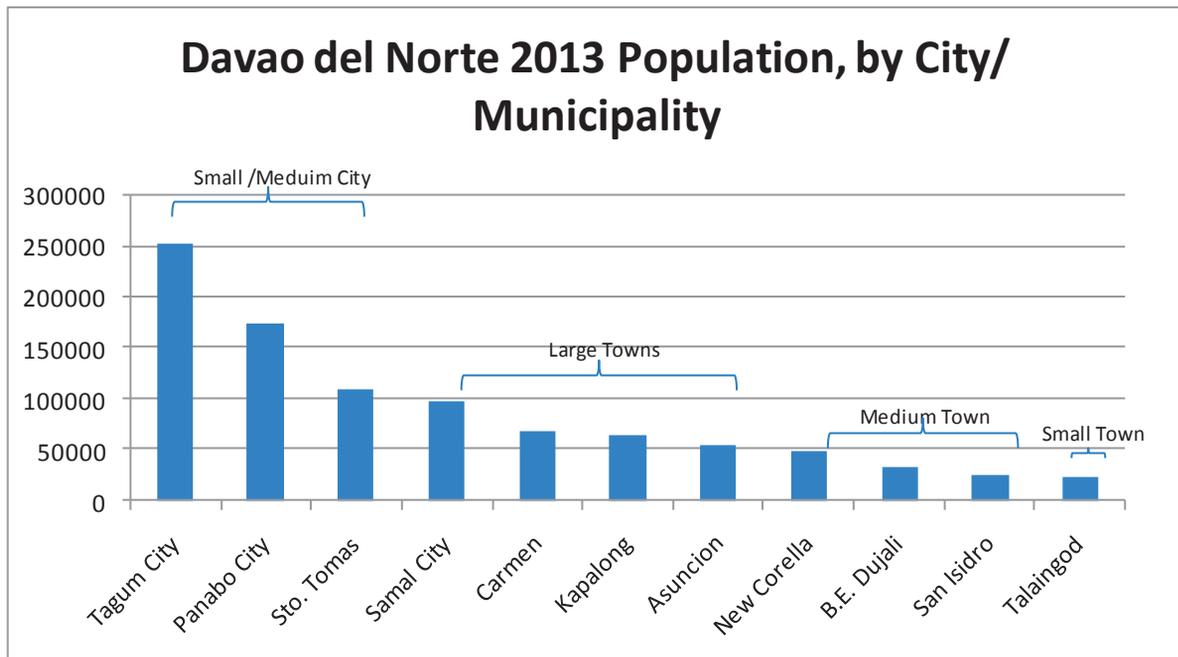


Figure No. 3-4

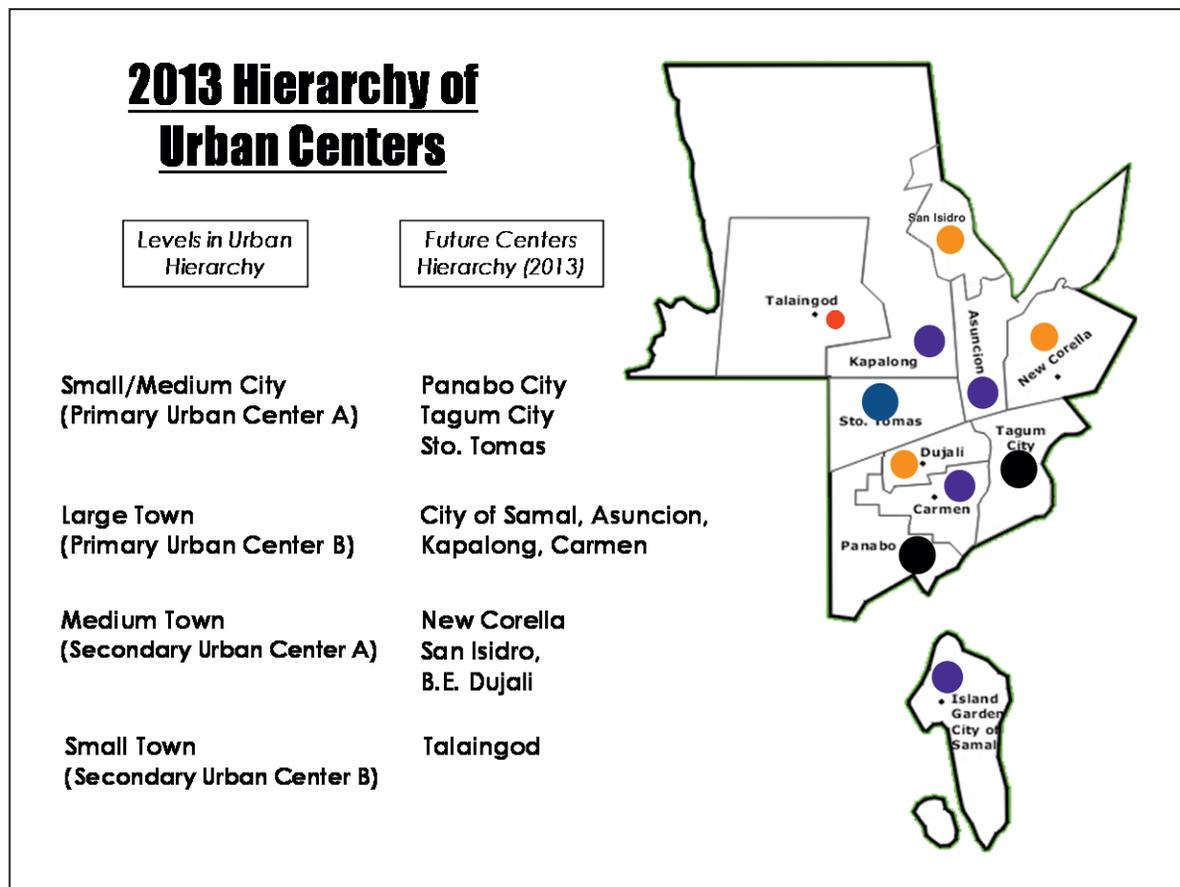


Figure No. 3-5

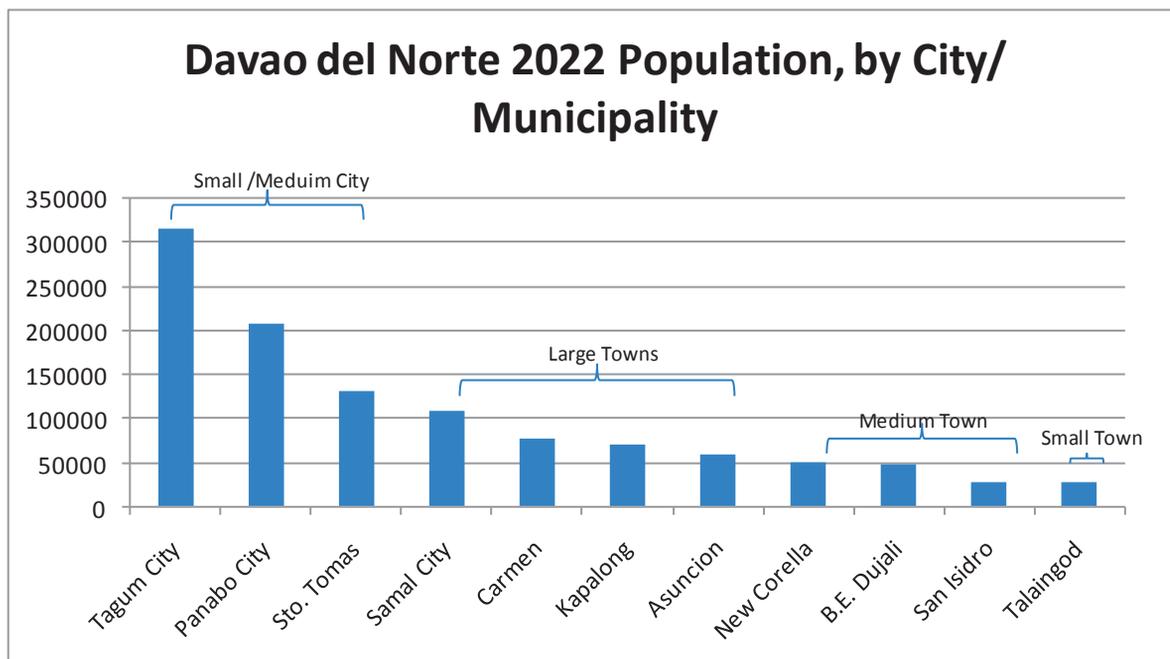
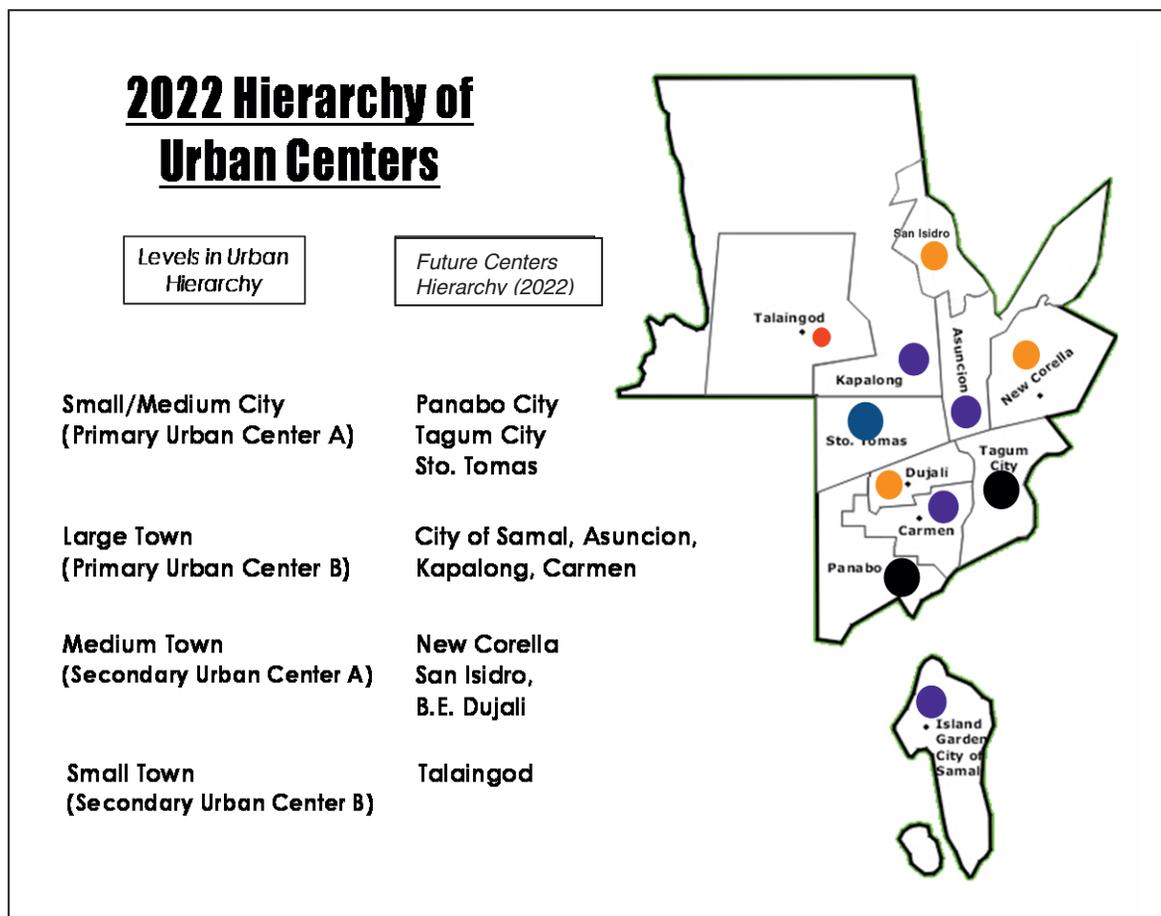
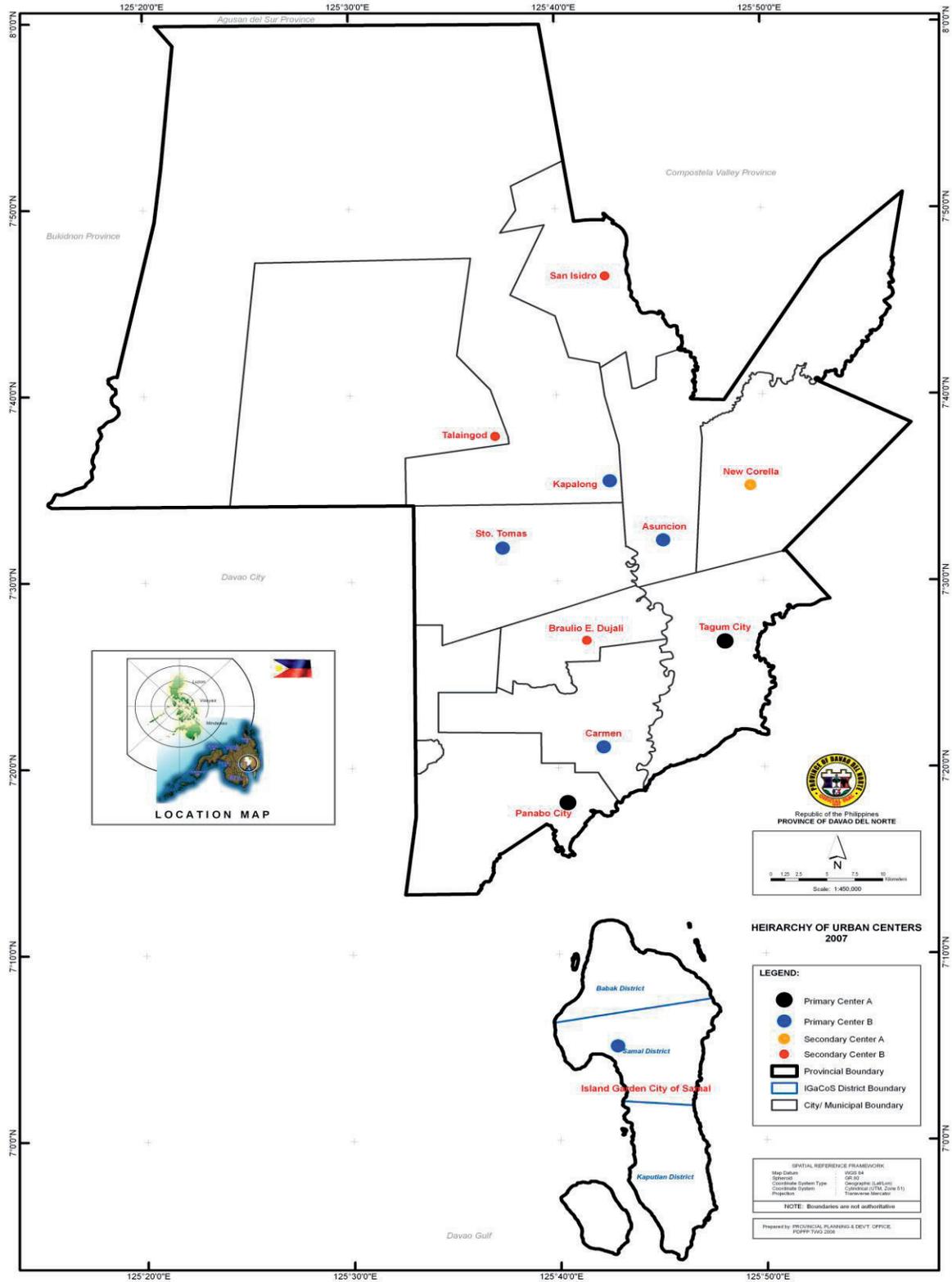


Figure No. 3-6



Map 7: 2007 HEIRARCHY OF URBAN CENTERS



Map 8: 2013 HEIRARCHY OF URBAN CENTERS

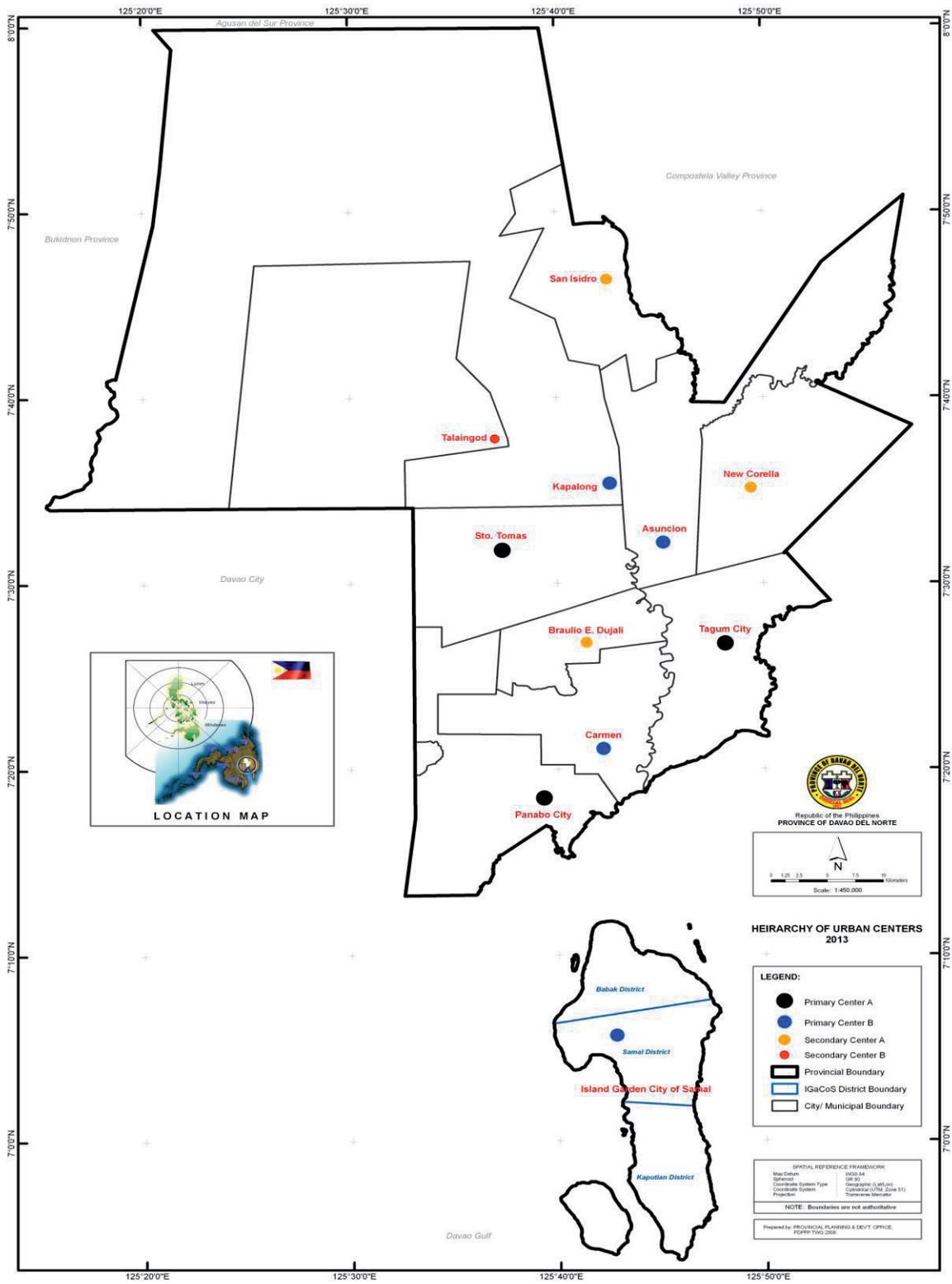


Figure No. 3-7
SCALOGRAM OF ACCUMULATED ESTABLISHMENTS
 Davao del Norte

| | Tagum City | New Corella | Asuncion | Sto. Tomas | Kapalong | Talaingod | Parabo | Carmen | San Isidro | B. Dujali | IGC of Samal |
|---------------------|------------|-------------|----------|------------|----------|-----------|--------|--------|------------|-----------|--------------|
| telephone company | | | | | | | | | | | |
| telegraph office | | | | | | | | | | | |
| post office | | | | | | | | | | | |
| messenger service | | | | | | | | | | | |
| radio station | | | | | | | | | | | |
| printing press | | | | | | | | | | | |
| newspaper pub | | | | | | | | | | | |
| magazine pub | | | | | | | | | | | |
| police force | | | | | | | | | | | |
| fire dept. | | | | | | | | | | | |
| sewage | | | | | | | | | | | |
| electric utility | | | | | | | | | | | |
| security agency | | | | | | | | | | | |
| street lights | | | | | | | | | | | |
| paved sidewalks | | | | | | | | | | | |
| nat'l highway | | | | | | | | | | | |
| irrigation system | | | | | | | | | | | |
| tricycle/motorcycle | | | | | | | | | | | |
| buses | | | | | | | | | | | |
| jeepneys | | | | | | | | | | | |
| taxis | | | | | | | | | | | |
| motor boats | | | | | | | | | | | |
| aircraft | | | | | | | | | | | |
| airports | | | | | | | | | | | |
| bus terminal | | | | | | | | | | | |
| comm'l posts | | | | | | | | | | | |
| sari-sari stores | | | | | | | | | | | |
| groceries | | | | | | | | | | | |
| dept. stores | | | | | | | | | | | |
| drugstores | | | | | | | | | | | |
| gas stations | | | | | | | | | | | |
| auto repair shops | | | | | | | | | | | |
| bakeries | | | | | | | | | | | |
| banks | | | | | | | | | | | |
| hardware | | | | | | | | | | | |
| lumber yards | | | | | | | | | | | |
| rice/corn mills | | | | | | | | | | | |
| furniture shops | | | | | | | | | | | |
| appliance stores | | | | | | | | | | | |
| agro-chem stores | | | | | | | | | | | |
| insurance/real est. | | | | | | | | | | | |
| factories | | | | | | | | | | | |
| pub/private hosp. | | | | | | | | | | | |
| clinic | | | | | | | | | | | |
| health care centers | | | | | | | | | | | |
| family ping clinic | | | | | | | | | | | |
| optical, dental | | | | | | | | | | | |
| rural health stat. | | | | | | | | | | | |
| basketball court | | | | | | | | | | | |
| night clubs/bars | | | | | | | | | | | |
| resort facilities | | | | | | | | | | | |
| dancing pavilions | | | | | | | | | | | |
| cockfight | | | | | | | | | | | |
| bowling alley | | | | | | | | | | | |
| agrl, local govt | | | | | | | | | | | |

3.0 PHYSICAL RESOURCES

3.1 General land and water characteristics and resources

3.1.1 Topography and slope

Rugged, mountainous and moderately to steeply sloping areas on the western part and a wide alluvial plain on the central lowland area generally characterize the topography of the province. Comprising the major portion of the alluvial plain is a flat tract of land. However, some places are gently undulating and exhibit a rolling topography.

Davao del Norte has generally a low land terrain comprising 37 percent of the total land area with less than 100 meters elevation. The highest elevation ranging from 1000-2000 meters comprising 3 percent of the total land area is found in the municipalities of Kapalong and Talaingod.

*Table No.3-7: Elevation Characteristics
Province of Davao del Norte, 2008*

| City/Municipality | Area of Elevation in Hectares | | | | | | Total |
|-------------------|-------------------------------|-----------|-----------|------------|-------------|---------|---------|
| | <100 m | 100-300 m | 301-500 m | 501-1000 m | 1001-2000 m | >2001 m | |
| Davao del Norte | 128,343 | 84,651 | 29,501 | 94,174 | 9,613 | - | 346,280 |
| % Distribution | 37 % | 24 % | 9 % | 27 % | 3 % | 0.00% | 100% |

Source: BSWM XI

Slope is a key variable affecting the selection and positioning of crops, and likewise influences the type of management infrastructure that must be adopted to sustain land productivity.

About 53.6 percent of the total land area of the province or 185,687.11 hectares has slope range of 0-18 percent (Table No.3-8). These areas may be used for agriculture, industries and settlements. The remaining 46.4 percent or 160,592.89 hectares of the province are areas with slope ranging from 18 percent to more than 50 percent.

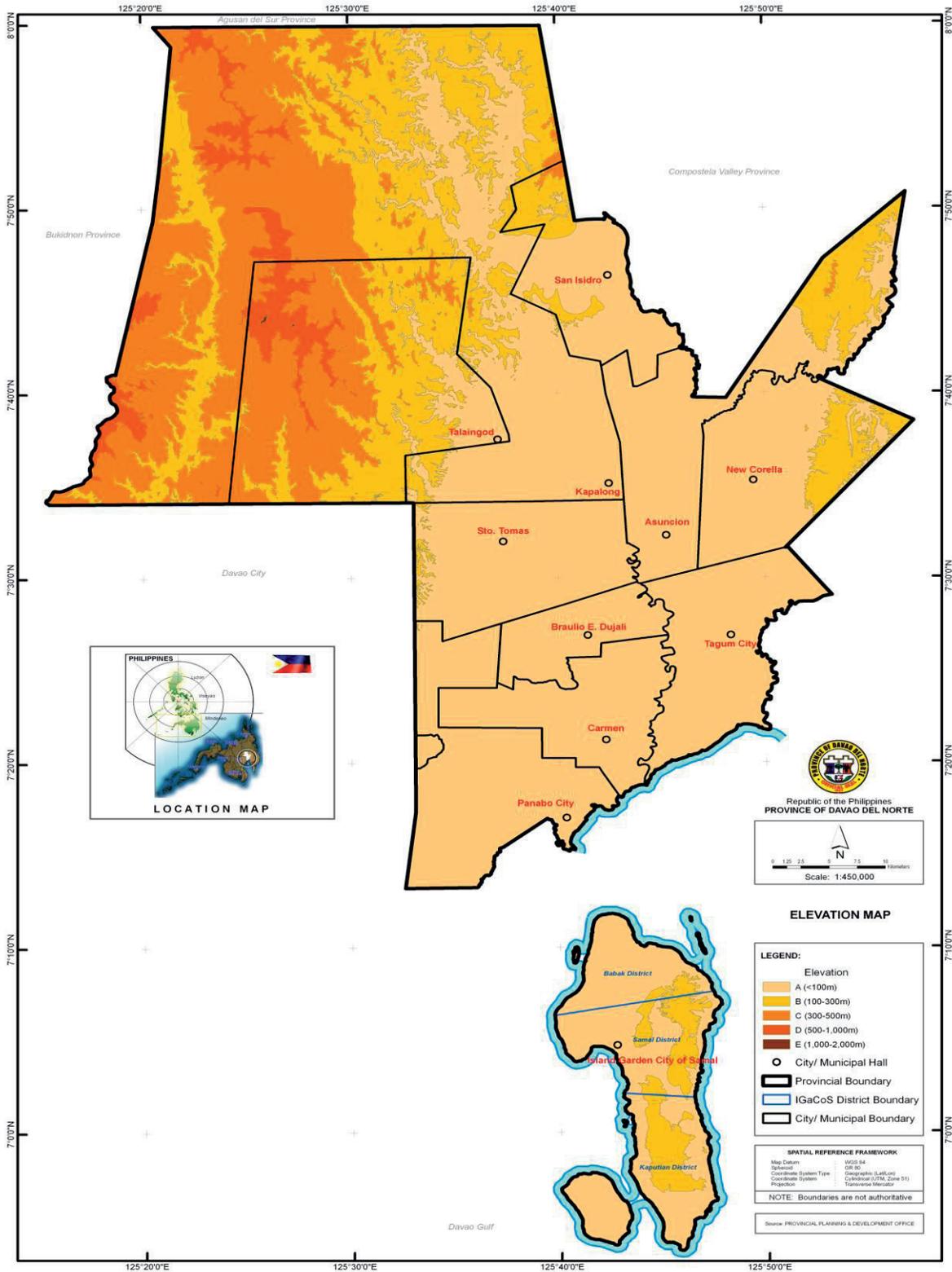
*Table No. 3-8 : Slope Classification by City/Municipality
Province of Davao del Norte (in hectares)*

| City/Municipality | Slope Class | | | | | | Total |
|-------------------|-------------|-----------|-----------|-----------|-----------|-----------|------------|
| | 0-3 % | 3-8 % | 8-18 % | 18-30 % | 30-50 % | 50 % up | |
| Asuncion | 13,530.90 | 1,799.30 | 2,601.80 | 2,652.70 | 8,758.80 | 3.50 | 29,347.00 |
| B.E Dujali | 9,100.00 | 0 | 0 | 0 | 0 | 0 | 9,100.00 |
| Carmen | 16,603.30 | 16.50 | 5.20 | 0 | 0 | 0 | 16,625.00 |
| Kapalong | 10,850.30 | 5,551.50 | 5,543.31 | 25,806.69 | 19,025.37 | 27,808.83 | 94,586.00 |
| New Corella | 12,446.30 | 3,232.80 | 4,934.90 | 3,863.80 | 7,643.80 | 26.40 | 32,148.00 |
| San Isidro | 4,627.00 | 1,871.00 | 939.00 | 7,716.00 | 96.00 | 0 | 15,249.00 |
| Sto. Tomas | 13,093.00 | 3,670.00 | 2,793.00 | 9,350.90 | 2,999.30 | 134.80 | 32,041.00 |
| Talaingod | 0 | 1,656.70 | 2,235.30 | 14,453.50 | 7,716.00 | 19,434.50 | 45,496.00 |
| IGC of Samal | 11,323.10 | 8,839.10 | 5,346.80 | 853.80 | 1,357.40 | 350.80 | 28,071.00 |
| Panabo City | 13,023.50 | 4,210.50 | 7,589.00 | 124.50 | 415.50 | 0 | 25,363.00 |
| Tagum City | 16,892.30 | 1,051.00 | 310.70 | 0 | 0 | 0 | 18,254.00 |
| Davao del Norte | 121,489.70 | 31,898.40 | 32,299.01 | 64,821.89 | 48,012.17 | 47,758.83 | 346,280.00 |
| % Distribution | 35.10 | 9.20 | 9.30 | 18.70 | 13.90 | 13.80 | 100 |

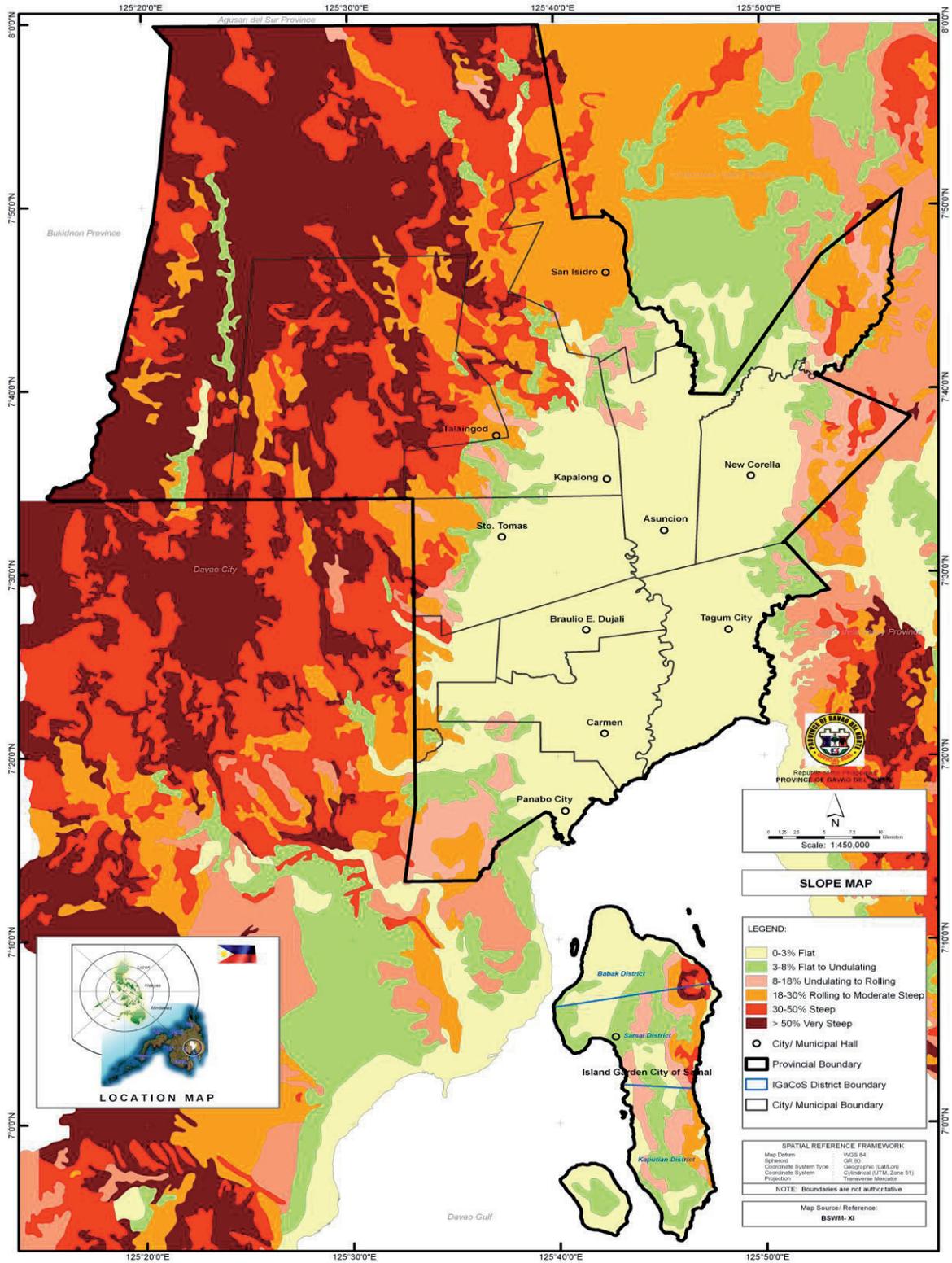
Source: BSWM XI, GIS computations based on the maps by the DENR, BSWM

Note: Land area is not authoritative for any other purposes.

Map 9: ELEVATION MAP



Map 10: SLOPE MAP



3.1.2 Land and water resources

Davao del Norte has a total land area of 346,280 hectares which is 18.3% of the total area of Region XI. About 279,759.50 hectares or 80% of the total land area should be protected for environmental and agriculture development purposes. These are the NIPAS, SAFDZ, marine protected areas and non-NIPAS which include second growth forest with over 1000 meters elevation or 50% slope, mangrove forest, watershed area and buffer strips or easements along rivers and escarpments. The remaining 66,520.50 hectares or 20% can be used for urban and rural settlements, farming, industries, tourism and other urban-related activities.

The province has abundant water supply both from surface and groundwater resources. Fifteen (15) rivers and creeks traverse the province. The bigger rivers such as the Lasang, Tagum/Libuganon, Saug and Tuganay drain the broad plain west and north into Davao Gulf. These major rivers are part of the watersheds of the same name.

Tagum/Libuganon River with a total length of 95 kilometers is the longest among the major rivers in the province and has a total watershed area of 247,500 hectares. It originates from the eastern hillside of the Mindanao Central Cordillera and flows to the central alluvial plain, and then extends to Davao Gulf.

A study conducted by the Sinclair Knight Merz in 2004 for an Integrated Water Resource Development Project for the Province of Davao del Norte identified surface water from Tagum River as a major resource which can provide a large volume for potable drinking water with minimal risk of supply failure. The water in the river will require treatment considering its quality. Likewise water supply needs for agricultural purposes, in terms of volume, accessibility and availability will also have to be given due consideration.

**Table No. 3-9 : Drainage Areas and Flow Rates of Major Rivers
 Province of Davao del Norte**

| Major Rivers | Drainage Area (km ²) | Flow Rate (m ³ /sec) | | |
|--------------|----------------------------------|---------------------------------|---------|---------|
| | | Peak | Maximum | Minimum |
| Hijo | 617 | 150.9 | 102.5 | 8.3 |
| Tagum | 2,326 | 654.7 | 601.9 | 24.1 |
| Lasang | 808 | No gauging station present | | |

Source: Philippine Water Resources Summary Data, NWRC
 Provincial Water Supply, Sewerage and Sanitation Sector Plan, Davao del Norte

Notes: Peak □ Peak discharge of Daily Maximum Discharge
 Maximum □ Maximum Daily Discharge of Weighted Daily Discharge
 Minimum □ Minimum Daily Discharge of Weighted Daily Discharge

Groundwater availability in the province is classified as deepwell and difficult area. Deep well area covers approximately 80% of the province, widely distributed in the river basins of Tagum and Davao rivers. Groundwater is the main source of drinking water in the urban centers of Tagum, Panabo, Sto. Tomas, Island Garden City of Samal, New Corella and Carmen. About 20% of the provincial area is classified as a difficult area to exploit groundwater. Such areas are characterized by mountains in the northwestern side of the province. Springs are the common source of water in these areas. There are 157 developed springs currently serving the populace mostly in the rural areas of the province.

3.1.3 Soil characteristics and fertility

a. Soil type

The soils of the Province of Davao del Norte have developed from either alluvium washed from the uplands or from materials originating from igneous or sedimentary rocks. Each type of soil has a different fertility, structure and character.

There are seven (7) types of soil in the province. These are:

1. Hydrosol - Under this miscellaneous soil type are the swamps, which are made up of a complex of poorly drained immature soils. These soils are generally brackish or salty and are sandy in some places. A very significant area of this type is utilized as fishponds in the City of Tagum.
2. Camansa Sandy Clay Loam - This soil is one of the most extensive soils in Davao del Norte. It occupies the hilly and mountainous regions on the northern parts of the province. The more gentle slopes of this soil are suited to perennial crops, but the soil on the whole is more suited for forestry purposes.
3. Cabangan Clay Loam - Soil of this type are secondary soils derived from recent Alluvium washed mainly from the uplands underlain by sedimentary. This soil occupies the greater part of the gently rising plain at the head of the gulf. The yields of the different crops on this soil indicate that it is of medium to high productivity. To secure optimum growth for most crops, except lowland rice, artificial drainage for this soil must be provided.
4. San Manuel Silty Clay Loam - This soil is developed from recent alluvium washed from the uplands and deposited by rivers along their courses. A large portion of the areas under this soil type is sometimes flooded and for this reason they make up some of the most productive soils of the province. Because of the natural fertility of the soil, diverse crops are raised on it with moderately high yields.
5. Mountain Soils (Undifferentiated) - The soils classified as mountain soils or undifferentiated are soils or areas that are inaccessible. These soils support the forests of the province and although they have no agricultural importance, they do support forestry farming.
6. Bolinao Clay- The Island Garden City of Samal is composed of this type of soil. The soil is slightly acidic and has a rather poor internal drainage but the production of coconuts, corn, and citrus on the eastern coast compares favorably with that of other soils of the province, though at a much lower level of production.
7. Cabantian Clay- The soils of the Cabantian Clay type are formed in the hilly portions of the City of Panabo bordering the City of Davao. On this soil, crops yield only moderately or even low in some places.

b. Soil fertility

The soil fertility of the province is highly categorized under medium acid that is within the range of 5.6-6.0. About 43.98 percent or 167,698 hectares of the total land area are medium acidic. (See Table No. 3-10)

Table No. 3-10 : Soil Fertility, Province of Davao del Norte

| Range | Classification | Area (Has.) | % Distribution |
|-----------|--------------------|-------------|----------------|
| < 4.5 | Extremely Acid | 36,387 | 10.33 |
| 4.5 – 5.0 | Very strongly acid | 65,499 | 17.18 |
| 5.1 – 5.5 | Strongly acid | 26,634 | 6.98 |
| 5.5 – 6.0 | Medium Acid | 167,698 | 43.98 |
| 6.1 – 6.5 | Slightly acid | 42,898 | 11.25 |

Source: Land Resources Information System (LARIS)
Bureau of Soils and Water Management, DA-RFU XI

3.1.4 Mineral resources

Davao del Norte is endowed with rich deposits of non-metallic minerals like guano, marble, limestone and others. It has an estimated total reserve of 44,845,283 MT of non-metallic minerals. The Province also has an abundant source of high grade quality sand and gravel, a major component material in construction. Tagum City, Panabo City and the municipalities of Carmen, Kapalong and Sto. Tomas are the major suppliers of sand and gravel. Total production of sand and gravel in 2008 has reached to 268,170 cu. m. In Region XI, Davao del Norte is the second largest producer of sand and gravel, next to Davao City. Comparative volume of production of this non-metallic resource in the region is presented in Table No.3-11.

Table No. 3-11 : Estimated Non-Metallic Resources
Province of Davao del Norte, 2007

| Non-Metallic Mineral | Locality | Total Reserve (M.T) |
|-------------------------------------|--|---------------------|
| 1. Guano Phosphate | Samal & Talikud Is. | 112,400 |
| 2. Rock Phosphate | Samal & Talikud Is. | 43,800 |
| 3. Sand & Gravel | Lasang River, Panabo City Sto, Tomas and Carmen River | 1,800,000 |
| 4. Marble Deposit | Igang Tagasan, Kapalong | 35,000 |
| 5. Limestone/ Lime Raw Materials | New Visayas & Ulugan Kapalong | 7,854,083 |
| 6. Magnesite | Igang, Tagasan, Kapalong | 35,000,000 |

Source: MGB XI

Table No. 3-12 : Non-Metallic Mineral Production, Region XI, 2007

| City/Province | Commodity | Unit | Quantity | Value (PhP) |
|-----------------|-----------------|-------|------------|---------------|
| Davao City | Earthfill | cu.m. | 183,613.50 | 1,809,658.80 |
| | Sand and Gravel | cu.m. | 306,466.50 | 7,890,348.00 |
| Davao del Norte | Earthfill | cu.m. | 101,798.50 | 6,616,902.50 |
| | Sand and Gravel | cu.m. | 268,170.00 | 17,431,050.00 |
| ComVal Province | Sand and Gravel | cu.m. | 34,610.50 | 1,058,609.50 |
| Davao Oriental | Sand and Gravel | cu.m. | 32,183.00 | 1,122,705.00 |
| Davao del Sur | Sand and Gravel | cu.m. | 108,650.00 | 7,422,950.00 |

Source: MGB XI

3.1.5 Climate and rainfall

The province has Type IV climate under the coronas classification and is characterized by unpronounced dry and wet seasons. Rainfall is more or less evenly distributed throughout the year with no pronounced rainy season and dry season. Davao del Norte lies within the typhoon belt but it is typhoon-free due to the natural protection provided by mountain ranges that act as barriers from the onslaught of typhoons.

The fairly pronounced rainy months in the province are from November through February. The province's average annual rainfall for the past five years, which was based on climatological data from PAG-ASA Agromet Station in Tagum City, ranges from 173.70 mm. to 251.96 mm.

*Table No. 3-13 : Monthly and Annual Mean Rainfalls,
Province of Davao del Norte*

| Month | Total Monthly Rainfall (in mm.) | | | | |
|---------|---------------------------------|---------|---------|---------|---------|
| | 2003 | 2004 | 2005 | 2006 | 2007 |
| Jan. | 154.8 | 297.9 | 116.4 | 221.9 | 320.2 |
| Feb. | 191.4 | 64.0 | 4.8 | 433.4 | 153.6 |
| March | 209.4 | 189.0 | 143.1 | 327.7 | 168.4 |
| April | 198.5 | 268.0 | 91.4 | 183.9 | 80.2 |
| May | 346.7 | 150.4 | 219.8 | 325.9 | 314.4 |
| June | 145.4 | 205.8 | 213.7 | 211.4 | 209.7 |
| July | 331.9 | 284.9 | 186.4 | 196.3 | 202.2 |
| Aug. | 227.4 | 45.0 | 226.5 | 168.2 | 342.9 |
| Sept. | 259.8 | 327.5 | 252.0 | 398.8 | 67.5 |
| Oct. | 387.6 | 136.5 | 288.7 | 319.9 | 245.4 |
| Nov. | 106.7 | 109.8 | 200.6 | 146.7 | 198.3 |
| Dec. | 282.4 | 197.3 | 294.7 | 89.4 | 192.5 |
| Total | 2,842 | 2,084.4 | 2,238.1 | 3,023.5 | 2,495.3 |
| Average | 236.83 | 173.7 | 186.5 | 251.96 | 207.94 |

Source : PAG-ASA Agromet Station in Tagum City

*Table No. 3-14 : Average Monthly Relative Humidity
Province of Davao del Norte*

| Month | Relative Humidity | | | | |
|-----------|-------------------|------|------|-------|-------|
| | 2003 | 2004 | 2005 | 2006 | 2007 |
| January | 80 | 79 | 81 | 90.8 | 90.79 |
| February | 81 | 83 | 76 | 90.7 | 88 |
| March | 80 | 81 | 75 | 89 | 86 |
| April | 72 | 76 | 74 | 87.16 | 85 |
| May | 81 | 81 | 83 | 88 | 87 |
| June | 79 | 76 | 83 | 91 | 88 |
| July | 82 | 81 | 81 | 89 | 86.7 |
| August | 81 | 75 | 82 | 90.1 | 89 |
| September | 79 | 79 | 81 | 90.7 | 87.4 |
| October | 78 | 75 | 79 | 89.27 | 87.3 |
| November | 78 | 74 | 81 | 88.57 | 88.1 |
| December | 84 | 79 | 83 | 88 | 88.1 |
| Average | 80 | 78 | 78 | 89.36 | 87.62 |

Humidity is a measure of the amount of water vapor in the air. Relative humidity refers to the ratio of the amount of water vapor present in a given volume of air to the amount of vapor required for saturation at the existing air temperature. Table No. 3-14, provides a five-year information of the average monthly relative humidity of the province of Davao del Norte from 2003 to 2007. Average range of humidity for the past five years is from 78 to 89.36.

3.2 Land use potentials and constraints

3.2.1 Land classification

Davao del Norte has a total land area of 346,280¹ hectares, of which 185,447 hectares or 53.5 percent are classified as Alienable and Disposable (A&D) and 160,833 hectares or 46.5 percent as forestland. Land classification is based on the criteria set by law. All lands with an 18-degree slope and higher are considered forestland regardless of whether these lands have forest cover or not. Areas characterized with a slope of less than 18 degrees are classified as alienable and disposable.

*Table No. 3-15 : Area and Location of A&D lands and Forestlands
 Province of Davao del Norte*

| City/Municipality | Total Area (has.) | Alienable and Disposable (A&D) | | Forestlands | |
|-------------------|----------------------|-----------------------------------|-------------------|----------------|-------------------|
| | | Area (has.) | % Distribution | Area (has.) | % Distribution |
| Asuncion | 29,347 | 17,932 | 61.1 | 11,415 | 38.9 |
| B. E Dujali | 9,100 | 9,100 | 100 | 0 | 0 |
| Carmen | 16,625 | 16,507 | 99.3 | 118* | 0.7 |
| Kapalong | 94,586 | 21,945 | 18.4 | 72,642 | 81.6 |
| New Corella | 32,148 | 20,614 | 64.1 | 11,534 | 35.9 |
| San Isidro | 15,249 | 7,437 | 48.8 | 7,812 | 51.2 |
| Sto. Tomas | 32,041 | 19,556 | 61.0 | 12,485 | 39.0 |
| Talaingod | 45,496 | 3,892 | 8.6 | 41,604 | 91.4 |
| IGC of Samal | 28,071 | 25,509 | 90.9 | 2,562 | 9.1 |
| Panabo City | 25,363 | 24,823 | 97.9 | 540 | 2.1 |
| Tagum City | 18,254 | 18,132 | 99.3 | 122* | 0.7 |
| Total | 346,280 | 185,447 | 53.5 | 160,833 | 46.5 |

Source: DENR XI

Note: GIS computation based on the Land Classification Map from DENR-XI

* mangrove forest

Alienable and disposable lands (A&D) are those lands of the public domain which are classified and determined not to be needed for forest purposes and are available for disposition under Commonwealth Act No. 141 as amended by the Public Land Act. It also specifies that no land of the public domain, 18% in slope or over which have already been declared as A&D shall be reverted to the classification of forestlands. A&D lands are used for agriculture, settlements, infrastructure and utilities, industries, tourism and others.

Forestlands are those lands of the public domain which have been classified as such and declared as needed for forestry purposes. Forestlands are also watershed which inherently produce more benefits and give better service than when converted to agricultural lands or other uses, such that, those lands are not to be titled. Forestlands in the province include production and protection areas. Not all forestlands are covered with forest trees. Areas categorized as production forest in

¹ Land area is not authoritative. GIS computation is based on the Land Classification Map of DENR-XI. Land area used in this plan is for planning purposes only.

the province is about 132,155.93 hectares, while the areas categorized under protection forest is approximately 27,722.84 hectares.

There are two major watersheds in Davao del Norte. These are the Saug-Libuganon watershed covering 247,500 hectares and the Tuganay watershed with 69,375 hectares covers the municipalities of Sto. Tomas, B. E Dujali, Carmen and part of Talaingod. These watersheds should be able to sustain life and provide economic benefits. Rehabilitation and protection of the province watershed through reforestation program is of prime consideration of the provincial government. Saug-Libuganon watershed covers the municipalities of Asuncion, New Corella, San Isidro, Kapalong, Talaingod and the City of Tagum.

3.2.2 Land suitability

According to the land capability analysis in the Davao Integrated Development Program (DIDP) Master Plan Study, Davao del Norte is suitable for lowland paddy, upland crops, upland crops/orchard, orchard and pasture. Some areas in the lowland (Carmen, B.E Duajli, Tagum) is found unsuitable for agriculture since these areas are frequently affected by flooding which is causing damage to crops and properties. These areas can still be developed and its usefulness and productivity optimized, if mitigating measures like flood control and drainage projects are provided. Some areas in the western part of Kapalong and Talaingod are also identified as unsuitable for agriculture because of the presence of steep slopes characterized by severe erosion.

In the Provincial Physical Framework Plan (PPFP) of Davao del Norte, land suitability is classified based on the degree to which the characteristics of the land can satisfy the environmental requirements of specific crops without deterioration of the land resource.

In identifying land suitability, the Land Management Unit (LMU) is assessed to determine whether the characteristics of the land can satisfy the environmental requirements of the crop using the following criteria:

Production Forest

- Presence of loggable forest
- No serious erosion hazard
- Slopes <50% and land < 1000 m. elevation
- No serious limitation of terrain or rock

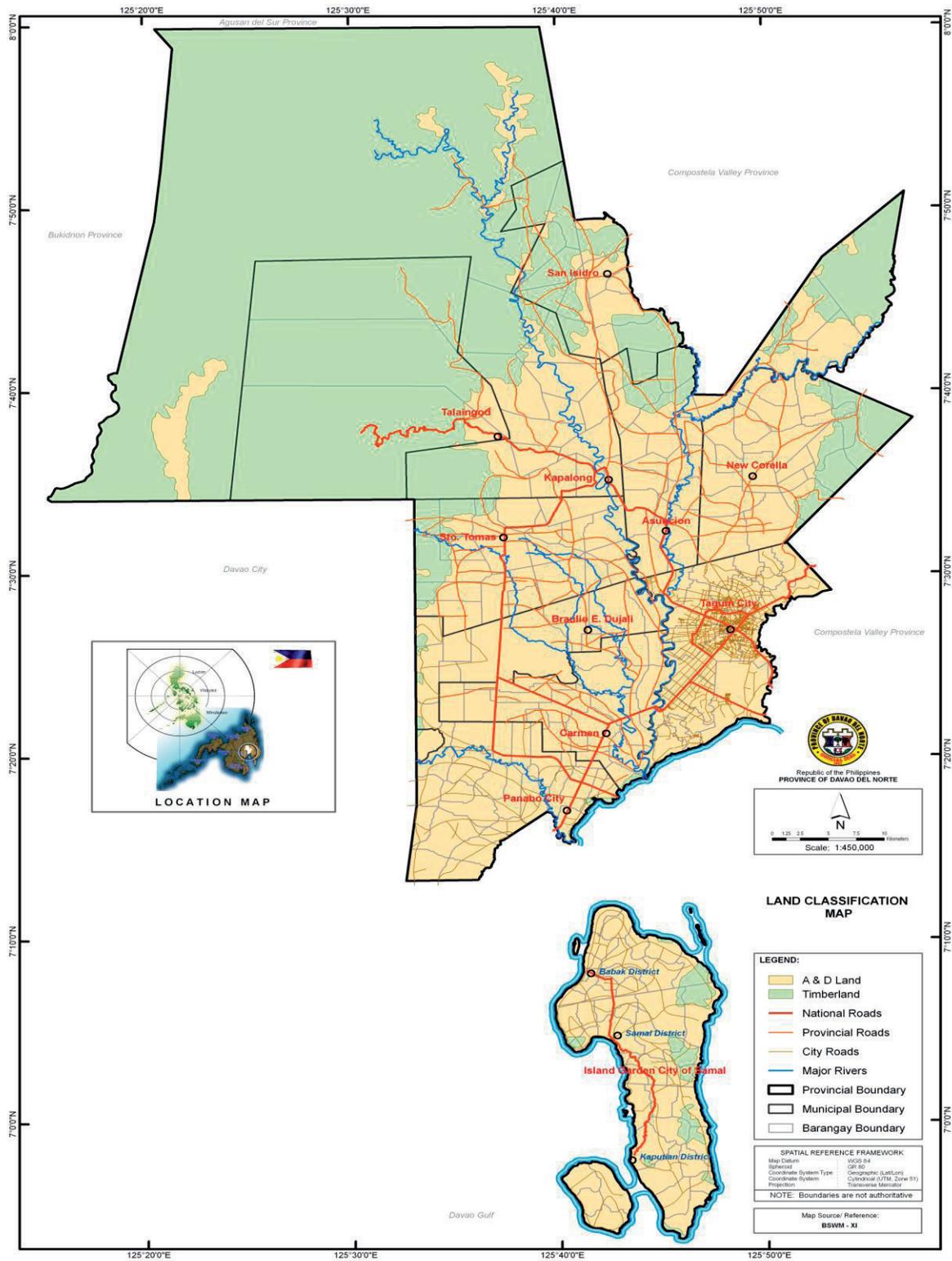
Plantations

- As for production forest loggable forest need to be present. Also because of greater need for access and management, slopes should be <30% and the limitation of terrain or rock should be less severe.

Irrigate Rice

- Slopes <3%, up to 8% if terraced
- Low soil permeability
- Availability of irrigation water
- No significant limitation of rock, erosion, soil depth, etc.
- Presence of problem soils downgrade the suitability but is not necessarily limiting

Map 11: LAND CLASSIFICATION MAP



Cultivated Annual Crops

- No significant existing erosion (or a low soil permeability)
- Slopes <8% (benchmark of erosion hazard)
- Adequate soil depth (>50cm)
- No flooding or poor drainage
- No problem soils
- No serious limitations of terrain or rock

Perennial Tree and Vine Crops

- For cultivated annual crops that can be placed on more erodible slopes. A slope limit of 18% may be allowable.

Pastures

- No serious existing erosion
- Slopes <18% if land is erodible
- Slopes <50% if land is stable
- No serious limitation of terrain, flooding, etc.

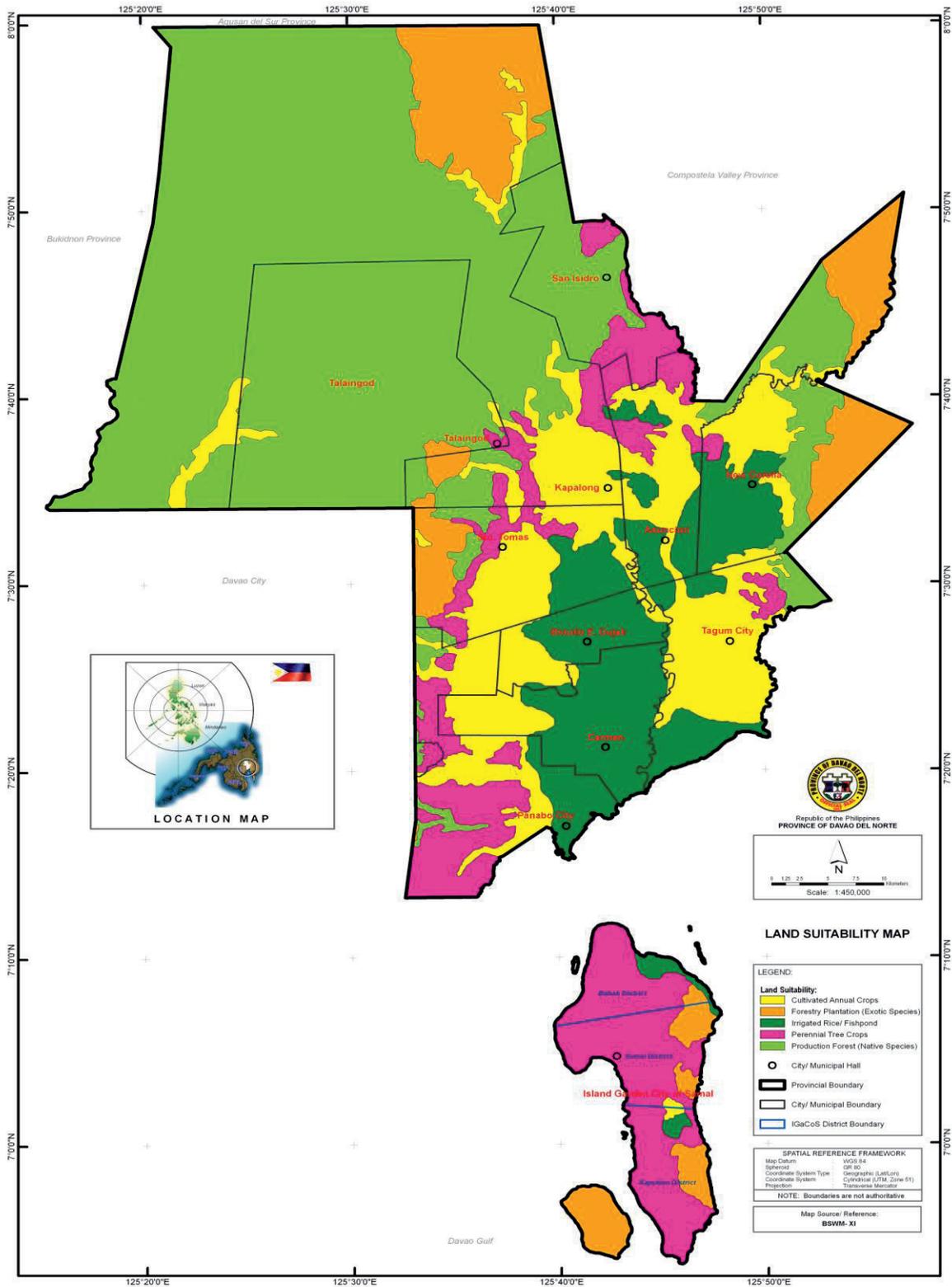
The land suitability analysis indicates that irrigated rice is suitable in the municipalities of Carmen, New Corella, Asuncion and B. E Dujali. Trees and vine crops is suitable in more areas of Island Garden City of Samal, San Isidro and Panabo City. Forestry plantation is suitable in the municipalities of Kapalong, New Corella, Sto. Tomas and Asuncion, while production forest is suitable in Talaingod and Kapalong. Data on Land Suitability is presented in Table No. 3-16.

*Table No. 3-16 : Land Suitability Classification (in hectares)
Province of Davao del Norte, 2008*

| Suitability Class | Area | % Distribution |
|--------------------------------------|------------|----------------|
| Suitable for Rice Paddy | 48,348.90 | 14 % |
| Suitable for Cultivated Annual Crops | 55,939.90 | 16 % |
| Suitable for Perennial Tree Crops | 64,057.50 | 18 % |
| Suitable for Forestry Plantation | 44,733.90 | 13 % |
| Suitable for Production Forest | 133,201.50 | 39 % |
| Total | 346,280.00 | 100 % |

Source: PFP, Davao del Norte, 1996, BSWM-XI

Map 12: LAND SUITABILITY MAP



3.2.3 Land sustainability

As applied to land use, sustainability of land use means a form of use that are able to be continued on and into the future with the same level of productivity and with no deterioration of the land resource. The principles inherent in the land use sustainability approach to land resource management are the following:

- a. All land should be used in a way that production from it is sustainable in perpetuity. It should not be used in such a way or at such intensity that it deteriorates and loses productive capacity for any form of use that it initially possessed.
- b. Sustainable land use can only be achieved by using the land within the limits of its sustainability for use.
- c. Good quality agricultural land is finite, scarce and non-renewable resource and should be protected for agricultural use.

Three categories are adapted in assessing the degree of land use in the sustainability approach and defined correspondingly as follows:

1. Sustainable land use – land which is being used in accordance with its suitability
2. Under-used or development opportunity land – land being used at a level of intensity that is below the intensity it is suitable
3. Not sustainable or over-used land – land being used at a level of intensity that is in excess of its suitability for use.

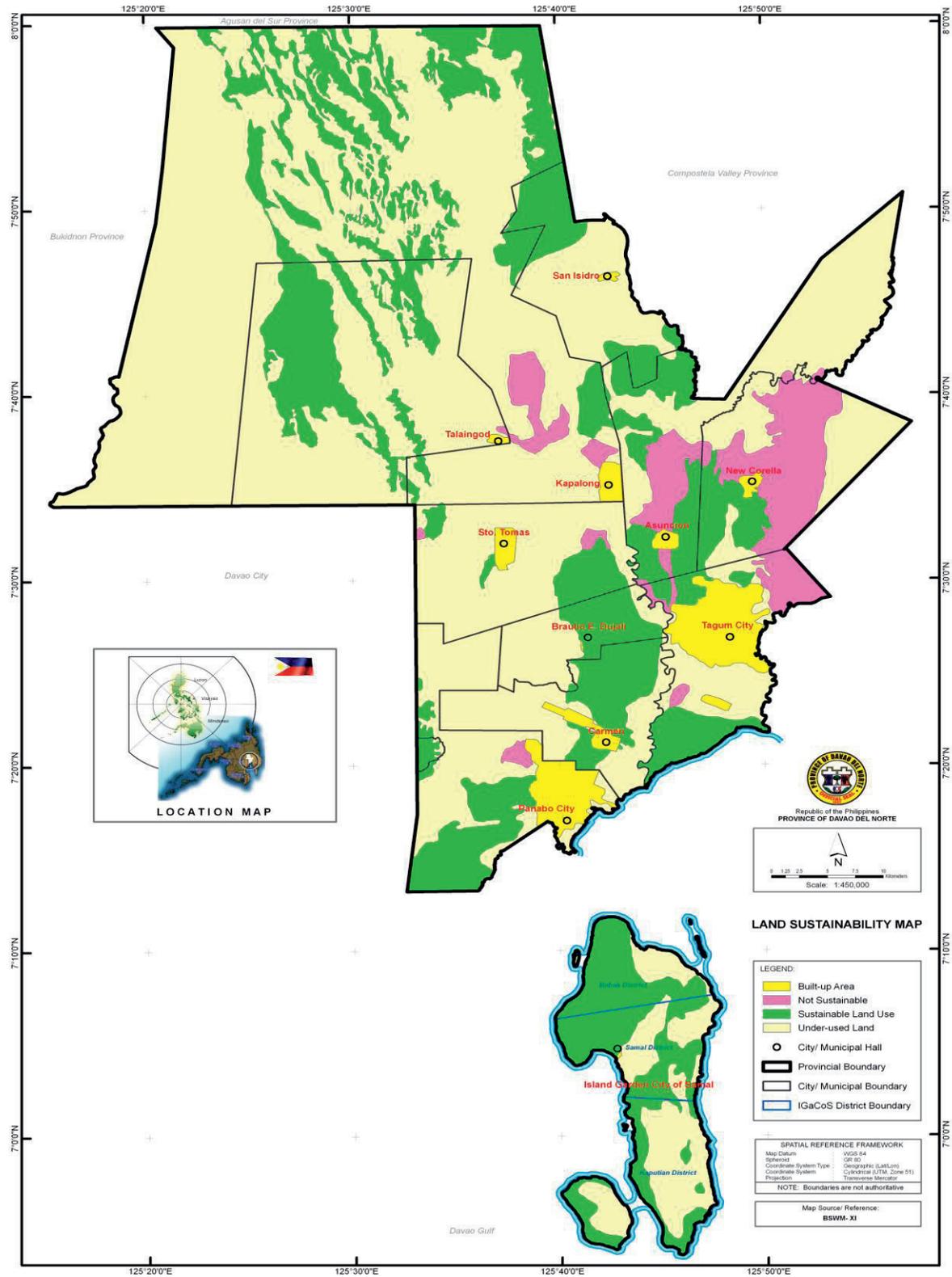
The existing land use is compared with the suitability of the land for those uses to determine whether the land is being used in a sustainable way. More than one-half of the total A&D lands within the province are used at a level of intensity that is below the intensity it is suited for. Approximately, 111, 261.17 hectares are under-used or classified as development opportunity lands.

Lands being used in accordance with its suitability are 72,736.70 hectares. The municipality of B.E Dujali and the Island Garden City of Samal are the two LGUs with the highest number of lands used in a sustainable way.

On the other hand, over-used lands or lands being utilized at a level that is in excess of its suitability for use is evident in the municipalities of New Corella, Asuncion and Kapalong.

In areas classified as forestland, about 23 percent of the total area is used in a sustainable manner, while 77 percent are under-used or can be considered as development opportunity.

Map 13: LAND SUSTAINABILITY MAP



3.2.4 Protection areas

Protection land is a portion of land and water set aside for its unique physical and biological diversity and protected against destructive human influences or impacts.

Davao del Norte's protection lands include the Mangrove Swamp Forest Reserve in Babak, Non-NIPAS, Network of Protected Areas for Agricultural Development/Strategic Agriculture and Fisheries Development Zone (NPAAD/SAFDZ) and severely eroded areas.

NIPAS areas in Davao del Norte are the 7,656 hectares Samal Island Protected Landscape/Seascape which was proclaimed under Proclamation No. 2152.

The Non-NIPAS areas cover second growth forest above 1000 m. elevation or more than 50% slope, mangrove forest and buffer strips along rivers and escarpments. Approximately, 47,758.83 hectares are under this category of protection lands.

SAFDZ area in the province is accounted at 132,382 hectares. The identification and setting aside of the NPAAD and SAFDZ ensure that the future expansion of successful agriculture and fishery production promoted under the Agriculture and Fishery Modernization Act (AFMA) shall be done on economically and environmentally suitable lands.

Of the total SAFDZ area, 125,847 has. or 96.1 % are identified as Strategic Crop Sub-Development Zone, 3,861 has or 2.9 % as Strategic Fishery Sub-Development Zone, 2,120 has. or 1.6 % as Integrated Strategic Crop/Livestock Sub-Development Zone, while Integrated Strategic Crop/Fishery Sub-Development Zone is approximately 554 has. or 0.4 %. Total SAFDZ area of the province is 21.6 percent of the region.

Another category of "protected" land includes certain types of agricultural lands. The concept of protection in this case varies from that other categories of protected areas. Under NPAAD/SAFDZ, some agricultural lands are "protected" against any irreversible conversion such as urban use. The main purpose of such protection is to keep and preserve the highly suitable agricultural lands for long-term food security of the nation.

The NPAAD/SAFDZ highly restricted agricultural land covers the most efficient agricultural lands, which are the traditional sources of food and cash crops. These are the most stable crop lands with moderate levels of farm management requirement. In addition, these lands are usually supported by large investment in infrastructure. Remaining NPAAD in Davao del Norte covers agricultural lands that are ecologically fragile and those lands that are covered with grasses.

*Table No. 3-17 : Area of Major Categories of Protection Lands and SAFDZ
 By City and Municipality, Province of Davao del Norte*

| City/Municipality | NIPAS (has.) | Non- NIPAS (has.) | Areas with severe erosion (has.) | SAFDZ (has.) | Total |
|-------------------|-----------------|-------------------------|--|-----------------|-----------|
| Asuncion | | | 10,175.8 | 8,337 | 18,512.8 |
| B.E Dujali | | | | 8,712 | 8,712.0 |
| Carmen | | | | 16,910 | 16,910.0 |
| Kapalong | | 27,808.83* | 78,200.3 | 11,661 | 89,861.3 |
| New Corella | | 26.40* | 6,542.0 | 16,377 | 22,919.0 |
| San Isidro | - | - | - | - | - |
| Sto. Tomas | | 134.80* | 5,724.8 | 18,750 | 24,474.8 |
| Talaingod | | 19,434.50* | 37,461.5 | 1,475 | 38,936.5 |
| IGC of Samal | 7,656.00 | - | 6,141.6 | 23,371 | 29,557.1 |
| Panabo City | | | 3,231.5 | 13,400 | 16,736.5 |
| Tagum City | | | | 13,389 | 13,389.0 |
| Davao del Norte | 7,656.00 | 47,758.83* | 147,477.5 | 132,382 | 279,759.5 |

* within areas affected by severe erosion

Data for San Isidro is still included in Asuncion and Kapalong

Source: SAFDZ, DA-BSWM, 1997

PPFP, Davao del Norte

3.2.5 Environmentally critical areas

Environmentally critical areas include flood prone areas, areas susceptible to soil erosion, salt water intruded areas and areas traversed by geologic fault lines. **Map 13** shows the environmentally critical areas of Davao del Norte.

Areas subject to natural hazards include those weather-related hazards to earthquake-induced hazards and those subject to volcanic hazard. Fault line is one natural hazard where lateral or vertical displacement (movement) is likely to occur. Episodic movements along this “active” fault lines cause earthquakes with accompanying destruction of property and may be loss of life.

Based on the study conducted by the Mines and Geosciences Bureau in Region XI, there are 38 barangays in 5 municipalities that are susceptible to mass movements.

a. Flood prone areas

Alluvial plains of Davao del Norte are mostly affected by flooding due to its low physiography and the inability of the nearby rivers to cope with high flood discharge thereby limiting the physical and economic productivity of the land. About 40,726 hectares or 11.20 percent of the total provincial lands are prone to flooding.

Comparing it to the regional level, Davao del Norte’s flood prone areas are about 45 percent of the total areas affected by floods in the whole region.

Provision of flood control measures such as protection dikes, cut-off channels, cross drainage along highways and desiltations are among the immediate solutions provided by the government that somehow lessen the damage brought about by flooding in recent years. Reforestation and watershed rehabilitation should be continuously undertaken as a long term solution to this problem since denudation of the vegetative cover and the unsustainable farming practices and economic activities in the uplands has been identified as the main cause of floods.

Table No. 3-18 : Flood Prone Areas in Hectares, By City and Municipality, Province of Davao del Norte, 2007

| City/Municipality | Area | % Share (Province) | % Share (Region) |
|-------------------|-----------|--------------------|------------------|
| Asuncion | 8,325.00 | 2.3 | 9 |
| B. E. Dujali | - | - | - |
| Carmen | 10,093.00 | 2.8 | 11 |
| Kapalong | 2,097.00 | 0.57 | 2 |
| New Corella | 4,426.00 | 1.2 | 4 |
| San Isidro | - | - | - |
| Sto. Tomas | 2,374.00 | 0.65 | 3 |
| Talaingod | - | - | - |
| IGC of Samal | - | - | - |
| Panabo City | 3,080.00 | 0.85 | 2 |
| Tagum City | 6,425.00 | 1.8 | 7 |
| Davao del Norte | 40,726.00 | 11.20 | 45 |
| Region XI Total | 90,464.00 | | |

Source: RPPF XI 2003-2030

Notes: Data for B.E Dujali still included in Carmen and Panabo

Data for Talaingod still included in Kapalong

Data for San Isidro still included in Asuncion and Kapalong

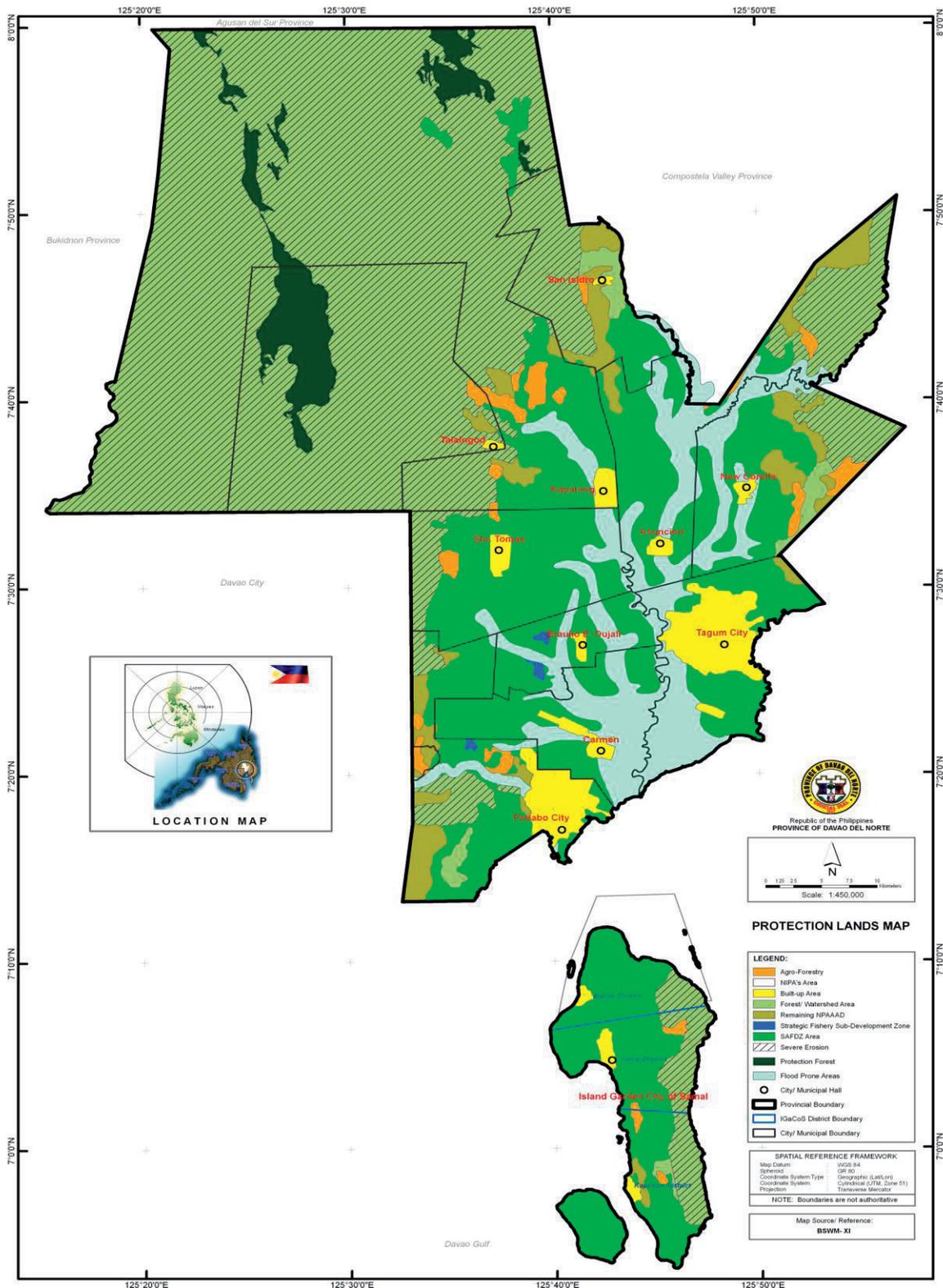
b. Coastal zone/area

The coastal line of the province is about 115.377 kms long in the Island Garden City of Samal and 76.624 kms. long in the mainland. There are 24 coastal barangays with a population of 48,444 in Samal Island, and 9 coastal barangays in the mainland with a population of 52,087. All in all, the population of coastal barangays based on the 2007 census totals to 100,531.

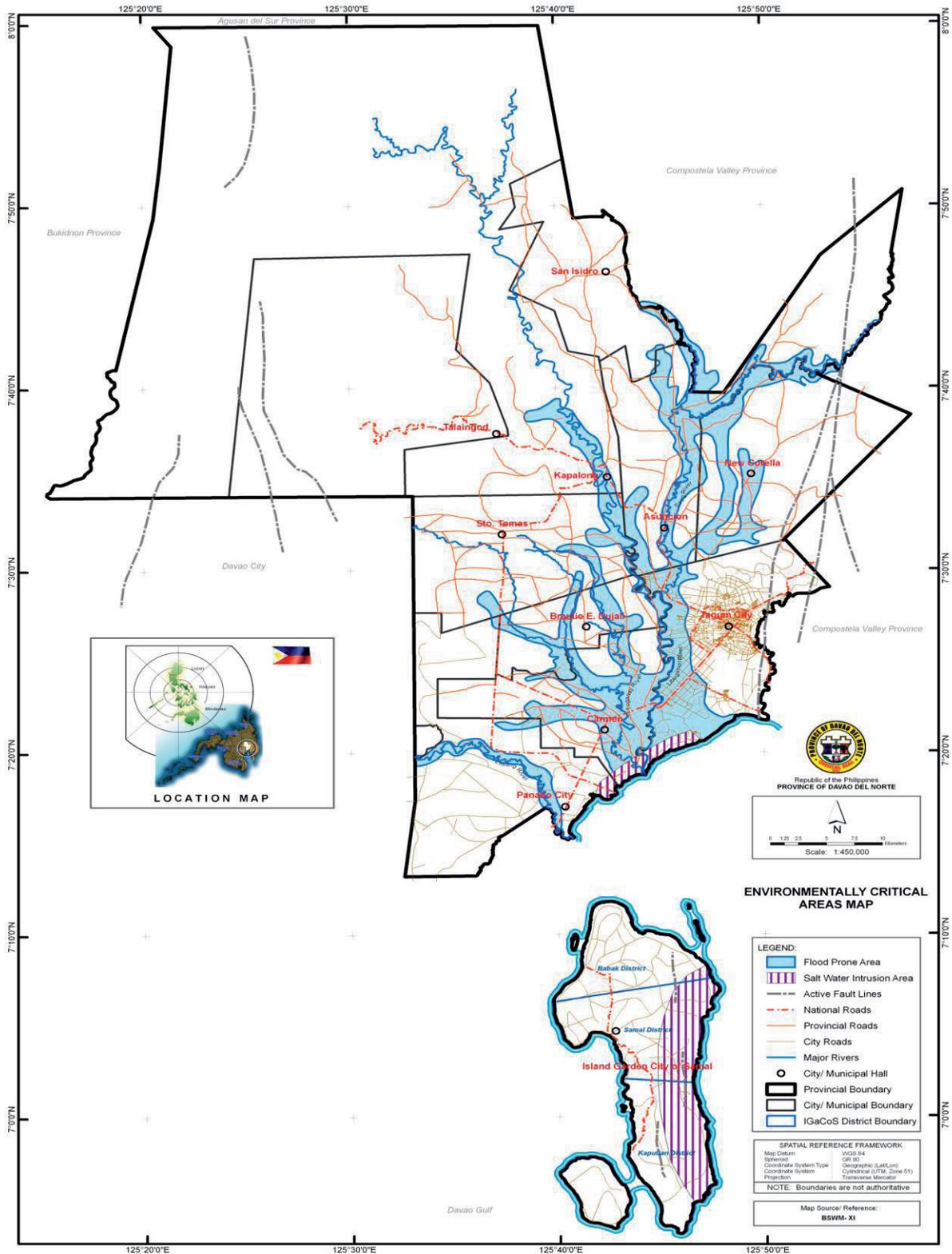
c. Areas affected by severe erosion

Severely eroded areas are part of the production land that needs to be protected from further deterioration. These areas are observable mostly in the mountainous part of Kapalong, Talaingod and Sto. Tomas and along the steep slopes of the eastern portion of IGaCoS. Areas affected by severe erosion is approximately 159,000.80 hectares. (Map 16)

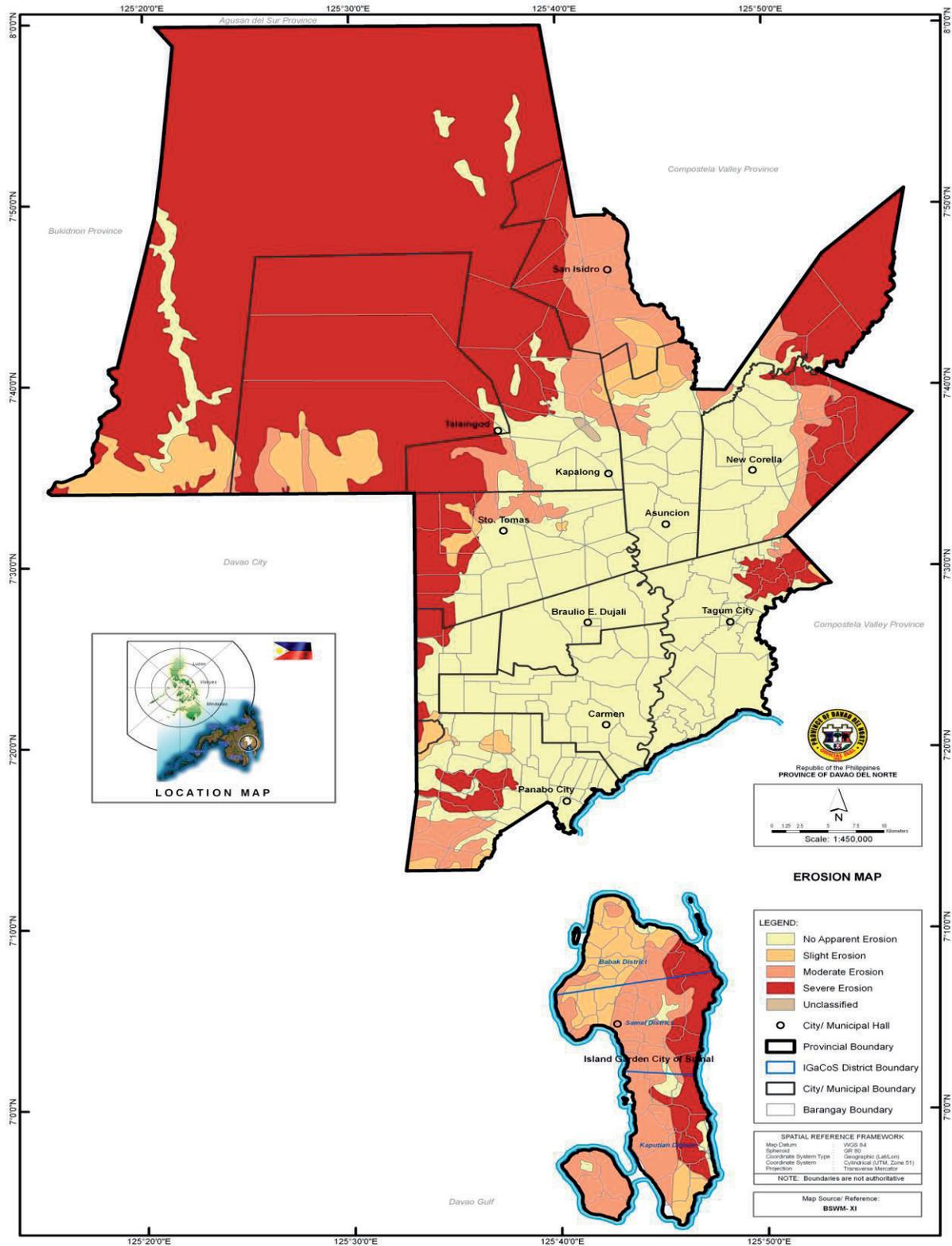
Map 14: PROTECTION LANDS MAP



Map 15: ENVIRONMENTALLY CRITICAL AREAS



Map 16: EROSION MAP



4.0 Economy

4.1 Economic Structure

4.1.1 Internal Context

The economy of the province is based in agriculture. Vast tracks of land are devoted to agricultural production of staple and industrial crops. Consolidating the production incomes would indicate that it is so. Table No. 3-19 shows the incomes generated by LGU from the major sectors, such as agriculture, industries, services, wood, quarrying and tourism.

*Table No.3-19 : Provincial Income from Major Sources in Php (Million),
By City/Municipality: CY 2007 Province of Davao del Norte*

| LGU | Agriculture | Industries * | Services * | Wood | Quarrying | Tourism | Total |
|-------------|-------------|--------------|------------|-------|-----------|---------|-----------|
| Tagum | 1,534.35 | 207.80 | 1,275.09 | 26.23 | 8.68 | 8.24 | 3,060.39 |
| New Corella | 740.65 | 0.56 | 4.20 | - | 0.02 | 2.75 | 748.18 |
| Asuncion | 775.10 | 0.45 | 6.12 | 0.98 | - | 2.75 | 785.40 |
| San Isidro | 200.15 | 3.00 | 1.66 | 0.41 | - | 2.75 | 207.97 |
| Sto. Tomas | 3,068.10 | 1.59 | 32.47 | 0.18 | 2.15 | 2.75 | 3,107.24 |
| Kapalong | 1,710.00 | 15.60 | 20.79 | 0.08 | 2.88 | 5.49 | 1,754.84 |
| Talaingod | 377.60 | - | 0.90 | 6.50 | - | 2.75 | 387.75 |
| Panabo | 3,040.95 | 33.37 | 307.94 | 27.90 | 8.36 | 8.24 | 3,426.76 |
| Carmen | 1,423.2 | 2.70 | 11.61 | - | 6.02 | 2.75 | 1,446.28 |
| BE Dujali | 755.30 | 2.46 | 2.73 | - | - | 2.75 | 763.24 |
| IGCSamal | 490.10 | 1.76 | 10.46 | - | - | 233.65 | 735.97 |
| Total | 14,115.50 | 269.29 | 1,673.97 | 62.28 | 28.11 | 274.88 | 16,424.01 |

Source : Agriculture – Provincial Agriculturist's Office & Bureau of Agricultural Statistics
Trade and Services - Department of Trade and Industry
Wood and Quarrying - Dept. of Environment and Natural Resources & PENRO-LGU
Tourism – Provincial Governor's Office – Tourism Office

Notes:

1. Data considered for Industries and Services Sectors are record on investments in Php Millions. Information on income from the said sectors are not being disclosed by concerned entities.
2. Data presented in Table No. 1 is derived from computing actual production and prices as of 2007.
3. Dash in the cell indicates that data is not available.
4. Data on Household Income was not available at the NSO at the time of plan formulation. The TWG for Economic sector had to use a more updated and actual data derived from surveys and technical reports.

It can be gleaned that agriculture is contributing most of the provincial income accounting for a total of P 14.1 billion in 2007. This is followed by the services sector with P1.673 billion; then tourism sector with 274.88 million and industries sector with P 269.29 million. The investments reflected for the industries sector includes all industries' capitalization which was monitored by the Board of Investments, the Department of Trade and Industry, Securities Exchange Commission and other authorized entities.

Among local government units, Sto. Tomas contributed most of the income from the agriculture sector, followed closely by Panabo City. Talaingod which is mostly forestland contributed an income from agriculture at an estimated value of P 377.0 Million, while San Isidro, being a new municipality and still developing gave the least contribution of P 200.15 Million to the sector.

Joint probability refers to the shares in provincial income of major sectors. Table No. 3-20 below shows the percent contribution of each LGU for every sector performance to the over-all production and income performance of the province.

Table No. 3-20: Joint Probability: Provincial Income from Major Sectors of Cities and Municipalities for CY 2007 Province of Davao del Norte

| Municipality / City | Agriculture | Industries | Services | Wood | Quarrying | Tourism | Total |
|---------------------|-------------|------------|----------|-------|-----------|---------|---------|
| Tagum | 9.342 | 1.265 | 7.764 | 0.160 | 0.053 | 0.050 | 18.634 |
| New Corella | 4.510 | 0.003 | 0.026 | 0.000 | 0.000 | 0.017 | 4.555 |
| Asuncion | 4.719 | 0.003 | 0.037 | 0.006 | 0.000 | 0.017 | 4.782 |
| San Isidro | 1.219 | 0.018 | 0.010 | 0.002 | 0.000 | 0.017 | 1.266 |
| Sto. Tomas | 18.681 | 0.010 | 0.198 | 0.001 | 0.013 | 0.017 | 18.919 |
| Kapalong | 10.412 | 0.095 | 0.127 | 0.001 | 0.018 | 0.033 | 10.685 |
| Talaingod | 2.299 | 0.000 | 0.005 | 0.040 | 0.000 | 0.017 | 2.361 |
| Panabo | 18.515 | 0.203 | 1.875 | 0.170 | 0.051 | 0.050 | 20.864 |
| Carmen | 8.665 | 0.016 | 0.071 | 0.000 | 0.037 | 0.017 | 8.806 |
| BEDujali | 4.599 | 0.015 | 0.017 | 0.000 | 0.000 | 0.017 | 4.647 |
| IGCSamal | 2.984 | 0.011 | 0.064 | 0.000 | 0.000 | 1.423 | 4.481 |
| Totals | 85.944 | 1.640 | 10.192 | 0.379 | 0.171 | 1.674 | 100.000 |

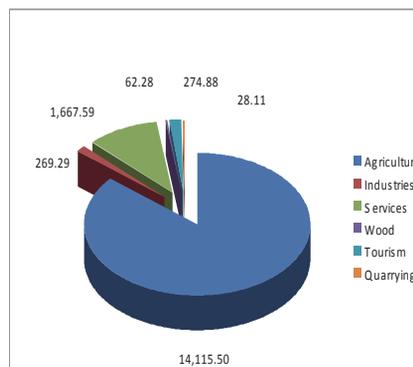
Note : Computed data are based on Table No. 3-19

From the said table, the top four LGU income generators across sectors are Panabo City (20.86%), Sto. Tomas (18.919%), Tagum City (18.63%) and Kapalong (10.68%).

About 85.94% of the total income generated by the province comes from agricultural production and 10% is contributed by the services sector of which close to 8% comes from Tagum City supporting its position as the trading and service capital of Davao del Norte.

Figure No. 3.8 Provincial Income from Major Sources Province of Davao del Norte, 2007

Comparing the performances of these commodities with that of the regional (Region XI) and national (Philippines) over the last five years (2002- 2006), banana which is the leading agricultural crop of the province contributed around 35.85% of the region’s production and 14.85% of the national output. Bureau of Agricultural Statistics records show that Davao del Norte is the leading producer of Cavendish banana in the country. The commodity is intended for export to other countries like Japan, China, and the Middle East.



Rice contributed 29.44% of the region's average production, but less than 1% of the country's output. Coconut, also one of the leading crops in the province, contributed around 1.38% of the average production output of the country and 8.06% of the region's.

Based on Table No 3-18, among the local government units, the top four income generators across sectors based on over-all income performance are Panabo City, Sto. Tomas, Tagum City and Kapalong. While the two least contributors to the over-all income are the municipalities of Talaingod and San Isidro.

In terms of industry and service sectors, Tagum City ranks first. When it comes to wood sector Panabo City got the first rank with the presence of Consolidated Plywood Industries, Inc. and a good number of wood processing locators. Following closely is Tagum City with the presence of TPPMC Wood Veneer, Inc. and other local wood processors.

4.1.2 Patterns of industries concentration and specialization

In terms of sectoral concentration by sector, Sto. Tomas ranks first in agriculture with 21.74%, followed closely by Panabo City. In the areas of industry, services and quarrying sectors, Tagum City takes the lead. While Panabo City ranks first in wood sector followed by Tagum City. On the other hand, tourism industry stays as the domain of the Island Garden City of Samal where foreign and local tourists flock for those natural attractions, pristine beaches and rustic sites. Table No.13 below provides a detailed information on the concentration of provincial income from major sectors.

**Table No.3-21 : Concentration of Provincial Income from Major Sources
By City and Municipality as of CY 2007
Province of Davao del Norte**

| Municipality / City | Agriculture | Industries | Services | Wood | Quarrying | Tourism |
|--------------------------------|--------------------|-------------------|-----------------|-------------|------------------|----------------|
| Tagum | 10.870 | 77.166 | 76.458 | 42.114 | 30.878 | 2.998 |
| New Corella | 5.247 | 0.208 | 0.251 | 0.000 | 0.075 | 1.001 |
| Asuncion | 5.491 | 0.167 | 0.366 | 1.573 | 0.000 | 1.001 |
| San Isidro | 1.418 | 1.114 | 0.099 | 0.658 | 0.000 | 1.001 |
| Sto. Tomas | 21.736 | 0.590 | 1.940 | 0.289 | 7.648 | 1.001 |
| Kapalong | 12.114 | 5.793 | 1.242 | 0.135 | 10.245 | 1.997 |
| Talaingod | 2.675 | 0.000 | 0.054 | 10.436 | 0.000 | 1.001 |
| Panabo | 21.543 | 12.392 | 18.396 | 44.795 | 29.739 | 2.998 |
| Carmen | 10.083 | 1.003 | 0.694 | 0.000 | 21.415 | 1.001 |
| BEDujali | 5.351 | 0.914 | 0.163 | 0.000 | 0.000 | 1.001 |
| IGCSamal | 3.472 | 0.654 | 0.625 | 0.000 | 0.000 | 85.003 |
| Totals | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Note : Computed data are based on Table No.3-19

Specialization is defined as the dominance in the economy of a province by a specific industry. In the case of the province of Davao del Norte, agriculture predominates all other sectors in all cities and municipalities with the exception of Tagum City which derives only about 50% of its income from agricultural production. As the capital of Davao del Norte, part of the income generated comes from other sectors such as industries and services. The following table presents the

information on the contribution of every sector in income generation for cities and municipalities of Davao del Norte.

Table No.3-22 : Specialization of Provincial Income by Major Sources in Percent Share By City and Municipality, as of CY 2007 Province of Davao del Norte

| Municipality/City | Agriculture | Industries | Services | Wood | Quarrying | Tourism | Total |
|-------------------|-------------|------------|----------|------|-----------|---------|--------|
| Tagum | 50.14 | 6.79 | 41.66 | 0.86 | 0.28 | 0.27 | 100.00 |
| New Corella | 98.99 | 0.07 | 0.56 | 0.00 | 0.00 | 0.37 | 100.00 |
| Asuncion | 98.69 | 0.06 | 0.78 | 0.12 | 0.00 | 0.35 | 100.00 |
| San Isidro | 96.24 | 1.44 | 0.80 | 0.20 | 0.00 | 1.32 | 100.00 |
| Sto. Tomas | 98.74 | 0.05 | 1.04 | 0.01 | 0.07 | 0.09 | 100.00 |
| Kapalong | 97.44 | 0.89 | 1.18 | 0.00 | 0.16 | 0.31 | 100.00 |
| Talaingod | 97.38 | 0.00 | 0.23 | 1.68 | 0.00 | 0.71 | 100.00 |
| Panabo | 88.74 | 0.97 | 8.99 | 0.81 | 0.24 | 0.24 | 100.00 |
| Carmen | 98.40 | 0.19 | 0.80 | 0.00 | 0.42 | 0.19 | 100.00 |
| BEDujali | 98.96 | 0.32 | 0.36 | 0.00 | 0.00 | 0.36 | 100.00 |
| IGCSamal | 66.59 | 0.24 | 1.42 | 0.00 | 0.00 | 31.75 | 100.00 |

Note : Computed data are based on Table No. 3-19

It can also be noted from this table that the contribution of income from agriculture sector is at varying levels in every LGU. The Island Garden City of Samal only derives its income from the said sector by 66.59% because of the income that it generated from the tourism sector. While other sectors such as trading and services are considered developing and thriving in every LGUs but still contributing to the local economy. Though their contributions are much smaller in scale but they are supportive to the existence and growth of major sectors in the economy.

As to the share of industries at the provincial level, we refer back to Table No. 3-20: Joint Probability which discusses the industry shares in the economy of Davao del Norte. Looking at the totals, agriculture contributes 85.944%, followed by services with 10.192%, then tourism with 1.674%, industries 1.640%, wood industry with 0.379% and lastly quarrying with 0.171%.

4.1.3 Description of basic sectors and industries

4.1.3.1 Agriculture and Fisheries

a. Crops Production

Table No. 3-22 indicates the major crops grown in the province. These include paddy rice, corn, coconut, banana for export and local consumption, fruit trees, and some high valued commercial and industrial crops. Vegetables, root crops and other temporary and perennial crops are also grown, although mostly not in commercial (or plantation type) scale.

Paddy rice cultivation is undertaken in 17,413 hectares, of which 87 % (15,218 hectares) are potentially irrigable. Rice is grown in all municipalities and cities of the Province with six (6) municipalities contributing most of the production areas. These are the municipalities of New Corella, Asuncion, Sto. Tomas, Kapalong, Carmen, and BEDujali. Sto. Tomas and Asuncion contribute the largest rice production areas at 3,874 and 3,004 hectares, respectively.

Mono-crop cultivation of corn is around 6,688 hectares which are usually planted with the white variety. Corn is produced in sizeable areas in six municipalities/city; New Corella, Asuncion, Kapalong, Talaingod, San Isidro and in the Island Garden City of Samal (IGaCoS). There are also

areas grown with corn and being intercropped with other commodities like local banana and under coconut.

Coconut is one of the dominant crops grown in the province. Some 39,650 hectares are devoted to coconut production. The Island Garden City of Samal devotes the largest area for coconut production at 16,488 hectares, contributing almost half of the total area planted to coconut in the Province.

Banana is also one of the major crops grown in the province. Around 47,250 hectares are devoted to the cultivation of banana, both for local consumption and export market. There are two kinds of banana grown for local consumption, the table and the cooking banana. Table banana includes the Lakatan, Latundan and Bungulan varieties, while the cooking varieties are Cardaba and Saba. Cavendish banana, which is for export, is most popular and extensively grown in plantation scale in most municipalities and cities except in the island of Samal. Production of this commodity contributes considerably to the income of the Province.

Fruit tree growing is also feasible in the Province. Two banner fruit tree crops with export potentials are being promoted for commercial and orchard production because of strong tendencies of income generation. These are the durian and mango. Durian is highly suitable for production in the Province because of its terrain and climatic condition. Mango is highly suitable in some areas with soil type of corraline limestone origin (Bolinao clay) as typically found in the Island Garden City of Samal, some parts of Panabo City and some upland areas in the mainland. Mango and durian are grown in 6,510 and 703 hectares, respectively.

Total area utilized in the cultivation of other major crops, not counting on some crops grown in patches, is around 30,000 hectares. All municipalities and cities devote substantial area for the cultivation of agricultural crops.

Table No. 3-23 : **Agriculture Profile
Province of Davao del Norte
as of CY 2007**

| Commo- dities (has.) | Municipalities/ Cities | | | | | | | | | | | Totals |
|----------------------------|------------------------|----------------|----------|----------|---------------|----------------|---------------|--------|--------|--------------|--------|--------|
| | District I | | | | | | District II | | | | | |
| | Tagum | New Corella | Asuncion | Kapalong | San Isidro | Tala- ingod | Sto. Tomas | Panabo | Carmen | BE Dujali | IGaCoS | |
| Paddy rice | 305 | 2,337 | 2,412 | 1,117 | 90 | 74 | 3,764 | 488 | 2,300 | 2,234 | 97 | 15,218 |
| Irrigated | 130 | 381 | 592 | 635 | 140 | 88 | 110 | 28 | - | 50 | 45 | 2,199 |
| Rain fed | 435 | 2,718 | 3,004 | 1,752 | 230 | 162 | 3,874 | 516 | 2,300 | 2,284 | 138 | 17,413 |
| Subtotal | | | | | | | | | | | | |
| Corn | 840 | 860 | 2,070 | 960 | 285 | 553 | 200 | 50 | 20 | - | 850 | 6,688 |
| Coconut | 5,034 | 2,453 | 2,128 | 1,597 | 1,201 | 488 | 685 | 4,772 | 4,717 | 87 | 16,488 | 39,650 |

| Commodities (has.) | Municipalities/ Cities | | | | | | | | | | | Totals |
|--------------------|------------------------|-------------|----------|----------|------------|-----------|-------------|--------|--------|-----------|--------|---------|
| | District I | | | | | | District II | | | | | |
| | Tagum | New Corella | Asuncion | Kapalong | San Isidro | Talaingod | Sto. Tomas | Panabo | Carmen | BE Dujali | IGaCoS | |
| Banana Cavendish | 4,542 | 1,000 | 1,200 | 3,770 | 5 | 132 | 8,796 | 9,574 | 3,588 | 1,964 | - | 34,571 |
| Local | 78 | 3,041 | 1,000 | 796 | 2,929 | 419 | 394 | 1,500 | 1,217 | 38 | 965 | 12,377 |
| Subtotal | 4,620 | 4,041 | 2,200 | 4,568 | 2,934 | 551 | 9,190 | 11,074 | 4,805 | 2,002 | 965 | 47,250 |
| Mango | 215 | 145 | 100 | 67 | 115 | 82 | 334 | 455 | 548 | 16 | 4,433 | 6,510 |
| Durian | 113 | 68 | 43 | 5 | 55 | 25 | 104 | 35 | 236 | 16 | 3 | 703 |
| Papaya | 37 | 15 | 14 | 11 | - | 38 | 5 | 26 | 6 | - | - | 152 |
| Coffee | 32 | 239 | 108 | 6 | 98 | 99 | 15 | 61 | - | - | 107 | 765 |
| Cacao | 29 | 108 | 55 | 57 | 3,600 | 15 | 15 | 28 | - | - | 120 | 4,027 |
| Vegetable & Spices | 189 | 106 | 16 | 23 | 32 | 9 | 85 | 260 | 47 | 28 | 94 | 889 |
| Root-crops | 77 | 47 | 121 | 109 | 47 | 6 | 194 | 526 | 121 | - | 120 | 1,368 |
| Others: HVCC | 701 | 555 | | | 1,010 | 28 | 19 | | | | 80 | 6,111 |
| Industrial | - | 17,043 | 281 | 193 | 87 | 176 | 18 | 3,437 | 40 | - | - | 17,557 |
| TOTAL | 12,322 | 28,398 | 10,140 | 9,346 | 9,694 | 2,232 | 14,738 | 21,240 | 12,840 | 4,433 | 9,694 | 148,785 |

Source : Provincial Agriculturist's Office

With regards to production as presented in Table 3-23, rice production averages 135,437.40 metric tons (dry basis) for the last five years, in an average harvested area of 31,362.80 hectares annually (two cropping seasons at the average). Irrigated rice comprises 96% of the production areas, and where most of the production of paddy rice (palay) came from. Average yield was around 4.32 metric tons (dry basis), or at an average of 86.40 bags of 50 kilograms in a hectare. Paddy rice production is estimated to value annually at P1,442.10 M at farm gate price.

Among the local banana varieties, cardaba also contributed much to the economy. Cardaba bananas are processed into chips and sold in local markets and for export. Many banana chips processing plants are being put up, particularly in Tagum and Panabo Cities. Chips undergo two-stage frying, before products are sold for human consumption. There are other forms of raw banana being processed into products as sold; dried banana chips from Cavendish banana that fail the quality standards, processed into animal feeds and pastes extenders (for plywood, etc.) and banana peelings (from cardaba banana chips) are processed into animal feeds and organic fertilizers. Their values however, were not immediately available for quantification.

Production of vegetables and root crops, although generally not grown in plantation scale, contributes around P 130 million annually to the Province's economy at their farm gate values.

Table No.3-24: Crop Area, Production, Average Yield, and Value of Production, By Crop, Davao del Norte, 2003- 2007.

| Crops/ Commodity | Ave. Area Harvested (Has.) | Average Production (MT) | Average Yield (MT/Ha.) | Estimated Value (2007 farm gate price), PhP, M |
|--------------------|----------------------------|-------------------------|------------------------|--|
| Rice | 31,362.80 | 135,437.40 | 4.32 | 1,422.10 |
| Irrigated | 30,087.80 | 130,540.20 | 4.34 | |
| Rain fed | 1,275.00 | 4,897.20 | 3.84 | |
| Corn | 22,933.80 | 33,530.00 | 1.46 | 324.31 |
| White | 19,725.40 | 24,078.20 | 1.22 | 236.21 |
| Yellow | 3,208.40 | 9,451.80 | 2.95 | 88.10 |
| Coconuts | 40,435.20 | 210,468.27 | 5.21 | 720.70** |
| Banana | | | | |
| Cavendish | 22,274.40 | 893,227.81 | 40.10 | - |
| Bungulan | 34.40 | 341.65 | 9.93 | - |
| Lakatan | 927.60 | 7,774.97 | 8.38 | 90.58 |
| Latundan | 698.00 | 3,787.46 | 5.43 | 19.28 |
| Saba/Cardaba | 3,527.80 | 35,409.61 | 10.04 | 145.90 |
| Others | 37.60 | 371.47 | 9.88 | - |
| Mango | 1,244 | 2,733.63 | 2.20 | 101.00* |
| Durian | 2,073.40 | 3,403.80 | 1.64 | 59.60 |
| Papaya | 113.00 | 1,975.42 | 17.48 | 31.30* |
| Coffee | 1,142.40 | 1,242.89 | 1.09 | 60.90 |
| Cacao | 909.80 | 300.46 | 0.33 | 15.80 |
| Vegetables | | | | |
| Mungo | 447.20 | 450.16 | 1.01 | 14.17 |
| Eggplant | 336.60 | 609.49 | 1.81 | 6.10 |
| Tomato | 18.60 | 66.68 | 3.58 | 0.93* |
| Pechay | 49.80 | 416.25 | 8.36 | 6.20 |
| Ampalaya | 68.20 | 280.59 | 4.11 | 5.17 |
| Chayote | 14.80 | 68.05 | 4.60 | 0.84 |
| Gourd | 124.60 | 741.23 | 5.95 | 4.50 |
| Okra | 32.80 | 76.58 | 2.33 | 0.82 |
| Squash fruit | 153.00 | 1,212.89 | 7.93 | 5.42 |
| Ginger | 21.80 | 107.17 | 4.92 | 2.03 |
| Pepper | 24.00 | 45.15 | 1.88 | 1.90 |
| String beans | 392.60 | 2,296.58 | 5.85 | 35.75 |
| Onion leeks | 28.40 | 158.20 | 5.57 | - |
| Patola | 33.80 | 162.54 | 4.81 | - |
| Raddish | 19.20 | 121.40 | 6.32 | 4.10* |
| Cucumber | 43.80 | 90.76 | 2.61 | 2.64* |
| Rootcrops | | | | |
| Camote | 783.20 | 3,926.15 | 5.01 | 23.24 |
| Cassava | 462.80 | 3,255.49 | 7.03 | 8.33 |
| Gabi | 38.00 | 340.33 | 8.96 | 5.42 |
| Ubi | 10.60 | 46.53 | 4.93 | - |
| TOTAL CROPS | | | | |

Source: Bureau of Agricultural Statistics, Davao del Norte

Notes: * - retail prices

** - estimated value of copra (coconut) meat

In cereals production, the statistics for the last five years (2003- 2007) is illustrated in Table No. 3-24. Rice production, in general, reduced by 4.06% annually. This resulted from the 4.48% reduction of production from irrigated areas where most of the production came from. This could not be compensated by the 5.30% increase of production from rain fed areas because of a very small increase in the production area for rain fed ecosystem. Records showed that irrigated areas used for rice production reduced at the rate of 4.47%. These areas are either converted to non-agricultural uses, or cultivation was shifted to other crops like Cavendish banana, which is prevalent at these times because of the lucrative income that can be derived from Cavendish banana production. Although new areas were opened for rain fed rice production (at 5.48 % increase), its size is not appreciable enough to offset the decrease of irrigated areas.

Production of corn increases by 12.25% annually, with yellow corn production posting a 54.85% annual growth rate. Although areas devoted to white corn production had reduced by 10.12 %, contributing to a 4.54 %, decrease in area for corn production, production have increased. This indicates that the application and adoption of new technologies in corn production have been observed.

Table No. 3-25: Production Data for Rice and Corn, Davao del Norte, 2003- 2007

| Commodities | 2003 | 2004 | 2005 | 2006 | 2007 | AAGr, % |
|---------------------------|---------|---------|---------|---------|---------|---------|
| RICE: | | | | | | |
| A. Production, MT palay | | | | | | |
| Irrigated | 131,727 | 142,164 | 140,728 | 128,407 | 109,675 | (4.48) |
| Rain fed | 4,995 | 4,825 | 4,396 | 4,126 | 6,144 | 5.30 |
| Total | 136,722 | 146,989 | 145,124 | 132,533 | 115,819 | (4.06) |
| B. Area Harvested, Has. | | | | | | |
| Irrigated | 31,578 | 31,626 | 31,262 | 29,665 | 26,308 | (4.47) |
| Rain fed | 1,312 | 1,241 | 1,109 | 1,089 | 1,624 | 5.48 |
| Total | 32,890 | 32,867 | 32,371 | 30,754 | 27,932 | (4.00) |
| CORN: | | | | | | |
| A. Productions, MT grains | | | | | | |
| White | 25,294 | 22,201 | 23,472 | 23,588 | 25,836 | 0.53 |
| Yellow | 3,567 | 3,269 | 8,092 | 12,345 | 19,986 | 54.85 |
| Total | 28,861 | 25,470 | 31,564 | 35,933 | 45,822 | 12.25 |
| B. Area Harvested, Has. | | | | | | |
| White | 22,842 | 22,070 | 20,209 | 18,599 | 14,907 | (10.12) |
| Yellow | 1,473 | 1,762 | 3,133 | 4,388 | 5,286 | 37.64 |
| Total | 24,315 | 23,832 | 23,342 | 22,987 | 20,193 | (4.54) |

Source: Bureau of Agricultural Statistics, Davao del Norte
 AAGr- Average Annual Growth Rates

b. Fish Production.

The aquaculture profile as presented in Table No. 3-26 showed that fish production is usually undertaken from aquaculture classified as Brackish & Freshwater fishponds. Fishes produced from brackish fishponds are the bangus, shrimps. Crabs and other species that thrives in near salty waters and these are found in the coastal towns while tilapia and catfish are commonly raised in freshwater (inland) fishponds. The municipality has the biggest area of 364.0 has. developed as freshwater fishpond.

The aquaculture profile as presented in Table No. 3-26 showed that around 2,588.19 hectares are devoted to fish culture. Brackish aquaculture, producing bangus (Chanos chanos), shrimps, crabs, and other fish species that thrives in near salty water dominate the aquaculture industry at

1,866.50 hectares. Freshwater fishes like Tilapia (*Oreochromis niloticus*) and catfish (*Clarias garofinus*) are commonly raised in inland fish ponds. Brackish fishponds are commonly found in Tagum City, Panabo City, IGaCoS, and Carmen. Inland fish ponds are found in all municipalities and cities with considerably larger areas like Braulio E. Dujali and Panabo City. Inland water bodies like water impoundments and waterlogged areas are presently developed for the aquaculture industry using net cages.

Table No. 3-26 : Aquaculture Profile of Davao del Norte, 2007

| Municipality/ City | Fishpond Category | | | | | |
|-----------------------|-------------------|-------------------|------------|-------------------|-----------|-------------------|
| | Brackish | | Freshwater | | Total | |
| | Area, Ha. | No. of Farmers | Area, Ha. | No. of Farmers | Area, Ha. | No. of Farmers |
| Asuncion | - | - | 2.50 | 10 | 2.50 | 10 |
| BEDujali | - | - | 364.00 | 54 | 364.00 | 54 |
| Carmen | 90.00 | 21 | 68.00 | 79 | 158.00 | 89 |
| IGSamal | 70.00 | 6 | 2.00 | 8 | 72.00 | 14 |
| Kapalong | - | - | 3.50 | 16 | 3.50 | 16 |
| New Corella | - | - | 2.60 | 18 | 2.60 | 18 |
| Panabo City | 197.50 | 22 | 237.00 | 5 | 437.50 | 27 |
| Sto. Tomas | - | - | 31.39 | 118 | 31.39 | 118 |
| Tagum City | 1,509.00 | 271 | 0.50 | 2 | 1,509.50 | 273 |
| Talaingod | - | - | 3.50 | 24 | 3.50 | 24 |
| San Isidro | - | - | 6.70 | 48 | 3.70 | 48 |
| Totals | 1,866.50 | 320 | 721.69 | 382 | 2,588.19 | 702 |

Source: PAGRO- Fisheries Division, Davao del Norte

With regard to production, Table No.3-27 shows that fishery production in these areas had increased at an average rate of 0.78% annually in the last five years. BAS records show that, fish production from municipal waters improved at an average of 6.40%, and was able to compensate the reduced production in aquaculture, which decreased by 3.19% annually. Noted decreases were recorded in production from inland waters (53.52%) and brackish aquaculture (6.16%). An average of 4,379 metric tons of fishes are produced yearly from these sources, excluding those caught from open seas and landed in ports outside of the Province. With a limited volume of fish caught, fish requirement of the province is augmented by those coming from Davao City and General Santos City fish ports.

Table No. 3-27: Production Data for Fisheries,
Province of Davao del Norte, 2003-2007

| Commodities | 2003 | 2004 | 2005 | 2006 | 2007 | AAGR % |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|
| A. Production, MT | 4,072.00 | 4,669.00 | 4,677.00 | 4,273.78 | 4,200.72 | 0.78 |
| 1. Municipal Waters | 1,551.00 | 1,933.00 | 2,286.00 | 1,962.00 | 1,986.77 | 6.40 |
| Marine | 1,425.00 | 1,847.00 | 2,235.00 | 1,941.00 | 1,980.89 | 8.50 |
| Inland | 126.00 | 86.00 | 51.00 | 21.00 | 5.88 | (53.52) |
| 2. Aquaculture | 2,521.00 | 2,736.00 | 2,391.00 | 2,311.78 | 2,214.05 | (3.19) |
| Freshwater | 271.00 | 237.00 | 256.00 | 373.13 | 399.35 | 10.18 |
| Brackish | 2,078.00 | 2,264.00 | 1,950.00 | 1,739.57 | 1,611.50 | (6.16) |
| Marine fish cages | 172.00 | 235.00 | 185.00 | 199.08 | 203.20 | 4.30 |
| Commodities | 2003 | 2004 | 2005 | 2006 | 2007 | AAGR % |
| B. Area, Harvested, Has. | 3,087.56 | 3,049.00 | 2,773.00 | 2,811.58 | 2,690.50 | (3.38) |
| | 411.00 | 397.00 | 465.00 | 539.00 | 576.00 | 8.80 |

| | | | | | | |
|-------------------|----------|----------|----------|----------|----------|--------|
| Freshwater | 2,676.00 | 2,651.00 | 2,308.00 | 2,272.00 | 2,114.00 | (5.72) |
| Brackish | 0.56 | 0.61 | - | 0.58 | 0.50 | (2.80) |
| Marine fish cages | | | | | | |

Source : Bureau of Agricultural Statistics, Davao del Norte

4.1.4 Specific industry characteristics

a. Agriculture

In terms of contributions to the income of the province from the agriculture sector, Cavendish banana contributed the most among the major crops produced at an estimated value of P 10.07B in 2007. This is followed by the estimated income from coconut production. Rice comes third at an estimated value of P 1.22B. Coconut, like rice, is commonly grown in all municipalities and cities.

Table No. 3-28 : Estimated Value of Production of Major Crops, by Municipality/City, Province of Davao del Norte, 2007

| Municipality/ City | Value, in Php Millions | | | | | Total |
|-----------------------|------------------------|--------|-----------|--------|----------|-----------|
| | Rice | Corn | Banana | | Coconut | |
| | | | Cavendish | Local | | |
| District I: | | | | | | |
| Tagum | 31.45 | 48.00 | 1,320.00 | 3.90 | 131.00 | 1,534.35 |
| New Corella | 192.35 | 86.30 | 300.00 | 100.00 | 62.00 | 740.65 |
| Asuncion | 198.95 | 119.15 | 350.00 | 50.00 | 57.00 | 775.10 |
| Kapalong | 101.90 | 55.10 | 1,100.00 | 40.00 | 413.00 | 1,710.00 |
| Talaingod | 8.10 | 332.00 | 4.00 | 21.00 | 12.50 | 377.60 |
| San Isidro | 5.15 | 16.50 | 1.00 | 146.50 | 31.00 | 200.15 |
| Sub totals | 537.90 | 657.05 | 3,075.00 | 361.40 | 706.50 | 5,337.85 |
| District II: | | | | | | |
| Panabo | 39.25 | 2.70 | 2,800.00 | 75.00 | 124.00 | 3,040.95 |
| Sto. Tomas | 290.75 | 11.60 | 2,560.00 | 19.75 | 186.00 | 3,068.10 |
| Carmen | 175.50 | 14.70 | 1,050.00 | 60.00 | 123.00 | 1,423.00 |
| BEDujali | 171.40 | - | 580.00 | 2.00 | 2.00 | 755.40 |
| IGCSamal | 1.40 | 58.70 | - | - | 430.00 | 490.10 |
| Sub totals | 678.30 | 87.70 | 6,990.00 | 156.75 | 865.00 | 8,777.75 |
| TOTALS | 1,216.20 | 744.75 | 10,065.00 | 518.15 | 1,571.50 | 14,115.60 |

Source: Primary data as computed from BAS, NSO and AMAD -DA XI data

Notes :

A. The data presented in Table No. 3-24 are derived from the following computations:

1. For rice, corn, coconut and local banana:
 - a. Production data and farm gate price from BAS. For production data, use the provincial total.
 - b. Disaggregate by municipality and city using PAGRO data on production area or area planted.
 - c. This will generate the municipal/city breakdown for production by proportion
 - d. Multiply municipal/city production on 2007 by farm gate price in 2007 (BAS).

2. For Cavendish banana : data is derived approximation
 - a. Area by municipality/city derived from the CLUP (Agriculture Profile)
 - b. Production – average production from plantations (DA-AMAS)
 - o @ 40 tons average per year
 - o the municipal/city production (breakdown) is calculated
 - c. Value = production X \$ 0.1733/kg. X P 42.00/\$

B. Dash indicates that data is not available.

Table No. 3-29 Averages of Production Performances of Major Crops in Davao del Norte (DDN) and Their Comparison with Regional and National Totals. 2002-2006.

| Major Crops | Parameters | Figures | | | % Share of DDN with | |
|-------------|----------------|---------|-----------|------------|---------------------|--------|
| | | DDN | Reg. XI | Phils. | Reg. XI | Phils. |
| Rice | Area, hectares | 31,938 | 110,732 | 4,081,947 | 28.80 | 0.78 |
| | Production, MT | 137,012 | 465,293 | 14,239,406 | 29.44 | 0.96 |
| Corn | Area, hectares | 23,567 | 198,700 | 2,468,976 | 11.86 | 0.95 |
| | Production, MT | 29,191 | 256,278 | 5,136,906 | 11.40 | 0.57 |
| Coconut | Area, hectares | 40,659 | 376,395 | 3,247,486 | 10.80 | 1.25 |
| | Production, MT | 200,277 | 2,486,262 | 14,502,275 | 8.06 | 1.38 |
| Banana | Area, hectares | 25,327 | 65,609 | 413,415 | 38.61 | 6.13 |
| | Production, MT | 871,921 | 2,431,842 | 5,873,568 | 35.85 | 14.85 |

Source: Bureau of Agricultural Statistics, Provincial Office

b. Industry

The Industry Clustering Program, is the key strategy adopted by the Economic Development Committee of the Regional Development Council to be able to attain economic growth in the region. In this program the province of Davao del Norte had been identified as the major contributor to the development of the Banana Industry in Region XI. Basing on the current production output of the province in local and export banana, it is understood that development shall also be felt in the entire Banana Value Chain, which promises vast opportunities. The volume of banana that goes out to the market totals to 1,009,849 metric tons. This data represents 90% of the total volume produced, or 1,122,054 metric tons. While the remaining 10% or 112,205 metric tons belong to the estimated annual rejects attributed to over-calibration, under-calibration, over-age, under-age and bruising which is unavoidable during harvest and processing stages. The volume of rejects undergoes alternative processing to produce various product lines and strongly support the banana value chain to include the following:

Banana Chips Processing

Chips are the most popular variety of snacks and they are consumed round the year by people of all age groups from all income segments. Potato chips are more popular than banana chips but banana chips have a special category of consumers and are preferred by many. Competition is not as fierce as in the case of potato chips. This provides an ample opportunity as a new entrant. With good quality and competitive pricing, it is possible to capture adequate market share.

Banana chips are made from unripe bananas. Chips or wafers are crispy, salty or spicy and consumers prefer fresh quality. Since they are made from banana, they have nutritious values as well. The product needs to be packed in transparent polythene bags.

As to demand and supply, banana chips can be sold at all places where people assemble like theaters, picnic spots, bus stands or railway stations, traffic junctions, etc. Retailing has to be done through small grocery shops as well as big department stores and super markets.

. Banana Fiber Production

The banana plant has long been a source of fibre for high quality textiles. In Japan, the cultivation of banana for clothing and household use dates back to at least the 13th century. In the Japanese system, leaves and shoots are cut from the plant periodically to ensure softness. The harvested shoots must first be boiled in lye to prepare the fibres for the making of the yarn. These banana shoots produce fibres of varying degrees of softness, yielding yarns and textiles with differing qualities for specific uses. For example, the outermost fibres of the shoots are the coarsest, and are suitable for tablecloths, whereas the softest innermost fibres are desirable for kimono and kamishimo. This traditional Japanese banana cloth making process requires many steps, all performed by hand.

In another system employed in Nepal, the trunk of the banana plant is harvested instead, small pieces of which are subjected to a softening process, mechanical extraction of the fibres, bleaching, and drying. After that, the fibres are sent to the Kathmandu valley for the making of high end rugs with a textural quality similar to silk. These banana fibre rugs are woven by the traditional Nepalese hand-knotted methods.

. Banana Paper

Banana fibre is also used in the production of banana paper. Banana paper is used in two different senses: to refer to a paper made from the bark of the banana plant, mainly used for artistic purposes, or paper made from banana fiber, obtained from an industrialized process, from the stem and the non utilizable fruits. This paper can be either hand-made or made by industrialized machine.

. Banana Flour Processing (Food and Feed Grade)

This upgrades the production of banana chips for flour-making which is a potential industry in a major banana producing area. Initial production of banana flour have met wide acceptance from the bakers' association in Luzon and in the Visayas.

Banana flour is made from the starchy plantain. It is sometimes used for food for invalids as it is starchy, filling and nutritious. It can be combined with regular flour when a starchy product is desired.

Commercially prepared banana flour is produced by freeze drying puréed banana. The flour is very fine and is very useful for its moisture absorbing and holding properties. It is a good gluten-free product and can be used to make pancakes, bread, scones and cakes which are moister and lighter with a more airy texture.

The country would then be able to cut down costs of importing wheat flour if volume of local production of banana flour would be increased.

. Farm Inputs Processing

Agriculture is an important component of the economy of Davao del Norte. Its relative importance is essentially referred to production multiplied by price. To increase the value of output for this sector, there must be higher prices, higher yields, or some combination of the two.

Because of growth limitations in the agricultural sector, economic diversification is essential for economic growth. One area of diversification often overlooked is industries related to agriculture, such as value added agricultural processing and farm input manufacturing. The province of Davao del Norte agriculture provides an adequate supply of raw materials for agricultural processing which is a good source of demand for farm input manufacturing (farm machinery). Value-added agricultural processing is seen to become quite in need in our present times. The role of these secondary agricultural industries indicates that the economic impact of agriculture goes beyond crop and livestock production. It is considered that additional economic impacts can be generated from contributions of these agriculturally-linked sectors.

. Metal Working

Metalworking is the craft and practice of working with metals to create individual parts, assemblies, or large scale structures. The term covers a wide range of work from large ships, bridges and oil refineries to delicate jewelry. Metalworking is a very useful support industry to agricultural production with the various kinds of farm tools and equipment needed to make all farm work faster and more efficient. In industry, metalworking provides the production equipment that can give precise processing and quality accepted products that are saleable in both the local and foreign markets.

. Plastic Twine Manufacturing

Plastic twine is the thin, stretchy, Saran wrap like stuff on the cardboard handle that you buy at the self storage place. Normally you would think of it when binding together loose items to be packed away or moved. This stuff simplifies product organization and packaging like nothing else can.

. Bamboo/Ipil-ipil Pole Production

The role of bamboo and ipil-ipil poles to banana production comes as support to the fruit-bearing banana tree. The expanding banana industry has increased its demands for bamboo poles or the ipil-ipil poles to enable the growers to produce quality and unblemished fruits.

. Utilities- Water, Power and Telecommunication

Water, power and telecommunications are utilities that are very necessary in the production line either in factories or in the production field. Their availability can help assure that products reaching the clients are of standard quality. Business is brisk when these utilities are efficient and cost effective.

. Animal Waste Processing

Animal agriculture in many parts of the world faces a challenge. If producers are to prosper, they must employ methods of managing the by-products they generate -- the manure, litter, mortalities, hatchery and processing plant offal, and wastewater -- that are at the same time environmentally sound, socially acceptable and economically feasible.

. Recycling Plant

Recycling involves processing used materials into new products in order to prevent the waste of potentially useful materials, reduce the consumption of fresh raw materials, reduce energy usage,

reduce air pollution (from incineration) and water pollution (from land filling) by reducing the need for "conventional" waste disposal, and lower greenhouse gas emissions as compared to virgin production. Recycling is a key component of modern waste management and is the third component of the "Reduce, Reuse, Recycle" waste hierarchy.

Recyclable materials include many kinds of glass, paper, metal, plastics, textiles, and electronics (e.g., cell phones and computers). Materials to be recycled are either brought to a collection center or picked up from the curbside, then sorted, cleaned, and reprocessed into new materials bound for manufacturing.

. Pallet and Crate Production

Pallets are a vital item of equipment in handling, storage and distribution system. It is the most cost effective means of protecting and carrying a company's products to end customers or consumers.

Proper packaging is required by all freight carriers to ensure that shipment is delivered safely, in the same condition as it was sent. Shipments can easily be protected from damage with good packaging.

Pallets are used for stacking boxes, and in such case weight are evenly distributed that will assure any chance of damaging the boxes. Pallets are most commonly used in the shipment of banana products. As of the present, the wood industry of the province supports the banana industry in this manner.

Crates on the other hand are used in the shipment of large items.

. Warehouse and Cold Storage Facilities

The public refrigerated warehousing industry, in particular, offers a myriad of benefits to companies with storage and distribution needs for their low temperature products. Manufacturers, wholesalers, and retailers alike can cut down—or entirely cut out—a significant capital investment, directly freeing up capital for research and development, marketing, or other revenue opportunities. In addition to this a public refrigerated warehouse/distribution facilities employ highly trained professionals who specialize in providing maximum protection for customer products and can respond to queries about the freezing, thawing, tempering, and storage requirements for virtually any food product or commodity. A modern public refrigerated warehouse and distribution facilities have the computer and telecommunications capability to network with customer computers and provide critical transaction data and analysis. Information about such important matters as inventory management, shipment histories, production scheduling, and stock replenishment can be routinely shared between computers to access all information including storage temperatures. Customers can also take advantage of the reduced transportation costs that are available through consolidated shipments. Food manufacturers, especially, can enjoy greater flexibility in serving a huge but a changing market—by being freed of the diversion of funds necessary to acquire or construct an expensive refrigerated facility in one or several permanent locations.

. Banana-based gifts, toys and housewares

Banana-based gifts, toys and housewares processing supports the tourism industry in the province. Many products can be made from the by-product of banana production. While developing the technology to enhance available by-products, livelihood opportunities are being offered to the rural folks particularly the housewives.

c. Commerce (Trading and Services)

The strategic location of Davao del Norte in the map has made the province a trading hub for its neighboring provinces of Agusan del Sur, Compostela Valley and Davao Oriental. It serves as a center that offers much-needed services not only for Davao del Norte itself but for the three provinces.

Commerce in Davao del Norte is either on trading and services, further categorized as wholesale or retail, manufacturing, production, processing or just plain services. Activities related to trading and services are grouped and presented as follows:

1. Food Trade
 - Eatery, refreshment parlor, restaurants, ihaw-ihaw/grills, fast foods, cafes
 - Lechon manok take out counters
 - Fruits, vegetables, spice
 - Beverages, soft drinks, energy drinks, fruit juices
 - Bakery, candies and pastries, pizza, cake house
 - Fish, meat, dressed and live chicken, salted and dried fish frozen meats, processed tuna, seafoods, poultry
 - Rice and corn (buy and sell/milling)
 - Livestock
2. Dry goods, general merchandise, sari-sari stores, groceries, convenience stores
3. Machine shop, scrap iron and metal, junk shop/bottles/plastics, welding, steel fabrication, vulcanizing shop, machining
4. Barber shop, beauty parlor, reflex and massage parlor
5. Lending, consumer financing, credit financing, pawnshop, money changer, money transfer, lessor
6. Carwash, motor parts, auto repair shop, motorcycle repair, surplus car and spare parts, brand new and recapped tires, engine change oil, hi-plast fiber glass repair, bicycle parts, second hand units repair and sale
7. Selling of cars, motorcycles, bicycles, trucks and multi-cabs
8. Cosmetics, medicines, perfumes, food supplements and herbal product lines, health care products, Chinese herbal products, pharmacy, soaps and toiletries
9. Manpower services and consultancy on :
 - Planning and building design, well drilling, engineering, surveying, accounting and auditing, financing, management, computer, collection
10. Cellphones, cellphone accessories and load, calling station, communication supply, telecommunication services, computer units, parts, accessories and repair, computer games, internet cafes
11. Lodging houses, boarding houses, apartment, hotels, cottage rental, dormitory, bed spacer
12. Videoke, videoke machine rental, KTV bar, CD tapes rental, music lounge, restobar, sound system rental, video machine, VCD and DVD rental
13. Transportation services: trucking, cargo forwarding, van ransport, hauling, car rental, motorcycles
14. Construction, construction supplies, lumber, concrete products, hardware, solar water heating system, solar heating, bamboo poles, paints, mini-sawmills
15. Driving school, institutions, schools, colleges

16. Furniture and fixtures, appliances, upholstery supplies, glass installation and repair, china porcelain jars and vases, guitar maker
17. Clothing: RTW, dress shop, tailoring, shoe repair, rtw, gowns and garments rental, laundry, boutiques, used clothing, footwear, bags, accessories, jewelries, underwear
18. Agricultural supplies : farm tools, veterinary supplies, chicken dung, feeds and antibiotics, agri-chemicals and fertilizers rice hulls
19. Beach and inland resorts, beach shelters
20. Water refilling stations, water purifiers, processors, distributors
21. Digital photography, videography, photo studio
22. Printing press, art and sign, photo copier, publication, ads and promotion, printing, news publication and newspaper
23. Minerals, ores, gold, firewood and charcoal
24. ENT clinic, dental services and laboratory, maternity and lying-in clinics, medical clinics, health care centers, drug testing, therapy, pet clinic
25. Native products
26. Insurance
27. Flowers, balloons, table and chairs rental, plaques, trophies
28. Books, teaching/tutorial/school/office supplies and equipment, art materials
29. Passport and visa processing, ticketing office
30. Wedding coordinator/planner
31. Security agency
32. Gasoline station, petroleum products, emission testing centers
33. Gun store
34. Rubber products
35. Bio tech, pomology, crop protection and research
36. Radio station
37. Badminton courts, tennis supplies, billiard halls

In most LGUs, trading and services are simple, while the more complex type of services that are varied and advanced in terms of technology usage are located in more urbanized areas such as Panabo City and most particularly Tagum City. People from other LGUs in the province, and even from other provinces flock to Tagum City for such services, making Tagum City the alternative service center to Davao City. Business in Tagum City as well as in Panabo City is brisk and fast moving, and because of this, major commercial banks and financial institutions continue to open branches particularly in Tagum City and Panabo City to cater to the financial needs and transactions. Franchises for major fast food industry and gasoline have also located in the province. Trading and services sector delivers the much needed support to the booming banana industry and the growth of other agricultural endeavors as well as the tourism development with its backward and forward linkages.

In the table below is the distribution of industries in the municipalities and cities of the province based on the CY 2007 Business Name Registration. It can be gleaned that trading and services is present in all the municipalities and cities and plays a big role with P 1.673 Billion in investments. This is followed by food processing with P 35.5 Million investment.

Table No. 3-30 : **Income Generated from Industries (Php Million)**
(Based on Business Name Registration)
Province of Davao del Norte, CY 2007

| LGU | GTH | Cutflow wers | Trading & Services | Chem- icals | Fashion & Fashion Jewelry | Food Proces- sing | Cons & Cons Materials | ICT | Mining | Total |
|----------------------------|--------------|-----------------|--------------------------|----------------|------------------------------------|-------------------------|-----------------------------|--------------|--------------|------------------|
| Tagum | 0.020 | 0.010 | 1,275.088 | 0.325 | 0.170 | 4.572 | 1.126 | 6.700 | 0.300 | 1,288.311 |
| New Corella | | | 4.198 | | | | .500 | 0.040 | | 4.738 |
| Asuncion | | | 6.122 | | | 0.300 | 0.030 | 0.100 | | 6.552 |
| Sto. Tomas | | | 32.400 | | | 0.538 | 0.155 | 0.896 | | 33.989 |
| Kapalong | | | 20.789 | | | 0.350 | | 0.900 | | 22.039 |
| Talaingod | | | 0.900 | | | | | | | 0.900 |
| Panabo | 0.020 | | 307.939 | 0.410 | | 28.829 | 1.710 | | | 338.908 |
| Carmen | | | 11.615 | 1.450 | | 0.150 | 1.000 | 0.075 | | 14.290 |
| BE Dujali | | | 2.725 | | | 0.060 | | | | 2.785 |
| IGCS | | | 10.460 | | | 0.720 | 0.755 | 0.280 | | 12.215 |
| San Isidro | | | 1.660 | | | | | | | 1.660 |
| Davao del Norte | 0.040 | 0.010 | 1,673.896 | 2.185 | 0.170 | 35.519 | 5.276 | 8.991 | 0.300 | 1,726.387 |

Source : Department of Trade and Industry

d. Wood Industry

The province's vision is purposely to synchronize all its development efforts in order to achieve its development thrust. Programs such as agro forestry, afforestation and eco-tourism have been considered as other major strategies. It is a given fact that the province had already developed and sustained infrastructure support services, which is the basic foundation to support economic activities.

The three (3) strategies such as agro-forestry, afforestation and eco-tourism were expected to generate employment and increase income for the population in Davao del Norte with afforestation centering on wood industry that recognizes the right of IPs & forest occupants through CBFMA and IFMA programs.

The Local Provincial Environment & Natural Resources Office, with its limited resources implemented the following program & projects in relation to the following three strategies:

Province of Davao Del Norte

| Programs and Projects | Objectives |
|--|--|
| 1. Small Watershed Rehabilitation Project | - Plantation development of forest trees for stream bank protection & forest protected zone. - Upland communities' participation in watershed protection. |
| 2. Ecotourism Development Project | - Restoration, protection & development of ecotourism sites. |
| 3. Plant Now Pay Later Project | - Plantation development of forest trees and fruit trees for production purposes. |
| 4. Nursery and seedling production | - Production of forest tree & fruit tree seedlings for tree parks, ceremonial planting, & urban forestry requirements. |
| 5. Agroforestry Learning Site & Extension Center | - Development of a diversified farming system in the upland that serves as a show window. |
| 6. Forest Resource Management & Information System Project | - Provide concise to the point & timely information relating to forest resource management. |

Source : PENRO –LGU, Davao del Norte

The economic activity in the province had always been dominated by the banana industry in terms of area coverage, production and dollar receipts from export. Two distinct industry developments from banana can be discerned, namely: the production and export of Cavendish banana, which is the major player; and the emerging banana chips industry with the use of local banana (cardava). It appears that the relationship between the wood industry and banana industry is seen in the support provided by the wood industry on the Cavendish banana export in the form of pallet board production.

The wood industry is not making much headway in the export market, at least for the farmers engaged on the community based afforestation activities. Production forest continued to be utilized as raw materials in the production of wood chips, particleboard and chopstick, furniture making, finished lumber, handicraft and mostly on pallet boards.

Production vs. utilization:

In 2005, the province of Davao del Norte posted 53 wood processors and one plywood/veneer plant. Wood processing plants operated to address the demand of wood by the banana industry. It was noted that the demand of the banana industry alone could not be supplied by the existing forest production in the province, hence nearby provinces also participated in the market.

There is also the strong domestic demand from the construction industry from both the private and government sectors. The government's demand for wood is particularly attributed to the construction of school and other public buildings. Even with the presence of one plywood processor in Tagum City, the province need to import wood products from sources outside the province just to augment the existing supply requirements.

**Table No. 3-32 : Wood Industries By Type of Permit
 Province of Davao del Norte, 2005**

| Type of Permits | Number |
|------------------------|---------------|
| Plywood/Veneer/Board | 1 |
| Mini Veneer | 1 |
| Regular Sawmill | 1 |
| Mini Sawmill | 26 |

| | |
|------------------------|-----------|
| Re-Saw | 1 |
| Chopsticks/Woodworking | 1 |
| Wood chips | 1 |
| Log Dealers | 1 |
| Furniture makers | 20 |
| Total | 53 |

Source: DENR Tagum City

The capacity of the province to supply logs in 2005 is estimated at 157,296.22 cu.m., while the wood industry requirement is estimated 92,650.28 cu.m. From this, log surplus was placed at 64,645.94 cu.m. The fact that Region XI, to include the province of Davao del Norte is a known net log importer, the indicated surplus provided in the Table below indicates that the surplus is considered as reserved for the increasing demand for the subsequent years.

*Table No. 3-33 : Raw Wood Industry Material Utilization By Province
Davao Region, As of CY 2005*

| Province | Log requirement in cu.m. | Log Supply in cu.m. | Surplus/(Deficit) in cu.m. |
|----------------------|-----------------------------|------------------------|-------------------------------|
| Davao City/Davao Sur | 228,129.15 | 211,467.79 | (16,661.36) |
| Davao del Norte | 92,650.28 | 157,296.22 | 64,645.94 |
| Davao Oriental | 73,622.65 | 937,000.67 | 863,378.02 |
| Compostela Valley | 67,493.42 | 82,320.86 | 14,827.44 |
| Total | 461,895.50 | 1,388,085.54 | 926,190.04 |

Source: DENR XI

If the supply and demand rule is applied, the condition should have made wood production very attractive to the farmers and existing farmers should have already benefited in terms of increase in income. On the contrary, the huge gap between supply and demand does not mean an advantage to the producers (farmers). Instead, at a price ranging from P1,700.00 – P 3,100.00 per cu.m. for falcata logs and P 600.00 to P 2,600.00 per cu.m. for Gmelina in the market only warrants a sustenance livelihood.

**Table No. 3-34 : Price of Forest Products
 Province of Davao del Norte
 CY 2006**

| Specie | Dia. Class (cm) | Log Bolt per cu.m. (loading area) | Lumber Size range per bd. ft. |
|---------|-----------------|--------------------------------------|--|
| Gmelina | 60-up | P2,600.00 | Green Lumber – PhP 16-18 |
| | 50-48 | 2,500.00 | Kiln Dried – PhP 22 -24 |
| | 40-48 | 2,300.00 | |
| | 30-38 | 2,000.00 | |
| | 26-28 | 1,500.00 | |
| | 20-25 | 600.00 | |
| | 60-up | P3,100.00 | Lumber By Class: Class A – PhP 11-13 Class B - PhP 9-10 Class C - PhP 6-8 |
| | 50-48 | 2,900.00 | |
| | 40-48 | 2,600.00 | |
| | 30-38 | 2,000.00 | |
| | 26-28 | 1,700.00 | |

Source: DENR XI

e. Mineral Industry:

Davao del Norte is endowed with rich deposits of non-metallic minerals like guano, marble, limestone and others. As shown in the table below, the province has a total reserve of 35,000,000 metric tons of non-metallic minerals.

**Table No. 3-35 : Non-Metallic Mineral Reserves
 Province of Davao del Norte**

| Non-Metallic Minerals | Location | Total Reserve (MT) |
|-----------------------|---------------------|--------------------|
| Guano Phospate | Samal & Talakud Is. | 112,400 |
| Rock Phospate | Samal & Talikud Is. | 43,800 |
| Sand & Gravel | Provincewide | 1,800,000 |
| Marble Deposit | Kapalong | 35,000 |
| Limestone/Lime Raw | Kapalong | 7,854,083 |
| Magnesite | Kapalong | 35,000,000 |

Source: DENR & PENRO

The province has an abundant source of high quality grade of sand & gravel, a major component material construction. As of 2007 a total production of 369,402 cubic meters was realized and was valued at PhP 36,940,200.00 with taxes collected in the amount of PhP 5,541,030.00.

For 2007 there were 50 permits issued for sand & gravel and earthfill extraction.

**Table No. 3-36: Annual Production of Sand & Gravel
Province of Davao del Norte
CYs 2003-2007**

| Location | Annual Production (Cu.M) | | | | | Total |
|-------------|--------------------------|----------|-----------|-----------|-----------|-------------|
| | 2003 | 2004 | 2005 | 2006 | 2007 | |
| Carmen | 50,400 | 69,547.5 | 117,937.5 | 88,073 | 75,582.5 | 401,540.5 |
| Kapalong | 41,718 | 36,429.5 | 73,245 | 41,151 | 40,247.5 | 192,291 |
| Panabo City | 65,691 | 51,022 | 131,830 | 184,845.5 | 104,653 | 1,589,075 |
| Sto. Tomas | 34,092 | 34,977.5 | 26,265 | 27,702.5 | 19,992.5 | 143,030 |
| Tagum City | 57,875.5 | 92,951.5 | 92,721 | 105,117 | 128,927 | 577,875.5 |
| New Corella | 1,405 | - | - | - | - | 1,405 |
| Total | 351,465 | 335,958 | 401,499 | 446,889 | 369,402.5 | 1,905,213.5 |

Source: DENR & PENRO

The extraction of sand & gravel is one of the major income generating industries in the province where it was able to contribute a total of Php 8,573,460.75 to local revenues for the past 5 years, 2003 to 2007.

**Table No. 3-37: Revenues from Sand & Gravel Extraction
Province of Davao del Norte
CY 2003-2007**

| Location | Total Production | Per Cu.M. | Gross Income from Extraction (PhP) | Share on taxes | |
|-------------|------------------|-----------|------------------------------------|----------------|--------------|
| | | | | Mun/City | Province |
| Carmen | 401,540 | 15 | 6,023,107.5 | 4,216,175.25 | 1,806,935.25 |
| Kapalong | 192,291 | 15 | 2,884,365 | 2,019,055.5 | 865,309.5 |
| Panabo City | 589,071.5 | 15 | 8,836,072.5 | 6,185,250.72 | 2,650,821.75 |
| Sto. Tomas | 143,030 | 15 | 2,145,450.00 | 1,501,815.00 | 643,635.00 |
| Tagum City | 577,875.5 | 15 | 8,668,132.5 | 6,067,692.75 | 2,600,439.75 |
| New Corella | 1,405 | 15 | 21,075.00 | 14,725.5 | 6,322.5 |
| Total | 1,905,213.5 | 15 | 28,557,127.5 | 19,989,989.25 | 8,573,460.75 |

Source: PENRO

f. Tourism Industry

The tourism industry in the province is classified as beach tourism, agri-tourism and eco-cultural tourism. There are three identified major areas of destination in the province, namely; a) the Island Garden City of Samal with its island white sand beaches, diving sites and water sports, b) the vast banana plantations in the mainland and c) a highland journey in nature and culture to include waterfalls, springs, lakes at the municipalities of Kapalong, New Corella, San Isidro and

the Ata-Manobo Cultural Village in the highland municipality of Talaingod. A table in the Annexes of this plan provides a list of tourist attractions that can be found in the cities and municipalities of the province of Davao del Norte.

The following table shows the trend of tourist/visitor occupants in various hotels, inns and lodging houses for Davao Region from CYs 2002 to 2006. Davao City being the regional center gets the biggest number of visitors who availed of hotel accommodations. Second on the list is Davao del Norte contributed by the Island Garden City of Samal.

**Table No. 3-38 : Regional Occupancy Report
 Region XI : CYs 2002-2006**

| Province/City | 2002 | 2003 | 2004 | 2005 | 2006 |
|-------------------|---------|---------|---------|---------|---------|
| Compostela Valley | 11,248 | 9,468 | 11,683 | 20,181 | 38,757 |
| Davao City | 431,354 | 496,948 | 568,442 | 573,324 | 574,165 |
| Davao del Norte | 38,261 | 26,247 | 37,873 | 27,363 | 37,045 |
| IGCS | 19,059 | 20,427 | 22,853 | 30,601 | 42,398 |
| Davao del Sur | 22,826 | 29,965 | 28,131 | 42,791 | 30,721 |
| Davao Oriental | 19,115 | 13,359 | 22,992 | 22,456 | 30,721 |
| Region XI | 541,863 | 596,414 | 691,974 | 716,716 | 763,083 |

Source : Department of Tourism, Region XI

The Island Garden City of Samal had consistently been a favored tourist destination as shown in the table above, which suggests the number of tourist arrival based on hotel occupancy. Because of its proximity to and accessibility from Davao City Samal Island enjoys a large share of tourists so that it plays second to Davao City in the recorded influx of tourists. The mainland also got a fair share of tourist who are seeking adventure particularly in nature and culture. The same can be deduced from Table No. 3-39 below which reflects the five-year data on traveler distribution in Region XI.

**Table No. 3-39 : Yearly Distribution of Travelers in Region XI
 Per Province/City : CYs 2003-2007**

| Province/City | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------|---------|---------|---------|---------|---------|
| Compostela Valley | 9,468 | 11,683 | 20,181 | 38,180 | 29,846 |
| Davao City | 496,946 | 568,442 | 573,324 | 574,165 | 641,161 |
| Davao del Norte | 26,247 | 37,873 | 27,363 | 37,912 | 26,179 |
| IGCS | 20,427 | 22,853 | 30,601 | 41,820 | 46,046 |
| Davao del Sur | 29,965 | 28,131 | 42,791 | 39,421 | 30,075 |
| Davao Oriental | 13,359 | 22,992 | 22,456 | 31,585 | 31,025 |
| Region XI | 596,414 | 691,974 | 716,716 | 763,083 | 804,333 |

Source : Department of Tourism, Region XI

Most of the travelers in Region XI are Filipinos who live in some parts of the country other than Davao Region, balikbayans, and Filipinos residing outside the Philippines. In 2002, the domestic travelers in Davao Region comprised 89.9 percent of the region's total visitor arrivals. Foreign visitors on the other hand, represent 10.1 percent. Majority of these foreign visitors came from East Asia which includes the countries of China, Hongkong, Japan, Korea and Taiwan

Of the 541,863 total visitor arrivals in Davao Region during 2002, 487,102 are domestic travelers while 54,761 are foreign visitors. Aside from East Asia, North America also comprised the huge bulk of foreign travelers in the region. During the year out of 54,761 foreign travelers in Davao Region, 12,341 or 22.5 percent were coming from North America which comprises Canada and the United States of America.

Other foreign visitors came from Europe, ASEAN countries with 4.1 percent, Oceania (2.6%), Middle East (0.9%) and South Asia (0.4%).

**Table No. 3-40: Distribution of Visitor Arrivals in Region XI
By Country of Residence : 1999-2002**

| Country of Residence | 1999 | 2000 | 2001 | 2002 a/ |
|-----------------------------|----------------|----------------|----------------|----------------|
| Foreign Market | 67,926 | 58,539 | 68,302 | 54,761 |
| ASEAN | 6,334 | 4,042 | 3,894 | 2,269 |
| East Asia | 26,498 | 25,538 | 31,912 | 26,066 |
| South Asia | 16,027 | 389 | 414 | 218 |
| Middle Asia | - | 274 | 418 | 476 |
| North America | 16,027 | 13,710 | 14,839 | 12,341 |
| Oceania | 2,761 | 2,443 | 3,074 | 1,434 |
| Europe | 9,170 | 6,812 | 5,132 | 3,527 |
| Others & | | | | |
| Unspecified Residences | 7,106 | 5,605 | 9,037 | 8,430 |
| Domestic Market | 518,125 | 502,144 | 574,345 | 487,102 |
| Foreign Residents | 15,061 | - | - | - |
| Filipino Residents | 498,342 | 496,227 | 560,885 | - |
| Country of Residence | 1999 | 2000 | 2001 | 2002 a/ |
| Balikbayans | 4,722 | 5,917 | 13,460 | - |
| TOTAL | 586,051 | 560,683 | 642,647 | 541,863 |

Source: Department of Tourism XI

4.2 Potentials for contributing to local growth

4.2.1 Economic Base Industries

As presented in Table 3-41, there are four major sectors contributing to the economy of the province; agriculture, industries, services and tourism. Among them, agriculture contributes almost 86% of the income source, followed by service sector in major growth centers. In agriculture, it is discussed that cavendish banana production among the major crops produced, provides most of the income source of the province.

Table 3-41: Location Quotient: Provincial Income from Major Sectors of Cities and Municipalities for CY 2007 Province of Davao del Norte

| Municipality/City | Agriculture | Industries | Services | Wood | Quarrying | Tourism |
|-------------------|-------------|------------|----------|------|-----------|---------|
| Tagum City | 0.58 | 4.14 | 4.09 | 2.26 | 1.66 | 0.16 |
| New Corella | 1.15 | 0.05 | 0.06 | 0 | 0.02 | 0.22 |
| Asuncion | 1.15 | 0.03 | 0.08 | 0.33 | 0 | 0.21 |
| Sto. Tomas | 1.15 | 0.03 | 0.10 | 0.02 | 0.40 | 0.05 |
| Kapalong | 1.13 | 0.54 | 0.12 | 0.01 | 0.96 | 0.19 |
| Talaingod | 1.13 | 0 | 0.02 | 4.42 | 0 | 0.42 |
| Panabo City | 1.03 | 0.59 | 0.88 | 2.15 | 1.43 | 0.14 |
| Carmen | 1.14 | 0.11 | 0.08 | 0 | 2.43 | 0.11 |
| BEDujali | 1.15 | 0.20 | 0.04 | 0 | 0 | 0.22 |
| IGCSamal | 0.77 | 0.15 | 0.14 | 0 | 0 | 18.97 |
| San Isidro | 1.12 | 0.88 | 0.08 | 0.52 | 0 | 0.79 |

Source: Computed based on Table No. 3-18

Of the sectors, Table 3-42 suggests that agricultural products, as dominated by Cavendish banana production, are inclined to be export oriented with most municipalities having location quotients greater than 1.0. This suggests that the sector is providing more of the LGU's requirements. The low location quotient in agriculture for Tagum City (0.58%), however, suggests under representation. This may mean that the city is not largely dependent on the income from agriculture (or from Cavendish banana production which contributes largely to the income of the sector) It may also suggest that other agricultural commodities produced by the city are not enough for local consumption, as it really is. The Island Garden City of Samal is having low location quotients in most sectors (except in tourism) and suggests that these sectors are not providing enough of the requirements of the city and are generally non-export oriented.

Tagum City's location quotients showed that most of the income generators (industries, services, wood, and quarrying) are greater than 1, suggesting that these sectors are the city's economic bases. This is with exception of tourism which registers a low location quotient of 0.16. Panabo City's location quotients are greater than 1.0 in agriculture, wood processing and quarrying. The service sector of the city also shows the potential for growth with the quotient of 0.90 and is expected to grow in the near future. Panabo City considered as a "spill-over recipient" of Davao City's development growth, and it is expected that the service sector will eventually be needing expansion to cater to the needs in the near future.

Talaingod, which is dominantly forestland, showed a high location quotient in the wood sector. The location quotients in the sector showed as well that Tagum and Panabo cities are making good in exporting wood products. Although these cities have limited forest production areas, wood processing provides more than their respective requirements. Quarrying areas situated in Tagum City, Panabo City & Carmen showed that these areas provided more than their respective sand and gravel requirements for construction purposes. Requirements of other LGUs are sourced from these quarrying areas.

Although all LGUs benefit from tourism, it is only in the Island Garden City of Samal where notable patronage from tourists (both local and international) is indicated by the location quotients. The city registers a very high location quotient of 18.97 as compared to the rest of the LGUs. Talaingod which boost of a rich cultural heritage being home to an indigenous people of the province, comes next with a quotient of 0.43. This may suggest that the tourism destinations in Talaingod are not yet earning enough from tourist visitations. The absence or lack of facilities to accommodate tourists and visitors is a factor that deters the generation of desired income from tourism which redounds to low location quotient at present.

4.2.2 Local employment growth

a. Agriculture

It is seen that agriculture dominates the income source of the province, where the production and export of Cavendish banana is largely contributing. Cavendish banana is produced in plantation scale or commercial farms undertaking activities from land preparation, planting, plant care, harvesting, processing to marketing. Various ancillary services are likewise engaged at; to mention some are on research and development, trucking services, medical, and many more. Meaning, the industry is a job and employment generator. In production alone, an established Cavendish banana plantation requires around 1.5 to 1.75 employment in a hectare to do plant care and maintenance.

Knowledge and skills required for employment in Cavendish banana production and marketing is very varied and broad; from janitorial services to managerial in nature. This means that the demand for skills to be employed in the industry is simply “limitless.” Potential for local employment is simply available, hence to the benefit of the job-seeking local populace.

Aside from generating local employment, some communities surrounding Cavendish banana plantations make use of rejected fruits as a means of livelihood. Green bananas are peeled, dried and sold for the manufacture of paste extenders and animal feeds. Other uses of banana that could not pass the export qualities are sold for local consumption, fillers and additives in the manufacture of catsup; processed into food grade flour, chips and many other uses.

b. Industries

Leading the list of industries under the value chain of the banana industry, banana chips processing industry that has in recent years become a very important player in our economy, not only in the processing itself but also in the production of cardaba banana, the raw material of banana chips.

Banana chips comes from fresh harvests of mature green fruit of saba variety which are deep fried in oil and comes in different processing stages and forms depending on buyer or consumer preferences.

This industry is considered as one of the major employment generators of Davao del Norte starting from the planting and production of cardaba, to the processing of banana chips. Cardaba production is backyard in scale, where most farmers devote 1-2 hectares average farmland for its production, but nevertheless it becomes a means of employment and a steady source of income to farm families. Although the technology applied is not as intensive compared to the production of Cavendish banana, but it still requires labor in its backward and forward linkages. A hectare devoted to cardaba production requires at least 1 man-day labor. Likewise the processing of banana chips employ an estimated 5,672 manpower every year.

Other industries are emerging and gaining importance due to the development of the banana industry. They either serve as backward and forward linkages that provide employment and means of livelihood to local communities in the province.

c. Services

Trading and services sector plays second to agriculture as income generator in the province since this sector is considered a supporting arm to the banana industry. Without the existence of this sector, agriculture will also slacken. Based on the CY 2007 Business Name Registration, the

small and medium sized businesses were able to provide employment to 6,466 persons. As the number of establishment and the amount of investments increase over time consequently there will be an increase in employment needs in the province.

d. Wood

As forest resources became depleted and harvesting of forest products became an issue, the supply of raw logs decreased to approximately 30% (2007-2008). However, the government exerted efforts to increase wood production as the local market badly demands wood products for the banana industry. The concerned agency, Department of Environment and Natural Resources in coordination with the Local Government Units (LGUs) have implemented programs and projects such as the Community-Based Forest Management (CBFM) and Plant Now Pay Later to address the problem and to assure a more sustainable supply in the next five to ten years. Employment growth in the wood industry only involves the plantation establishment good for 14 man-days per hectare developed.

e. Quarrying

For CY 2007, a total annual production of 369,402 cu.m. or a 17% decrease from CY 2006 annual production were produced by the 50 permittees. The daily average volume of cubic meters produced per permittees is 279 cu.m., with an employment rate of 2 man-days. Under the Local Government Code of 1991, the host LGUs, namely: city/municipal and barangay are entitled to 30% and 40% share, respectively of gross collection from the utilization of mineral resources.

f. Tourism

Davao del Norte took a share of tourist arrival in Davao Region by 3.71%, while the Island Garden City of Samal alone had a share of 5% in the whole region indicating the island as a favourite tourist destination because of its white beaches, the world-class diving sites and rustic views. About 28% who visited the region came for holidays and pleasure. The business names registered for CY 2007 totalled 108 with total investments of P 102.5 Million and employed 366. From these, there were twelve beach and inland resorts, hotels and restaurants that were registered with capital investments totalling P 85.9 Million, employing 196 persons. Since tourists either foreign or local jump off from the mainland to the island, transportation to and from the island and even within the island itself is very essential hence, investments in this sector totalled P 1.85 Million to include a sea coastal transport liner, booking and ticketing offices, pump boats and motorized bancas. Employment generated from the transportation services was 25. Aside from these, various industries most of which are related to trading and services are operating to cater the needs of the local residents and tourists alike. It is expected that tourism industry will continue to grow in the near future because of the on-going extensive tourism development and promotion not only for the island but also for the mainland. In addition, transportation services have become more accessible with the opening of more international and local flights to Davao City and lower fares rates offered by airline companies. The presence of tourists enlivens the business sector and creates a desired ripple effect in the entire economy.

4.2.3 Competitiveness and market shares

a. Agriculture

Table No. 3-42 : Cavendish Banana Performances of Provinces in Region XI and Their Comparison with Regional and National Totals: 2002- 2007

| Location | Production Parameter | | | | Area Parameter | | | |
|-----------|----------------------|-----------|------------|-------|----------------|---------|------------|--------|
| | AAGr, % | Ave. MT | Share with | | AAGr, % | Ave. MT | Share with | |
| | | | Nat'l | R- XI | | | Nat'l | R - XI |
| Phils. | 12.92 | 2,410,709 | - | - | 10.94 | 55,606 | - | - |
| Region XI | 10.14 | 1,899,234 | 78.80 | - | 6.33 | 37,716 | 67.80 | - |
| CV | 15.90 | 747,916 | 31.0 | 39.40 | 2.50 | 11,557 | 20.80 | 30.60 |
| DC | 7.71 | 108,000 | 4.50 | 4.50 | 4.30 | 2,334 | 4.20 | 6.20 |
| DO | - | - | - | - | - | - | - | - |
| DS | 3.21 | 151,439 | 6.30 | 8.0 | 12.50 | 2,251 | 4.00 | 6.00 |
| DN | 7.27 | 871,045 | 36.00 | 46.00 | 7.92 | 21,574 | 38.80 | 57.20 |

Source : Prov'l. Agriculturist's Office

Average Annual Growth Rates (AAGr) and all other entries are computed from the data obtained from “Major Crops Statistics of the Philippines: 2002- 2007” of the Bureau of Agricultural Statistics (BAS), Aug. 2008.

The statistical data of BAS in regard to Cavendish banana production showed that Davao del Norte contributes as much as 36.00% of the average national production totals in the last five years, and posted a growth rate of 7.27% annually. It is contributing to 38.80% of the total national area grown to the commodity, and dominates the regional area at 57.20% of its total production area. Davao del Norte's Cavendish production area increases at 7.92% annually.

Cavendish banana are primarily marketed outside of the country; to Japan, China, North and South Korea, and some Middle East countries being the major outlets. The industry is having stiff competitions from Latin American countries, Vietnam, Malaysia, and some South African nations. Basically, competitiveness among Cavendish banana producers to maintain and even expand market outlets is anchored on quality or in meeting the quality standards set by the buyers. Attaining desirable product quality and maintaining the standard rely heavily on some factors like observance of “good agricultural practices (GAP)”. The conduciveness of the agronomic and ecological factors that the province possesses making it suitable to producing the commodity makes its Cavendish banana production in the province competitive in the export market.

b. Industries

For banana chips processing industry, out from the 26 processing plants now operational in Mindanao 16 are located in the Davao Region, of which 8 are in Davao del Norte, which means that from the standpoint of the region, Davao del Norte takes 50% share of production, and 30.77% of the production in the whole Mindanao. It is understood that most of the processing plants locate in the province, particularly in Tagum City because it is where the bulk of the supply of cardaba banana is found. All the LGUs in the province produce and contribute about 90% of cardaba-raw material for the processing of banana chips, and are brought to Tagum and Panabo Cities. The remaining 10% requirement comes from the neighbouring provinces of Compostela Valley and Agusan del Sur. Market demand for banana chips is growing. The competitiveness of the Philippine banana chips is in its quality which is much more preferred compared to that of Thailand, which is the other major source of banana chips in Asia.

c. Services

The comparative advantage of the province with its capital, Tagum City is its strategic location which positions itself as an alternative service center to Davao City. Tagum City lies at the crossroads of Davao City and the provinces of Davao Oriental, Compostela Valley and Agusan del Sur. The major consideration of consumers and businessmen alike in all the influence areas of Tagum City are the distance and travel time to get to Davao City, the Regional Center. If their needs are catered right in Tagum City, why travel the distance to Davao City. It is expected that by the time the Bukidnon-Tagum City route opens more opportunities will also open up for trading and services in the province.

d. Wood

During the last four years, the capacity of the province to supply logs has exceeded. Due to the decrease in harvesting, the supply of finished wood products became scarce. The local market demand for wood pallet, furniture, plywood and lumber is addressed by importing from other areas while waiting for local tree farms to produce.

e. Quarrying

Due to the demand of quarry resources, the permittees have engaged in selling quarry materials to other buyers coming from other provinces. It is quite evident that the Municipality of Carmen has transported a bigger volume of sand and gravel to Davao City. As per record, only sand and gravel materials are transported outside the province, while filling materials like soil or mountain mix are consumed by local markets in the province. The volume transported outside the province is very minimal likewise it could not affect the local demand. Compostela Valley Province and Davao City have also existing permits in the same riverbeds that can be found along the rivers of Hijo and upper Lasang. The transported quarry materials to Davao City in 2005, 2006 and 2007 has reached to 17%, 8.4% and 12.96%, respectively. Also in 2007, quarry transported to Compostela Valley Province reached 0.12%. Please see table 3-43.

Table No. 3-43 : Volume of Sand and Gravel transported outside the Province

| Location | Volume Transported in Cu. M. | | | | | |
|-------------------|------------------------------|--------|------------|--------|------------|---------|
| | 2005 | | 2006 | | 2007 | |
| | Davao City | Comval | Davao City | Comval | Davao City | Comval |
| Tagum City | - | - | 1,330 | - | 1,950 | 321 |
| Panabo City | 6,000 | - | 4,000 | - | 4,600 | - |
| Carmen | 44,303 | - | 19,883 | - | 27,942.5 | - |
| Total | 50,303 | - | 25,213 | - | 34,492.5 | 321 |
| Annual Production | 294,884 | - | 297,390.5 | - | 266,222 | 266,222 |
| Percentage | 17.07% | - | 8.47% | - | 12.96% | 0.12% |

Source: PENRO-LGU, Davao del Norte

To compare the production volume and income of earthfill and sand and gravel with other LGUs in the region, the table below shows that although Davao City has more volume of sand and gravel and earthfill produced, yet Davao del Norte has generated more value in pesos for every cu.m. both for the above non-metallic minerals. High grade quality sand and gravel in Davao del Norte is more preferred even when priced higher than the other LGUs.

**Table No.3-44: Earthfill and Sand and Gravel Production in Region XI
As of CY 2007**

| City/Province and Commodity | Quantity in Cu. M. | Value (Php) |
|--------------------------------------|--------------------|---------------|
| Davao City Sand and Gravel | 306,466.50 | 7,890,348.00 |
| Earthfill | 183,613.50 | 1,809,658.80 |
| Compostela Valley Sand and Gravel | 34,610.50 | 1,058,609.50 |
| Davao del Norte Sand and Gravel | 268,170.00 | 17,431,050.00 |
| Earthfill | 101,798.50 | 6,616,902.50 |
| Davao Oriental Sand and Gravel | 32,183.00 | 1,122,705.00 |
| Davao del Sur Sand and Gravel | 108,650.00 | 7,422,950.00 |

Source: Bureau of Mines, Region XI

f. Tourism

On the number of travelers in the Philippines by region, the table below shows that Southern Mindanao got a share of 4.84% of the total 11,164,025 travelers in the country, placing 7th in the regional ranking.

Table No. 3-45 : Number of Regional Travelers in the Philippines, CY 2002

| Region | 2002 | % Distribution | Rank |
|--------------------------------------|------------|----------------|------|
| CAR–Cordillera Administrative Region | 1,278,251 | 11.45 | 2 |
| Region I – Ilocos Region | 355,575 | 3.19 | 11 |
| Region II – Cagayan Valley | 582,528 | 5.22 | 5 |
| Region III – Central Luzon | 423,189 | 3.79 | 9 |
| Region IV – Southern Luzon | 4,065,265 | 36.41 | 1 |
| Region V – Bicol | 389,718 | 3.49 | 10 |
| Region VI – Western Visayas | 836,395 | 7.49 | 4 |
| Region VII – Central Visayas | 1,063,398 | 9.52 | 3 |
| Region VIII- Eastern Visayas | 175,467 | 1.57 | 14 |
| Region IX – Western Mindanao | 200,691 | 1.80 | 13 |
| Region X – Northern Mindanao | 550,709 | 4.93 | 6 |
| Region XI – Southern Mindanao | 540,359 | 4.84 | 7 |
| Region XII – Central Mindanao | 425,174 | 3.81 | 8 |
| Region XIII- Caraga | 277,306 | 2.48 | 12 |
| Total | 11,164,025 | 100.00 | |

Source : Tourism Research and Statistics Division, Dept. of Tourism

The tourism industry contribution to the provincial economy is shown in Table No. 3-46 below. A total of P266.67 Million was spent by visiting tourists in Davao del Norte for CY 2007 alone, of which P233.7 Million or 85% was done in the Island Garden City of Samal.

**Table No.3-46 : Tourism Income for the Year 2007
 Based on Arrivals and Occupancy
 By City and Municipality: CY 2007**

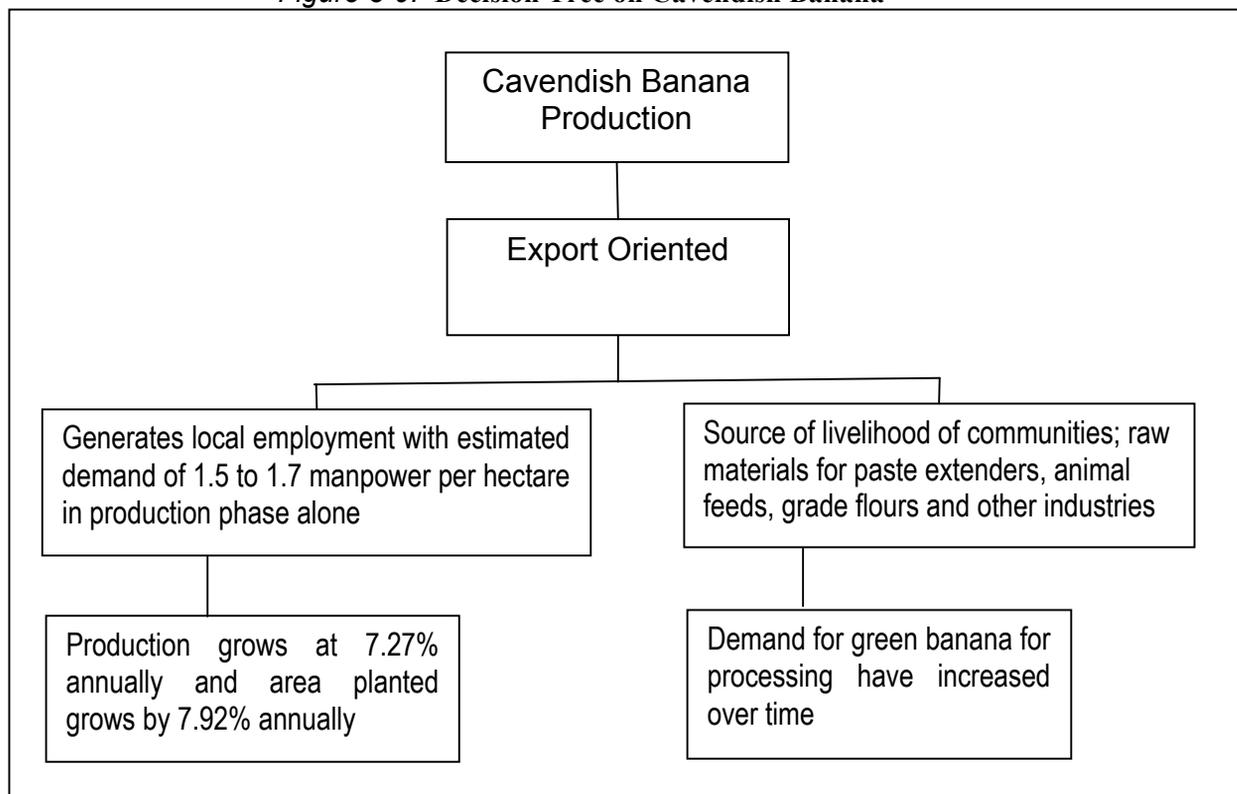
| LGU | No. of Arrivals | % Arrival | Total Tourist Spending (Php in Millions) |
|---------------|-----------------|-----------|--|
| City of Samal | 22,252 | 85% | 233.7 |
| Panabo City | 785 | 3% | 8.24 |
| Tagum City | 785 | 3% | 8.24 |
| Kapalong | 523 | 2% | 5.49 |
| New Corella | 262 | 1% | 2.75 |
| Asuncion | 262 | 1% | 2.75 |
| BE Dujali | 262 | 1% | 2.75 |
| Talaingod | 262 | 1% | 2.75 |
| Total | 26,196 | 100% | 266.67 |

Source: Department of Tourism, Region XI

4.3 Potentials for local economic growth.

4.3.1 Agriculture

Figure 3-9. Decision Tree on Cavendish Banana



a.1 Banana Industry

Banana is the leading fruit grown in the Philippines and a consistent top dollar earner of the country. Its prospects in the domestic and foreign markets are promising as demands for fresh and processed products are increasing. Being produced for export are Cavendish and banana chips, and for the local market, produced are lakatan and latundan. Banana production in the Philippines is also favored by existing agro-climatic conditions.

The demand for organic banana chips, Cavendish and bungulan for export is also growing. Local requirement is expected to increase since banana constitutes 73 percent of consumer fruit intake.

The total world banana production in 2004 reached about 70.63 million metric tons. The average world production was estimated at about 62.7 million metric tons per year. The world average yield was around 15.6 metric tons per hectare. The world's average rate of planting was about 4.1 million hectares per year (FAO).

The world's leading banana producers include India producing 25 percent; Brazil, 9 percent; Ecuador, 9 percent; China, 8 percent; Philippines, 8 percent; Indonesia, 6 percent and Costa Rica, 3 percent of the world's total production (FAO).

As the fifth major banana-producing country in the world, the Philippines produced 5.63 million metric tons in 2004 valued at p 35.5 billion, increasing at 3.6 percent per year from only 3.5 million metric tons in 1990 (BAS).

The country's production area ranked as the third largest in the world at 414,510 hectares in 2004 or about 8.5 percent of the total world area. It ranked second to India which has 680,000 hectares. The country's production area from 1990 to 2004 was increasing at a rate of 2.2 percent per year (BAS).

Banana production in Davao Region reached 4.28 million metric tons in 2004. This is 76 percent of the total Philippine production (BAS). Among Mindanao regions, Davao Region has the greatest contribution to the country's total banana production followed by Region XII, with Region IX contributing the least. Davao del Norte was the highest producer of banana and had the largest area planted.

According to a study by World Bank, yields are highest in Southern Mindanao where the commercial plantings are mostly situated. While the national average yield is only 10 tons per hectare, the average for Southern Mindanao is almost four times as much.

In terms of world production and trade, the Philippines is the lone Asian country who made it to the world's top 10 major suppliers of banana. In the Japanese market, the Philippines is the major supplier of banana capturing 73.8% of the Japanese market for bananas. Other important export markets for Philippine bananas are Saudi Arabia, Korea and the United Arab Emirates.

The growth of the banana industry is expected to continue in the near future as shown in the following projections:

- Cavendish banana export is expected to increase at 3-6 percent per year.
- Cardava banana chips export performance will have at least 10 percent growth rate per year.
- Domestic market of lakatan and latundan is expected to increase at around 3 percent per year with promising export potential.
- The bulk of banana supply will come from Mindanao.

- Local market demand for cardava in urban centers is increasing for snack foods such as banana cue, turon, etc. lakatan and latundan market demand is increasing particularly in the areas of Visayas and Luzon.

As to investment opportunities, the proposed expansion area for banana production in Davao Region is 18,389 hectares distributed in the provinces as follows:

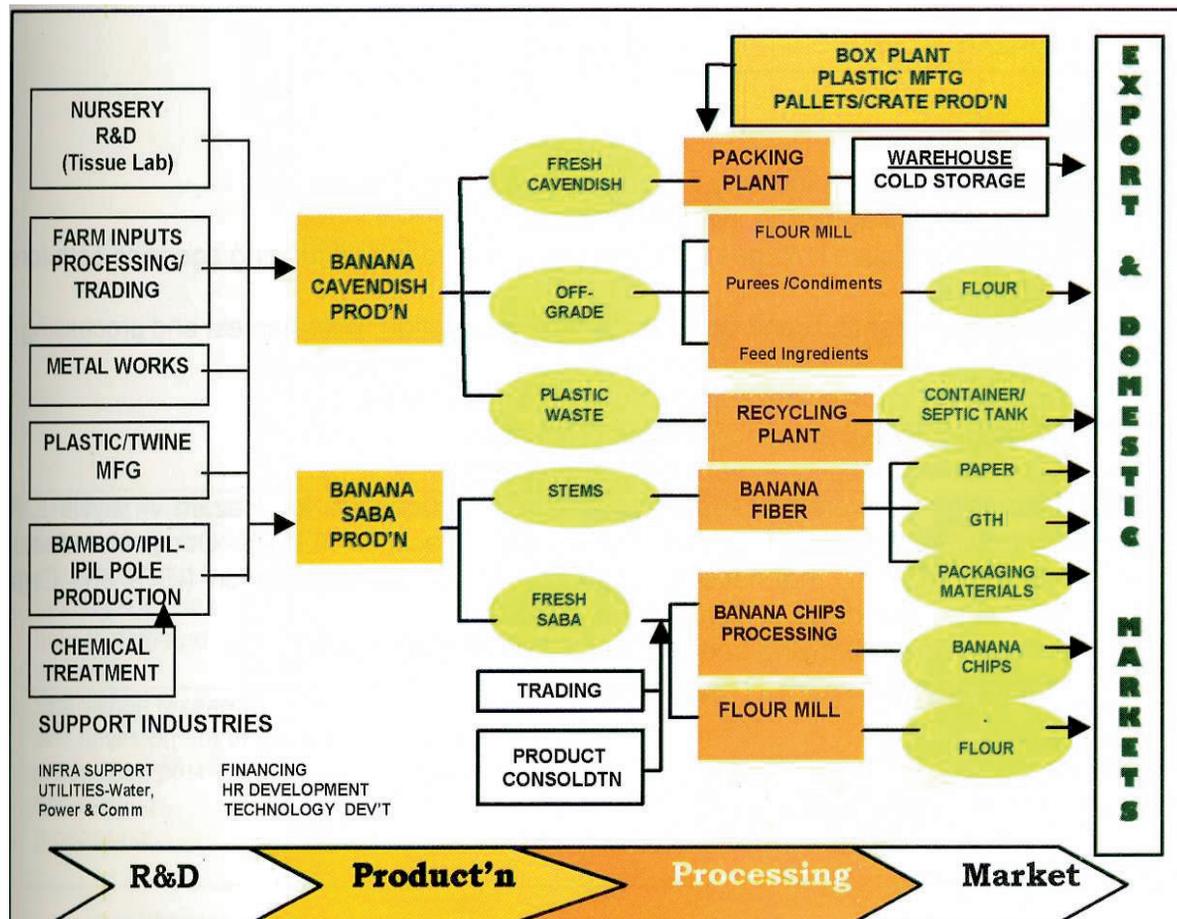
**Table No.3-47 : Expansion Area for Banana Production
 Davao Region**

| Cultivar | Davao del Norte | Davao Oriental | Compostela Valley | Davao del Sur | Davao City | Total |
|-------------------------------|------------------------|-----------------------|--------------------------|----------------------|-------------------|--------------------|
| Cavendish | 3,000 has. | 1,000 has. | 500 has. | 500 has. | | 5,000 has. |
| Cardava | 2,500 has. | 2,000 has. | 3,540 has. | 100 has. | | 8,140 has. |
| Lakatan | 1,500 has. | 500 has. | 200 has. | 100 has. | | 2,300 has. |
| Cultivar | Davao del Norte | Davao Oriental | Compostela Valley | Davao del Sur | Davao City | Total |
| Latundan | 500 has. | 500 has. | 200 has. | 300 has. | | 1,500 has. |
| Unclassified/ any cultivar | | | | | 1,449 has. | 1,449 has. |
| Total | 7,500 has. | 4,000 has. | 4,440 has. | 1,000 has. | | 18,389 has. |

Source: Davao Region Industry Cluster Plan, 2005-2010

Figure No. 3-10 shows the entire banana supply chain that illustrates the vast investment opportunities from the input stage up to the marketing stage. In the input stage, investment areas are in fertilizer, pesticides, tissue cultured planting materials, organic inputs such as organic fertilizers and bio pesticides, plastic bags, plastic mulch and packaging materials. In the production stage, investment opportunities are in credit and expansion. In the processing stage, banana chips and other products such as flour, animal feeds, food grade, among others are the prospective investment areas. In the marketing stage, banana has vast potentials in the logistics, post-harvest facilities, cold chain system and transport facilities for domestic and export markets.

Figure No. 3-10 : Value Chain Analysis of the Banana Industry Province of Davao del Norte



Source : Davao Region Industry Cluster Plan, 2005-2010

The identified strengths of the banana industry are as follows:

- Large number of experienced and technically capacitated banana growers.
- Strong, dedicated and credible leadership in the industry
- Extensive membership
- Strong multi-sectoral linkages
- Presence of highly organized banana industry players in the province and in the region
- Large potential areas for expansion
- Existing R & D facilities with mature technologies
- Typhoon-free area
- Presence of multi-national companies

Opportunities that can forge the growth of the banana industry in the province are identified as follows:

- Greater access to market
- Presence of ICT facilities
- Heightened global consciousness for health foods

- High employment and investment generation

Specific on the banana industry, the product and service providers comprise the nursery operators, banana growers/planters, banana consolidators and processors, and the micro enterprises.

The supporting industries consist of chemicals/fertilizer dealers or suppliers, manufacturers of farm implements/equipments, shipping and cargo forwarders; manufacturers of packaging materials and boxes to include wooden pallets and crates, producers/suppliers of sugar and oil for the processors' use.

The specialized infrastructure groups are institutions that provide utilities and services for the banana industry like water and power, public markets, packing houses, airport and seaports.

4.3.2 Industry

a. Banana Chips Processing Industry

Cardaba banana is processed into banana chips intended mainly for the export markets.

The Philippines exports most of the banana chips to the United States contributing around 17% of the total world exports to that country. Some of the important markets of Philippine banana chips include Japan, Taiwan, UK, Germany, Korea, Hongkong and Singapore.

Banana chips industry has become part of Davao Region's top exports, placing 4th on the list with a growth of 29% between 2007 and 2008.

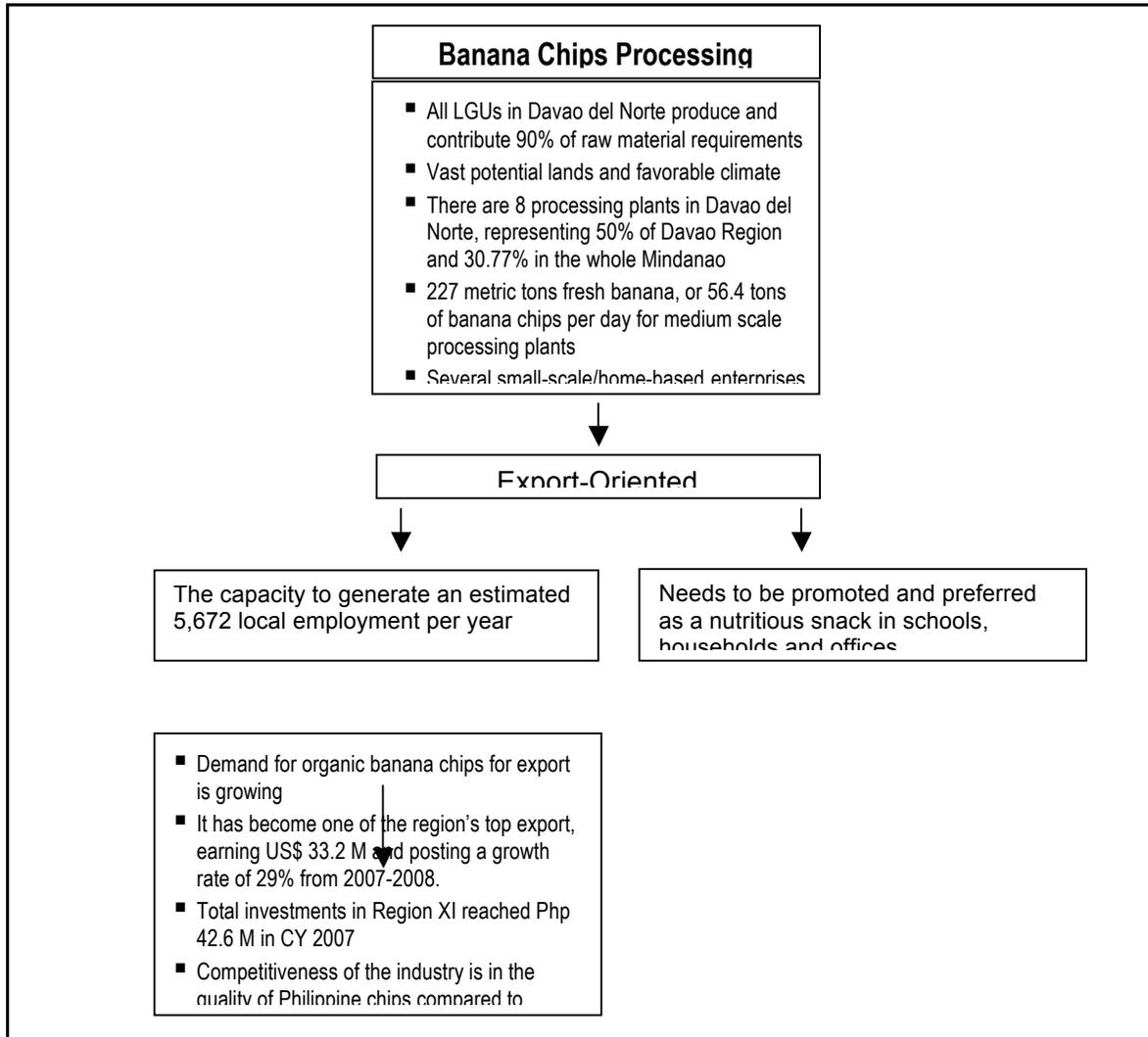
At present, there are 26 processing plants for banana chips in Mindanao; sixteen of these plants are located in Davao Region, of which eight are in Davao del Norte. (See Table No. 3-48 below).

*Table No.3-48: Banana Chip Processors
 Province of Davao del Norte
 As of CY 2008*

| Business Name | Location |
|---|--------------------------|
| 1. Four Seasons Fruits Corporation | Magugpo East, Tagum City |
| 2. Tagum Commodities Corporation | Magugpo East, Tagum City |
| 3. Prime Fruits International | Cuambogan, Tagum City |
| 4. Royce Food Corporation | Magdum, Tagum City |
| 5. Arcmen Industries | Cagangohan, Panabo City |
| 6. Krismarie Food Product (Micro-domestic Market) | Mabini St., Tagum City |
| 7. San Shen Agri-Integrated, Inc. (First fry indirect exporter) | Mankilam, Tagum City |
| 8. RS Golden Food Products | Manay, Panabo City |

Source : Department of Trade and Industry, Davao del Norte

A decision tree in Figure No. 3-11 below presents the dissection of the banana chips processing industry in the province of Davao del Norte.



b. Other related industries

Other export products processed from banana are banana sauce (catsup) and banana flour, meal and powder. Basing on the export data in 1998, a total of 1,474 metric tons of banana catsup valued at US \$ 1.3 million was exported, where its biggest export market is the US capturing almost half of the total export volume followed by Canada, Saudi Arabia and the United Arab Emirates. The banana flour, meal and powder are solely exported to the Japanese market at a volume of 2.2 metric tons valued at US\$ 14,771.

4.3.3 Trade and Services

The banana industry being the most important player of the economy of the province of Davao del Norte dictates the location and type of investments on services and support industries in the province as well as the strategic alliances and infrastructure facilities needed to sustain its growth. Total trade and services as of CY 2007 is shown in the table below.

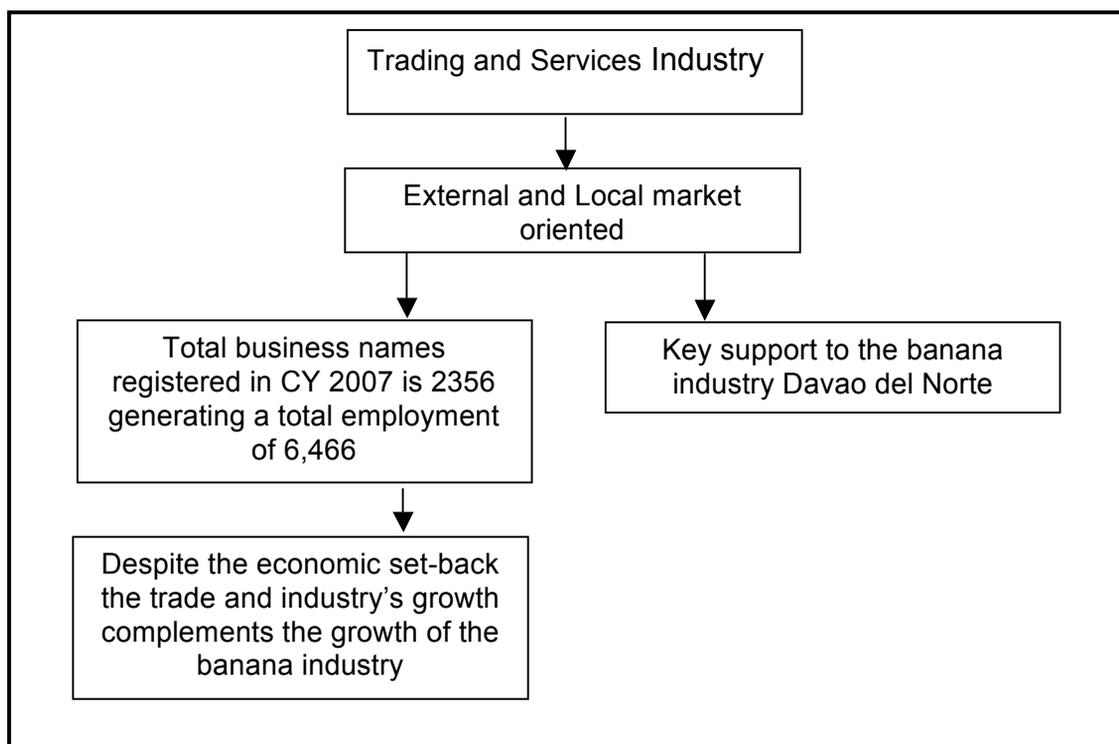
**Table No. 3-49: Total Trade and Services
 Province of Davao del Norte
 For Calendar Year 2007**

| LGU | No. of Establishments | Investments | Employment |
|-----------------|-----------------------|------------------|------------|
| Asuncion | 36 | 6,121,725.00 | 76 |
| Carmen | 73 | 11,614,500.00 | 153 |
| BE Dujali | 9 | 2,725,000.00 | 30 |
| Kapalong | 104 | 20,789,298.07 | 244 |
| New Corella | 28 | 4,197,700.00 | 114 |
| Panabo City | 421 | 307,938,795.00 | 1,769 |
| Sto. Tomas | 186 | 32,466,000.00 | 424 |
| Tagum City | 1,499 | 1,275,088,205.61 | 3,656 |
| Talaingod | 11 | 900,000.00 | 25 |
| San Isidro | 9 | 1,664,340.00 | 19 |
| City of Samal | 90 | 10,459,500.00 | 366 |
| Davao del Norte | 2,356 | 1,660,941,223.68 | 6,466 |

Source ; Department of Trade and Industry

It can be gleaned from Table No. 3-19 of this chapter that industries and services are very minimal in terms of their number and volume of investments, yet they are very essential in the growth and development of the banana industry and the rest of the key players of our economy, namely: wood, tourism and mining industries.

Figure No 3-12: Decision Tree on Trade and Services



4.3.4 Wood Industry

Wood industry used to be a major economic contributor of the province and the region as well. By the year 2000, this has dramatically changed with the decline in the supply of wood due to stricter enforcement of selective logging policies imposed in 1987. As a consequence, importation of logs increased to augment the supply of many wood processors.

There was always a strong domestic market demand for wood. Its steady stream of revenues came from the construction industry, the government's requirement for desks, tables and chairs, pallets for the banana industry and wood products for export.

The construction industry needs lumber, woodworks, and other wood by-products for construction purposes. The Department of Education (DepEd) has yearly requirement for desks, tables and chairs and the banana industry's demand for pallets which is estimates at 60,000 pieces per month. These pallets while marketed domestically are also found in the export market as packaging materials for export banana and other goods.

Wood products like furniture and furniture parts, finger jointed lumber, builder wood works, door and window jambs, wood chips and knockdown pallets are also exported. The export of wood finished products had been increasing from 2002 to 2004 at an annual average of US \$ 2 million. The region's wood products found its way to the USA, Europe, Japan, Korea, Taiwan and other Asian countries.

Ironically, while the region's wood exports are on an uptrend, it remains to be a net importer of raw wood materials particularly logs for plywood and veneer. The sources of imported wood are New Zealand, Solomon Island and Papua New Guinea.

The total area planted to trees is estimated at 23,524.97 hectares. These include areas under the reforestation projects of DENR XI and plantations developed by private entities. Most of the planted areas are covered with CBFMA, the rest are covered under different plantation instruments such as Integrated Forestry management Agreement (IFMA) and Socialized Industrial Forestry Management Agreement (SIFMA)

Table No. 3-50 : Areas Planted, By Province, By Type, Davao Region, 2004 (In Hectares)

| Province | Private | CBFMA | IFMA | SIFMA/ AFLA | Total |
|---------------------------|----------|-----------|----------|-------------|-----------|
| Davao Oriental | 743.10 | 7,793.71 | 1,136.65 | None | 9,673.46 |
| Davao del Norte | 2,683.49 | 2,174.71 | 1,988.24 | None | 6,846.44 |
| Compostela Valley | 875.52 | 1,827.86 | | 42.3 | 2,745.68 |
| Davao del Sur/ Davao City | 551.02 | 2,917.37 | 120 | 671 | 4,259.39 |
| Total | 4,853.13 | 14,713.65 | 3,244.89 | 713.30 | 23,524.97 |

Source: Davao Region Industry Cluster Plan, 2005-2010

The region's capacity to supply logs is estimated as 1,388,085.54 cubic meters. The region's industry requirement is 461,895.50 cubic meters. If the regions' capacity to supply is compared with its requirements, a log surplus of 926,190.04 cubic meters may be noted.

Table No. 3-51: Raw Wood Industry Material Utilization, by Province, Davao Region, 2005

| Province | No. of Wood Processing Plants | Log Requirement (m ³) | Log Supply (m ³) | Surplus/ (Deficit) (m ³) |
|-----------------------|-------------------------------|-----------------------------------|------------------------------|--------------------------------------|
| Davao City/ Davao Sur | 33 | 228,129.15 | 211,467.79 | (16,661.36) |
| Davao del Norte | 34 | 92,650.28 | 157,296.22 | 64,645.94 |
| Davao Oriental | 11 | 73,622.65 | 937,000.67 | 863,378.02 |
| Compostela Valley | 26 | 67,493.42 | 82,320.86 | 14,827.44 |
| Total | 105 | 461,895.50 | 1,388,085.54 | 926,190.04 |

Source: Davao Region Industry Cluster Plan, 2005-2010

As of 2005, the total available area for development is 227,263 hectares. These areas can be developed with or without tenure. The areas with tenure are covered under different instruments such as CBFM or IFMA/SIFMA. Some 33 percent of these areas are available for investments.

Table No. 3-52: Areas Available for Development, By Province Davao Region, March 2006 (In Hectares)

| Province | With tenure | | Without Tenure | Total |
|-------------------|-------------|------------|----------------|---------|
| | CBFM | IFMA/SIFMA | | |
| Davao Oriental | 7,628 | 7,093 | 4,032 | 18,755 |
| Davao del Norte | 12,932 | 6,938 | 25,967 | 45,837 |
| Compostela Valley | 23,669 | 1,824 | 41,558 | 67,051 |
| Davao del Sur | 5,794 | | 48,690 | 54,485 |
| Davao City | 7,048 | 1,244 | 32,841 | 41,133 |
| Total | 57,073 | 17,099 | 153,090 | 227,263 |

Source: Davao Region Industry Cluster Plan, 2005-2010

The total area available for forestry development in Davao del Norte is 45,837 hectares or 20.17% of the total area in the region. With this, the province ranks third on the list for forestry development in Davao region.

The following are the identified strengths of the wood industry in Davao del Norte:

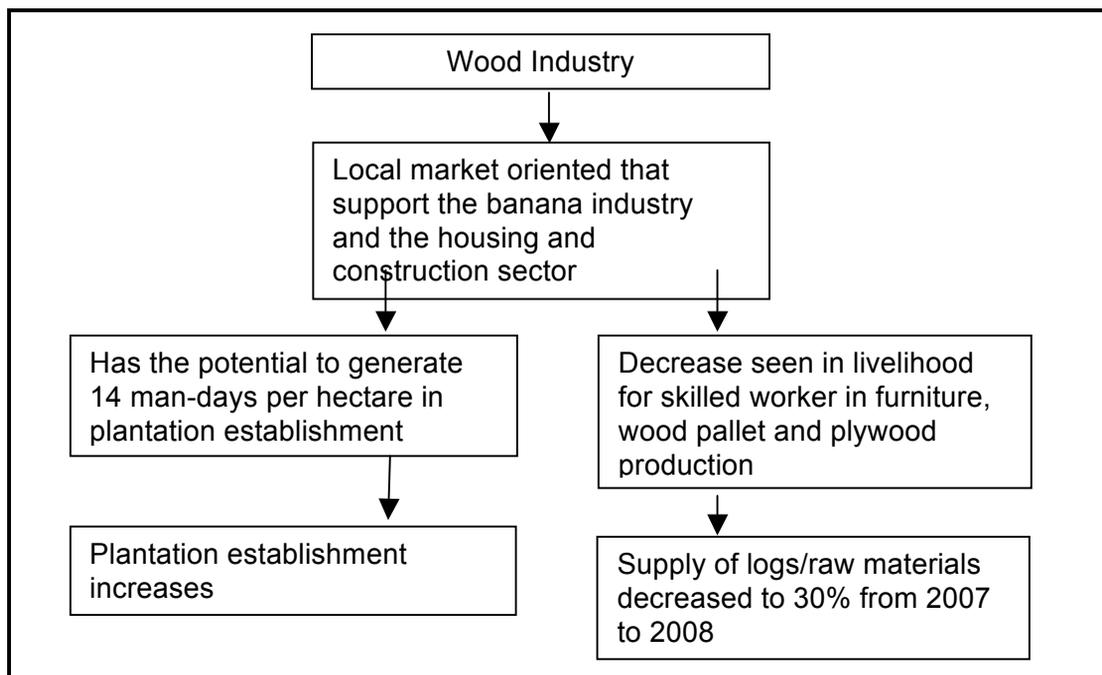
- There is a high inventory of harvestable stocks of plantation species, which had been developed under the government's reforestation projects, private sector programs, special projects and foreign assisted projects.
- There is still a large area available for commercial tree plantation development to address the demand in later years.

- Strong government support to community based forestation projects. Under Executive Order No. 318-2004, the Community-based Forest Management shall be the primary strategy in all forest conservation and development. CBFMA is being issued to People's Organizations (POs) that comply with all the requirements that are designed for sustainable plantation development.
- Strong wood processing capacities and existing skilled manpower resources.
- Strong policy support. The development of the wood industry is given priority under the Davao Regional Development Plan, 2004-2010
- Davao del Norte and Davao Region as a whole is typhoon-free. As such investment opportunities are available for tree plantation development.
- The following are also the identified opportunities for the wood industry that our province can also take advantage:
 - Global strong advocacy for the use of renewable, biodegradable and organic products. This provides the opportunity to source out wood products from commercially grown species.
 - Shift to market acceptability of commercially-grown tree specie.
 - Ever increasing world demand for wood products. Every year the world consumes approximately 1.6 billion cubic meters of industrial wood (timber and fiber). The demand for wood products worldwide is estimated to increase at 1 percent yearly.
 - Improved sea linkages. The strategic location of the Davao Region in the BIMP-EAGA Region and to the rest of the world makes it a good transshipment hub for regular international shipping lines. Tagum City, which is the center for wood processing industry in the province is only approximately 55 kilometers away from Davao City and thus, shares this competitive advantage.
 - Strong domestic market base. There is good demand for wood-based product within the region itself supportive of the existing banana and other important industries in the province.

To ensure the sustainability of the raw materials supply, primary focus must be on the establishment of clonal nurseries to support the development of tree plantations. The focus of the investment promotion initiatives should be on the following:

- Tree plantation development
- Research and development and other technical support to improve cultural practices
- Promotion of upstream industries which will create more value adding activities
- Maximum utilization of milling wastes and other wood by-products.

Figure No. 3-13: Decision Tree on Wood Industry

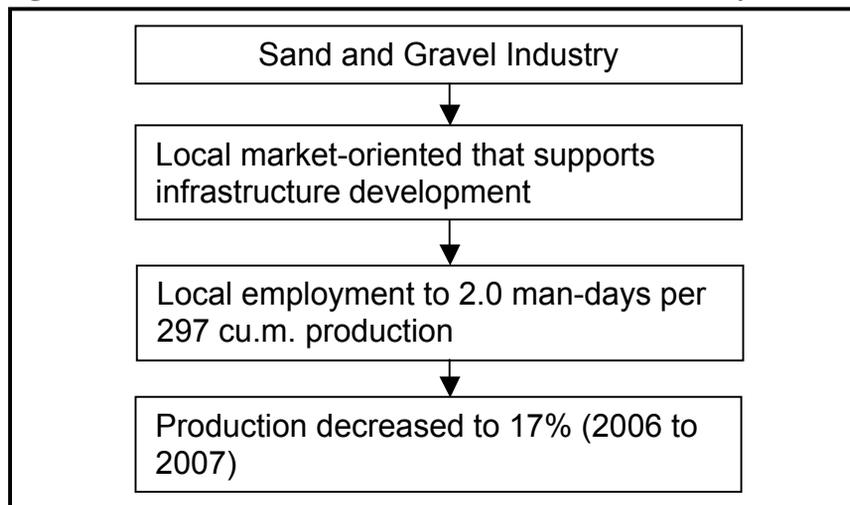


4.3.5 Mining Industry

Mineral exploration and development has been considered by the national government as one of the top priority areas of development because of its potential to bring economy into a more robust state and alleviate poverty in the rural areas. The issuance of Executive Order (EO) 270 series of 2004 gives mandate to the promotion of responsible exploration, development and utilization of mineral resources.

The province only has an abundant supply of non-metallic resources. Non-metallic resources production chain starts from exploration to development to mining or quarrying. The raw materials such as rock aggregates and sand and gravel from the quarrying stage serve as input materials to the processing of cement which is a vital component to the construction industry. Much of the sand and gravel are important inputs to the expanding construction activities of the province.

Figure No. 3-14: Decision Tree on Sand and Gravel Industry



4.3.6 Tourism Industry

The comparative advantage of the province of Davao del Norte can be attributed to the natural beauty that abounds such as beaches, dive sites, historical sites, cultural villages, forest ecosystems, mountains, caves, falls, rivers and springs, plantations and many others.

The province gets a fair share of tourist arrivals in the region so that it was also able to generate considerable income. It was estimated by the Department of Tourism Region XI that every tourist spends an average of P 3,200 per day during the 3.2 average days of stay anywhere in the province.

The known strengths for tourism industry in the province are the following :

- Natural attractions (islands to highlands) and unique collage of ethnic groups.
- Good climate all year round
- Institutional government policy on eco-tourism development is in place
- Established organizations from various sectors to assist the development of eco-tourism sites.
- Availability of infrastructure support facilities (airport, seaport, roads, etc.)
- Trainable manpower with high literacy rate.

Davao del Norte also shares in the tourism opportunities of the region, namely:

- Increasing awareness and appreciation for eco-tourism experience
- Accessibility to the BIMP-EAGA and ASEAN markets
- Increasing sea/air traffic brought about by demand of tourists
- Davao City being the primary gateway in Mindanao, and Davao del Norte is only 55 kilometers away from Davao City
- Mindanao as exotic wilderness destination
- Networking among South East Asian Countries on tourism destinations

With nature-based tourism gaining wide recognition among tourists, special interests and opportunities can be offered for sites development, theme parks and even in-home/country experience packages. Events depicting the culture of local communities coupled with visits to cultural and natural destinations are great attractions to tourists/visitors seeking quality experiences.

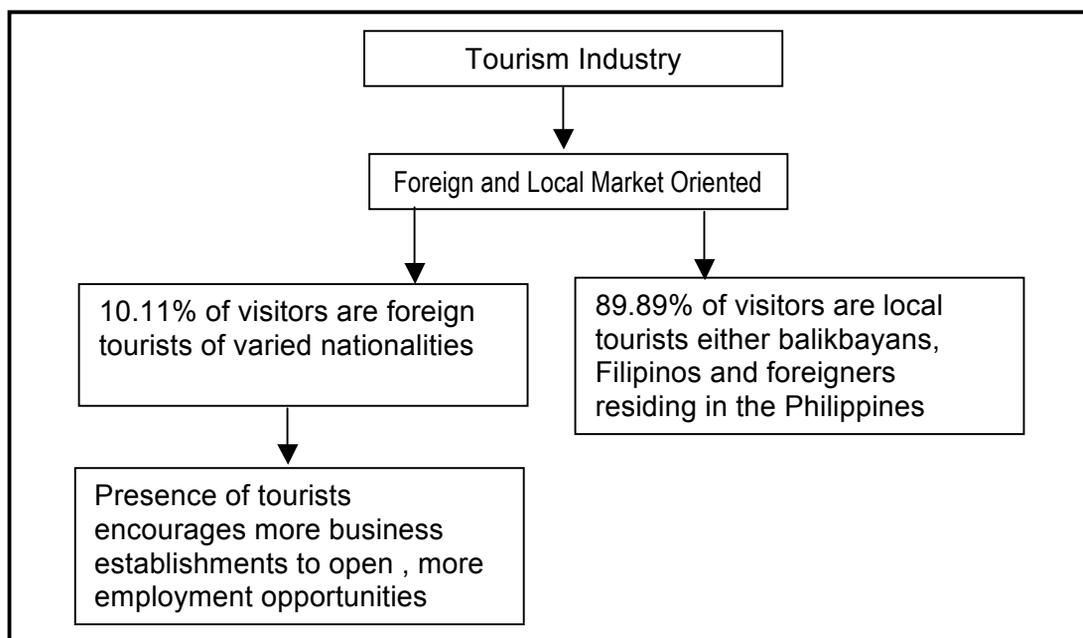
The tourism supply chain includes tourism operators doing business to provide complementary services ranging from travel arrangements and bookings, transportation facilities, hotels/resorts accommodation, and food and entertainment, among others.

In recent developments on the tourism program of Davao del Norte the following undertakings conceived to increase our competitiveness in the industry, viz:

- The reopening of the Ekran Berhad Resort Hotel in Kaputian District of the Island Garden of Samal to boost the growing need for tourist accommodation in that part of the island.
- The promotion of the Hijo Port Town which is expected to bring in more investments in port development and cargo shipment out and into the province.

- The promotion of the Island Garden City of Samal as an eco-adventure destination of the south, a retirement haven and a health and wellness capital in the south.
- The conduct of “Island to Highland : Destination Davao” road show that will showcase not only Samal island but to highlight the selected tourist destinations in the mainland for possible investment tourism development programs to include:
 1. Panas Inland Resort
 2. Carmen historical and fresh water fish
 3. Hotel accommodations
 4. Mariculture in Panabo City
 5. Caving adventure in Kapalong, New Corella and San Isidro
 6. Banana business tour package for the plantations

Figure No. 3-15: **Decision Tree on Tourism Industry**



4.4 Local Factors

4.4.1 Physical Resources

The potentials of the province in agriculture and fisheries are vast since almost half or 46.82% (148,785 hectares) of the total land area of the province is devoted to various agricultural activities.

The geographic location of Davao del Norte with regards to agriculture is strategic. Being surrounded by mountain ranges with lush vegetation of neighboring provinces, the province is protected from the onslaught of typhoons. Climate is generally Type IV with rainfall more or less evenly distributed throughout the year. However, occasional flooding is experienced in some areas, caused by river overflows and run-off accumulations from higher elevations. Unlike before, flooding is no longer as intense and lasts a few days to recede. Dry spells, particularly El Niño, is also experienced and affects mostly the upland areas and elevated production areas where irrigation is intermittent.

In terms of area elevation, most of the land areas of the province are potential for cultivation of various crops with 33% or 128,343 hectares that are very low lands, 21% or 84,651 hectares low lands, 7.66% or 29,501 hectares moderately low lands. Areas of higher elevation are classified as moderately high represent 34.50% or 132,802 hectares which are also potential for forestry development.

While the slope is characterized by level to nearly level (0-3%) with 118,871.60 hectares of 36.17%; gently to undulating slopes (3-8%) with 26,601.20 hectares or 8.09%; undulating to rolling slopes.

The soil characteristics of the province can support cultivation of most agricultural crops. Soil resources are dominantly clayey in texture that originates from alluvium washed from the uplands and from materials originating from igneous and sedimentary rocks. These soils exhibit medium to high fertility, except in some places where nutrient supplementation is required.

The province has abundant water supply both from surface and groundwater resources. 15 rivers and creeks traverse the province. The bigger rivers such as the Lasang, Tagum/Libuganon, Saug and Tuganay drain the broad west and north plains into Davao Gulf, and water the important agricultural lands along their course.

4.4.2 Human Resources

In 2007, the labor force of the province, totaled 261,516 or 70.9 percent of its population 15 years old and above. Out of this number, 93.8 per cent or 245,347 were gainfully employed (Table No.3-52) and 6.2 per cent were reported unemployed. This is a projection made based on the available latest data published by the NSO (2000 Report).

Table No. 3-53 : Labor Force, 2007 (projected)
Province of Davao del Norte

| | MALE | FEMALE | TOTAL | % |
|------------------------|---------|---------|---------|--------|
| 15 yrs.old & above | 231,809 | 136,941 | 368,750 | 42.2 |
| In the labor force | 192,772 | 68,744 | 261,516 | 70.9 |
| Employed | 182,363 | 62,984 | 245,347 | 93.8 |
| Unemployed | 10,410 | 5,761 | 16,171 | 6.2 |
| Not in the labor force | 39,037 | 68,197 | 107,234 | 100.00 |

Source: PPDO projected computation

DTI registered industries for CY 2007 have reported their respective contributions in generating employment in the province. It can be noted from the table below that the jobs generation is concentrated in the trading and services sector, followed by agriculture and fisheries, wood industry and food processing.

Table No 3-54 : Sectoral Contributions to Employment Generation of DTI Registered Industries, Davao del Norte, 2007

| Type of Industry | Sectoral Contribution (Php Million) | % Share |
|------------------------------------|-------------------------------------|---------|
| 1. Agriculture & fisheries | 789 | 9.14 |
| 2. Chemicals | 14 | 0.16 |
| 3. Construction & const. materials | 99 | 1.45 |
| 4. Cutflowers | 2 | 0.02 |
| 5. Fine Jewelry | 4 | 0.04 |
| 6. Food Processing | 309 | 3.58 |
| 7. Gifts, toys and housewares | 5 | 0.06 |
| 8. ICT | 124 | 1.44 |
| 9. Metalcraft | 9 | 0.10 |
| 10. Mining | 3 | 0.03 |
| 11. Trading & services | 6,876 | 79.65 |
| 12. Wood | 399 | 4.62 |
| Total | 8,633 | 100.00 |

Source : Department of Trade and Industry, Davao del Norte

Employment rate of the province is more or less the same with the regional scenario of 94 per cent and a little bit higher than the National figure of 92.2 per cent (Table No.3-55).

**Table No.3-55: Employment Status, 2007
 Provincial/Regional/National**

| Particular | Davao del Norte | Region XI | National |
|--------------------------------|-----------------|-----------|----------|
| Labor force participation rate | 42.2 | 66 | 64.8 |
| Employment rate | 93.8 | 94 | 92.2 |
| Unemployment rate | 6.2 | 6 | 7.8 |

Source: NSCB Report

In terms of human resource development, there are a total of 344 elementary schools, 96 secondary schools in the province. There are also 17 tertiary schools and 36 TECVOC schools. While elementary and secondary schools address the literacy needs as well as introduce appropriate livelihood skills to students, the TECVOC schools offer a wide range of technical and vocational courses that equip the students with appropriate skills that are compatible to the needs of local major industries in the province.

4.4.3 Knowledge Resource

Various programs and projects of government carry the training component for capability building intended to enhance the knowledge and skills of end beneficiaries as well as the program and/or project implementers to assure that appropriate technologies are religious followed and applied leading to the success of the program/project.

Aside from these, support assistance in the fields of technical, financial, organizational and marketing management. The following are the support assistance of various agencies both in the national and local that promote productivity and economic growth:

**Table No. 3-56 : Programs and Projects of Government Agencies
as Knowledge Resource, Province of Davao del Norte**

| Support Assistance by Office | |
|--------------------------------------|--|
| 1. Department of Trade and Industry | <ul style="list-style-type: none"> . Industry Congress . Industry Benchmarking . Processor-Supplier Match-ups . Product research and development . Industry Information System development . Technology Upgrading . Marketing Assistance . Institutional organization and strengthening . Product consolidation . SME financing support program . SME information support (provision of consultancy services and advisory, SME database and SME center) . Facilitation to partnership linkages for competitive support such as market matching, selling and trade missions . SME counseling and advisory (graduate studies practicum program, business counseling, coaching on bookkeeping, counseling on operational planning, financial management consultancy, technical advisory and community extension) . Industry productivity and quality <ul style="list-style-type: none"> o Productivity trainings (occupational health and safety & 5S) o Good agricultural practices o Good manufacturing practices o Center for Excellence-Research (UM Tagum College) o Center for Excellence-Technology (DNSC) . Entrepreneurship trainings |
| 2. Provincial Agriculturist's Office | <ul style="list-style-type: none"> . Food Cereals Production Program . Diversified Farming Systems Development . Commercial and Industrial Crops Production Program . Research Development and Extension Program . Institutional Development Programs . Agri-Infrastructure Programs . MBN Approach Programs . Fishery and Livestock Production Program |
| 3. Provincial Governor's Office | <ul style="list-style-type: none"> . Eco-Tourism Development |
| 4. PENRO-LGU | <ul style="list-style-type: none"> . Community-based Tourism Development Program . Institutional capability-building program . Tourism promotion program . Community-based Forest Management Program . Communal Tree Plantation Development/Contract Reforestation and Agro-forestry Program . Sustainable Upland Development Livelihood Program . Coastal Resource Management Program |

Other components such as monitoring and evaluation are important factors that ensure the sustainability of programs and projects implementation. Said components also provide essential information that will enhance knowledge on the program.

4.4.4 Capital Resource

Annual income realized by the Provincial Government of Davao del Norte had an increasing trend since CY 2003, except for CY 2006. Data on the total receipts of the province are shown in the following table:

*Table No 3-57: Statement of Income
 Province of Davao del Norte
 CYs 2003-2007*

| Year | Income (Php) | % Increase/ Decrease |
|------|----------------|-------------------------|
| 2003 | 444,717,131.31 | |
| 2004 | 480,166,414.00 | 7.97 |
| 2005 | 510,217,872.23 | 6.26 |
| 2006 | 510,208,793.39 | (0.002) |
| 2007 | 559,949,983.88 | 9.75 |

Source: PTO- Davao del Norte

The continual growth of the total income of the province of Davao del Norte suggests a promising economy since the provincial government of Davao del Norte can have the capacity to implement programs and projects that can support the development needs as well as hasten and promote the economic growth in the area.

*Table No. 3-58: LGU Appropriation and Expenditure for Economic Services
 Province of Davao del Norte, CY 2007*

| Items | Appropriation (Php) | % Distribution | Expenditure (Php) | % Distribution |
|--|------------------------|-------------------|----------------------|-------------------|
| Grand Total | 663,590,454.00 | 100.00 | 500,852,966.00 | 100.00 |
| Total Economic Services | 92,119,852.00 | 13.88 | 87,495,945.00 | 16.00 |
| Agriculture/Veterinary Services | 23,299,940.00 | 3.51 | 21,752,130.00 | 4.00 |
| Environment/Natural Resources Services | 5,074,757.00 | 0.76 | 4,857,451.00 | 1.00 |
| Cooperative Services | 0 | 0.00 | 0 | 0 |
| Engineering Services | 16,492,893.00 | 2.49 | 15,429,040.00 | 3.00 |
| Tourism Projects | 0 | 0.00 | 0 | 0 |
| Comm'l/Industrial Dev't. Project | 0 | 0.00 | 0 | 0 |
| Energy Development Projects | 0 | 0.00 | 0 | 0 |
| Livelihood Projects | 0 | 0.00 | 0 | 0 |
| Other Economic Services | 0 | 0.00 | 0 | 0 |

| | | | | |
|--|---------------|------|---------------|------|
| Economic Enterprise | 47,252,262.00 | 7.12 | 45,457,324.00 | 8.00 |
| Provincial Equipment Pool Economic Enterprise | 45,094,060.00 | 6.80 | 0 | 0 |
| RCPC Casting and CHB Making | 2,158,202.00 | 0.33 | 0 | 0 |

Source: Provincial Budget Office, Davao del Norte

The LGU appropriation for 2007 for economic services is P92,119,852.00 or 13.88% of the total LGU appropriation. This is further distributed to 7.12% (P47,252,262.00) for economic enterprise; 3.51% (P23,299,940.00) for agriculture and veterinary services; 2.49% (P16,492,893.00) for engineering services and 0.76% (P5,074,757.00) for environment and natural resources services.

Actual expenditure for CY 2007 shows that the province had reduced its expenditure on all economic services as indicated by the amount in the above table.

4.4.5 Infrastructure Resource

a. Irrigation Services

There are four major categories of irrigation systems presently in operation in the Province. These are the River Irrigation Systems (RIS) or the run-of-the-river-type, the Communal Irrigation Systems (CIS), the Communal/Pump Irrigation Projects (CIPs/PIPs) and the small scale irrigation projects (SSIPs). Table No. 3-58 shows the distribution of these systems in the Province.

The River Irrigation Systems are the largest systems with the widest coverage or service areas. These are the Saug- Libuganon Left (SALLE) RIS and the Lasang- Libuganon- Kipaliku (LALIK) RIS. These systems are managed by the National Irrigation Administration (NIA). These systems have coverage of 19,491 hectares, 12,634 hectares of which are serving the rice areas and 6,242 hectares devoted to Cavendish banana production.

The smaller version of this, the Communal Irrigation Systems (CIS) is being managed by the Provincial Irrigation Office. It is similar to RIS, but each system serves less than 1,000 hectares. Around 1,255 hectares are served by eight (8) CIS, both grown to rice and Cavendish banana.

Smaller systems like the Communal and/or Pump Irrigation Projects (CIPs/PIPs) and small scale irrigation projects (SSIPs) are put up by the Department of Agriculture and the local government units. These are the small water impounding projects and diversion dams (SWIPs/DDs), shallow tube wells (STWs), open surface pumps, and other water harvesting units. These are managed by farmer's associations (FA) or the Irrigators' Service Associations (ISA). These systems primarily serve the rice areas, but it may not limit its utilization to serve Cavendish banana production areas if needed. It is estimated that around 13,200 farmers are served by these systems.

Table No. 3-59: Irrigation Systems Facilities, Davao del Norte, 2007

| Name of Systems | Municipalities Covered | Service Areas, Hectares | | | Farmers Served |
|--|--|-------------------------|-----------|----------|----------------|
| | | Potential | Effective | | |
| | | | Rice | Banana | |
| 1. Saug Libuganon Left RIS | Kapalong Asuncion Tagum City New Corella | 4,885 | 3,708.07 | 1,036.97 | 3,527 |
| 2. Lasang-Libuganon-Kipaliku RIS | Sto. Tomas BEDujali Carmen Panabo | 14,606.07 | 8,926.05 | 5,204.99 | 8,199 |
| 3. Communal Irrigation Systems (8 CIS) | Kapalong New Corella Sto. Tomas Panabo City | 1,255 | 854 | 281 | 970 |
| 4. Communal Irrigation Projects (3 CIPs) | Carmen New Corella Asuncion | 230 | 197 | 15 | 137 |
| TOTALS | | 21,198.07 | 13,872.12 | 6,537.96 | 13,017 |

Source: National Irrigation Administration and MAO/ CAO of Local Government Units

b. Pre and Post Harvest Facilities

It is observed that commonly used production facilities in rice and corn are powered by lower rated engines ranging from 7 to 11 horsepower prime movers, which are usually attached to hand tractors and mechanical dryers. Bigger machines like self-propelled tractors and combines, are seldom seen for land preparation in cereals production. This is because their use in small farms and land holdings is not economical. Operating self-propelled tractors, however, can be found in corporate farms and farms managed by cooperatives, where large contiguous areas can be worked on. Typical example is in the production and processing/marketing of Cavendish bananas.

In the study conducted by the Bureau of Post Harvest Research and Extension (BPRE), there is a sufficient number of rice threshers operating in the province, with all municipalities and cities exceeding the required number of units if we based it on the total volume of rice being produced in a cropping season. However, drying facilities are deficient by an estimated total of 96 units, equivalent to 34,605 metric tons of paddy rice to dry. Only Kapalong and Talaingod have surpluses in drying facilities.

There was also a shortage of storage facilities in 2007 in all municipalities and cities. Around 150 units of additional storage facilities are required to store around 110,000 metric tons of dry palay. In terms of milling facilities, around 37,300 metric tons of dried palay could not be milled on schedule (except in New Corella, Asuncion and Sto. Tomas where sufficient milling facilities are available). This volume requires around 50 units. Table below provides the figures of the recent inventory conducted.

**Table No. 3-60 : Inventory of Post Harvest Facilities
by Cities and Municipalities
Province of Davao del Norte, 2007**

| Cities / Municipalities | Drying Facilities | | | | Threshing/Shelling | | | Milling | | Storage |
|----------------------------|-------------------|-----|-----|----------|--------------------|----------|----|---------|-----|---------|
| | C/R D | FBD | MFD | MPD P | RT | MPS T | CS | C M | RM | |
| District I: | | | | | | | | | | |
| Tagum City | | 1 | | | 15 | 1 | 1 | 1 | 4 | |
| New Corella | | 2 | 6 | 56 | 178 | 16 | 1 | | 48 | 3 |
| Asuncion | 2 | 2 | 4 | 50 | 207 | | | | 22 | 5 |
| Kapalong | | | 6 | 59 | 83 | 12 | 2 | 1 | | 10 |
| Talaingod | | | | 21 | 11 | | 4 | 7 | | 1 |
| San Isidro | | 33 | | 76 | 7 | | | 8 | 1 | |
| District II: | | | | | | | | | | |
| Panabo City | 4 | | 5 | 28 | 27 | 1 | | 1 | 11 | 1 |
| Sto. Tomas | | | 2 | 46 | 67 | | | | 24 | 1 |
| Carmen | | | | 50 | 109 | 1 | | | 2 | |
| BEDujali | | 2 | 4 | 15 | 47 | | | | 13 | 7 |
| IGCSamal | | | | 28 | 2 | | 1 | 7 | 3 | 1 |
| TOTALS | 6 | 44 | 27 | 429 | 753 | 31 | 9 | 25 | 128 | 42 |

Source: Bureau of Postharvest Research & Extension, Davao del Norte Postharvest

C/RD- columnar/recirculating dryer; FBD- flat bed dryer; MFD – mobile flash dryer;
MPDP- multipurpose drying pavement; RT- rice thresher; MPST- multipurpose sheller/thresher; CS- corn
sheller; CM- corn mill; RM- rice mill

c. Farm to Market Roads

Another support infrastructure which is very much of importance to the development of the agriculture sector is the improvement of accessibility through well defined road sections, the farm to market roads. Well established road networks facilitate transport of goods and services into and out of the farms; increases production efficiency and reduces losses, among others. A comprehensive discussion of road network will be taken up in the transport section of this plan document.

4.4.6 Legal/Regulatory Resource

1. Republic Act 8289 or the Magna Carta for Small Enterprises (enacted 1991, amended 1997)

This act created the SMED Council which is primarily responsible for the promotion, growth and development of the Philippine SME sector. The function of SMED Council is to formulate a comprehensive strategy to promote SMEs and integrate it into other Philippine development plans.

Launched in July 2004, the SMED Plan 2004-2010 is meant to help in the graduation of MSMEs to higher levels of business undertakings and upgrading their productivity and value-added capabilities.

It is expected that by 2010 SME gross value added will improve from 32% to 40% and create 3.4 jobs all over the country through the following schemes:

- . Reforming business and investment environment by streamlining business regulatory requirements, advocacy to SME related laws and restructuring of SME institutions
- . Providing access to finance through SME financing support programs
- . Expanding market access through information support, partnership and linkaging for competitive support, support to trade fairs and market services, product development and design services and information technology appreciation.
- . Enhancing productivity and efficiency through SME counseling and advisory, industry productivity and quality and entrepreneurship training.

2. Republic Act 3883 – Business Name Registration

Every establishment, individually-owned, regardless of size and nature of business, must have its business name registered.

Any person, eighteen (18) years old or above may apply as the registered owner of the business name. Person of questionable character or those who have been convicted of any crime are disqualified from applying a business name.

Exempted from registering their business name are firms, whether partnership or corporation which are duly registered with the Security and Exchange Commission (SEC). However, if they wish to, they may still apply for a Business Name.

3. Local Business Licensing Ordinances

4. Republic Act 7160

Chapter II, Section 17. - (3) For a Province: (iii) Pursuant to national policies and subject to supervision, control and review of the DENR, enforcement of forestry laws limited to community-based forestry projects, pollution control law, small-scale mining law, and other laws on the protection of the environment; and mini-hydro electric projects for local purposes;

Article III, Section 468 (1) - Approve ordinances and pass resolution necessary for an efficient and effective provincial government and, in this connection, shall:

(vi) Protect the environment and impose appropriate penalties for acts which endanger the environment, such as dynamite fishing and other forms of destructive fishing, illegal logging and smuggling of logs, smuggling of natural resources products and of endangered species of flora and fauna, slash-and-burn farming, and such other activities which result in pollution, acceleration of eutrophication of rivers and lakes or of ecological imbalance

5. Republic Act 8435 – Agriculture and Fishery Modernization Act (AFMA)

This act prescribes urgent related measures to modernize the agriculture and fisheries sectors of the country in order to enhance their profitability and prepare said sectors for

the challenges of globalization through an adequate, focused and rational delivery of necessary support services.

Section 6. Network of Areas for Agricultural and Agri-Industrial Development. The Department, shall within six (6) months after the approval of this Act, and in consultation with the local government units, appropriate government agencies, concerned non-government organizations (NGOs) and organized farmers' and fisherfolks' groups, identify the Strategic agriculture and Fisheries Development Zones (SAFDZ) within the network of protected areas for agricultural and agro-industrial development to ensure that lands are efficiently and sustainably utilized for food and non-food production and agro-industrialization.

6. **MC 54 dated June 8, 1993** – Prescribing the guidelines governing Section 20 of R.A. 7160, otherwise known as the Local Government Code of 1991, authorizing cities and municipalities to reclassify agricultural lands into non-agricultural uses, however, Section C and Section I, state that such reclassification shall be limited to a maximum of the percentage of the total agricultural land of a city or municipality as follows:
 - . For highly urbanized and independent component cities, fifteen percent (15%)
 - . For component cities and first class municipalities, ten percent (10%)
 - . For fourth to sixth class municipalities, five percent (5%).

Provided that agricultural lands distributed to Agrarian Reform Beneficiaries pursuant to R.A. 6657, otherwise known as the Comprehensive Agrarian Reform Law shall not be affected by the said reclassification and the conversion of such lands into other purposes shall be governed by Section 65 of the said Act.

7. **Executive Order 124, dated Sept. 8, 1993** - Establishing priorities and procedures in evaluating areas for land conversion in Regional Agri-Industrial Centers, Tourism Development areas and sites for Socialized Housing projects.
8. **Administrative Order No. 20** or the Interim Guidelines on Agricultural Land Use Conversion (series of 1992) provides that all irrigated and economically irrigable lands covered with irrigation projects with firm funding commitments shall be non-negotiable for conversion.
9. **Administrative Order No. 4 series of 1994 of the Department of Agrarian Reform** provides the guideline on areas targeted for tourism development covered under the agrarian reform program. One of the provisions is that 50% of the total CARP areas is to remain as agricultural area.
10. **RA 6675 otherwise known as the Comprehensive Agrarian Reform Program.** An act instituting a program to promote social justice and industrialization and provides a mechanism for its implementation.
11. **E.O 124 series of 1993** defining priority areas for land use conversion. That priority areas for land use conversion are Regional Agri-Industrial Growth Centers (RAICs) identified by the Department of Trade and Industry (DTI) and the Department of Agriculture (DA), Tourism Development Areas (TDAs) identified by the Department of Tourism (DOT) and sites identified by the Local Government Units to socialized housing which are presently

used for agricultural purposes which need conversion approval from the Department of Agrarian Reform (DAR) prior to a change in use.

- 12. RA 7586 otherwise known as the NIPAS Act** – an act providing for the establishment and management of National Integrated Protected Area System (NIPAS) in order to maintain the essential processes and life support system to preserve genetic diversity to ensure sustainable use of resources found therein, and to maintain their natural condition to the greatest extent possible.
- 13. P.D. 389 otherwise known as the Forestry Reform Code** authorizes the President of the Philippines by proclamation upon recommendation of the director to declare all lands of the public domain eighteen percent (18%) in slope or over as permanent forest or forest reserves, regardless of the condition of the vegetation cover, occupancy or use of any kind, and thereafter such forest shall not be alienated or disposed of, but shall remain in public ownership as such as forest uses.

Section 18 – areas within timber concession between 18% in slope which are timberland and or have adequate residual stocking and presently supporting a processing plant shall not be released as alienable and disposable but shall remain as part of the permanent forest land.

Section 22 – Local government may acquire private or public land for the purpose of establishing a municipal or city forest, tree park, watershed or pasture land. Parcels of land less than 18% in slope and less than 250 hectares, regardless of size which are found within or surrounded wholly or partly by the body of public forest shall be considered as part thereof. A strip of land 50 meters above normal high water line on each side of rivers and streams which channels are less than 5 meters wide shall be retained as permanent forest for streams bank protection. Strips of land, mangrove and swampland not less than 50 meters from the shoreline shall be retained as permanent forest for shoreline protection.

- 14. P.D. 705, Amended Forestry Reform Code** – This provides for a system of land classification into agricultural, industrial or commercial, residential, resettlements, mineral, timber or forest or grazing lands, and into such other classes as may hereafter be provided by law, rules and regulations.

Section 15 further states that no land of the public domain 18% in slope or over shall be classified as alienable and disposable, nor any forest land 50% in slope as grazing land.

- 15. P.D 1157, Philippine Environmental Code** – It mandates the undertaking of environmental impact assessments for all projects which may significantly affect the environment.
- 16. P.D 1152** – Establishes specific environmental management policies and prescribes environmental quality standards to provide the structures to pursue a comprehensive program on environmental management.
- 17. P.D 1067, Water Code of the Philippines** – prohibits the intrusion of sewerage, industrial wastes or any substance that may pollute source of water supply. It also penalizes dumping of mine tailings and sediments into rivers and waterways.

For easement requirements:

1. Along banks of rivers, streams and other waterways shall have the following easement throughout their entire lengths for maintenance and emergency operation purposes.
 - a. For creeks in urban and rural areas and subject to overbank flows, a minimum easement of 4.50 meters shall be provided that will measure from the edge of existing bank or the improved bank.

- b. Rivers, esteros and navigation canals, not subject to overbank flows, shall have minimum easements of 5.50 meters measured from the edge of existing bank or the improved bank. These above easements may however, be increased depending upon the type of channel improvement that will be instituted if the waterway overflows its banks and also in the public improvement plan that will be proposed for the strip of land bordering the waterways.
 - c. In agricultural and forested areas, a minimum of 20 meters and 40 meters easement respectively, shall be required and measured from the upper banks of the rivers or streams (Art. 51)
2. Shores of lakes, seas and other inland bodies of water shall have the following easement throughout their entire lengths for the purpose of recreation, flood control, etc.
 - a. In urban and rural areas, a three to six meter easement shall be provided, measured from the water edge at maximum water level or tide level.
 - b. For agricultural and forested areas, twenty meters and forty meters easements, respectively shall be provided, measured from the water edge at maximum water or tide level.

18. Republic Act No. 8550

Known as the “Fisheries Code”, this Act was passed to achieve food security as the overriding consideration. The law provides for the utilization, management, development, conservation and protection of fishery resources in order to provide the food needs of the population. This is a flexible policy towards the attainment of food security that shall be adopted in response to changes in demographic trends for fish, emerging trends in the trade of fish and other aquatic products in domestic and international markets, and the law of supply and demand.

19. Republic Act 8749

Known as the “Philippine Clean Air Act of 1999”, this is an Act which provides for a comprehensive air pollution control policy and for other purposes in order to protect and advance the right of the people to balanced and healthy ecology in accord with the rhythm and harmony of nature and to attain sustainable development.

20. Republic Act No. 9003

This is an Act that provides for the adoption of a systematic, comprehensive, ecological solid waste management program that will ensure the protection of public health and the environment. All LGUs are expected to comply with the regulations provided under the law. Satisfying the requirements for operating controlled dumpsites for solid waste in accordance with the minimum prescribed standards of site operation shall be undertaken. In addition, the implementation of RA 6969 or the Hazardous Waste Management Act will be monitored.

5.0 TRANSPORTATION AND ACCESS

5.1 External Linkages

5.1.1 Land Access

The external linkages of the province are mainly land-based. The major external linkages consist of national roads connecting Davao del Norte to adjacent provinces of Compostela Valley, Bukidnon and to the City of Davao.

*Table No. 3-61: Major External Linkages
 Province of Davao del Norte, 2007*

| Road Name | Length(km) | %paved | RROW(m) | No. of Concreted Lanes |
|----------------------------------|------------|--------|---------|------------------------|
| Agusan-Davao Road | 37.98 | 100 | 60 | 2-6 lanes |
| Surigao-Davao Coastal Road | 6.848 | 100 | 20-30 | 2-4 lanes |
| Kapalong-Talaingod-Bukidnon Road | 41.737 | 1.18 | 20 | 2 lanes |

Source: DPWH

a. Major External Access Routes

The **Agusan-Davao road** extends from Compostela Valley in the north to Davao City in the south, while the **Surigao-Davao Coastal road** connects the province of Davao Oriental and southern parts of Compostela Valley to the province of Davao del Norte. While Davao City serves as the main center for economic and social activities in Region XI, these routes serve as the main trunkline for the flow of trade and the delivery of basic social services across Davao del Norte, as well as, the northern provinces in the region. Davao del Norte, especially Tagum City plays an important role as a converging point of these two road sections. This puts the province as potential trading hub for Agusan del Sur, Compostela Valley and Davao Oriental. The Agusan-Davao road also connects to the poblacion of Carmen and Panabo City. The rest of the municipalities in the mainland are connected by means of national secondary roads and provincial roads.

The **Kapalong-Talaingod-Bukidnon road** is not yet fully established. This road will connect Davao del Norte to the province of Bukidnon via Talaingod and Kapalong in Davao del Norte, and San Fernando and Valencia City in Bukidnon. The complete opening of this road will pave the way for more opportunities in the development of various sectors in the province such as, the trade and industry; agriculture, livestock and agro-forestry; as well as the deployment of basic social services and security enforcements in its tributary areas.

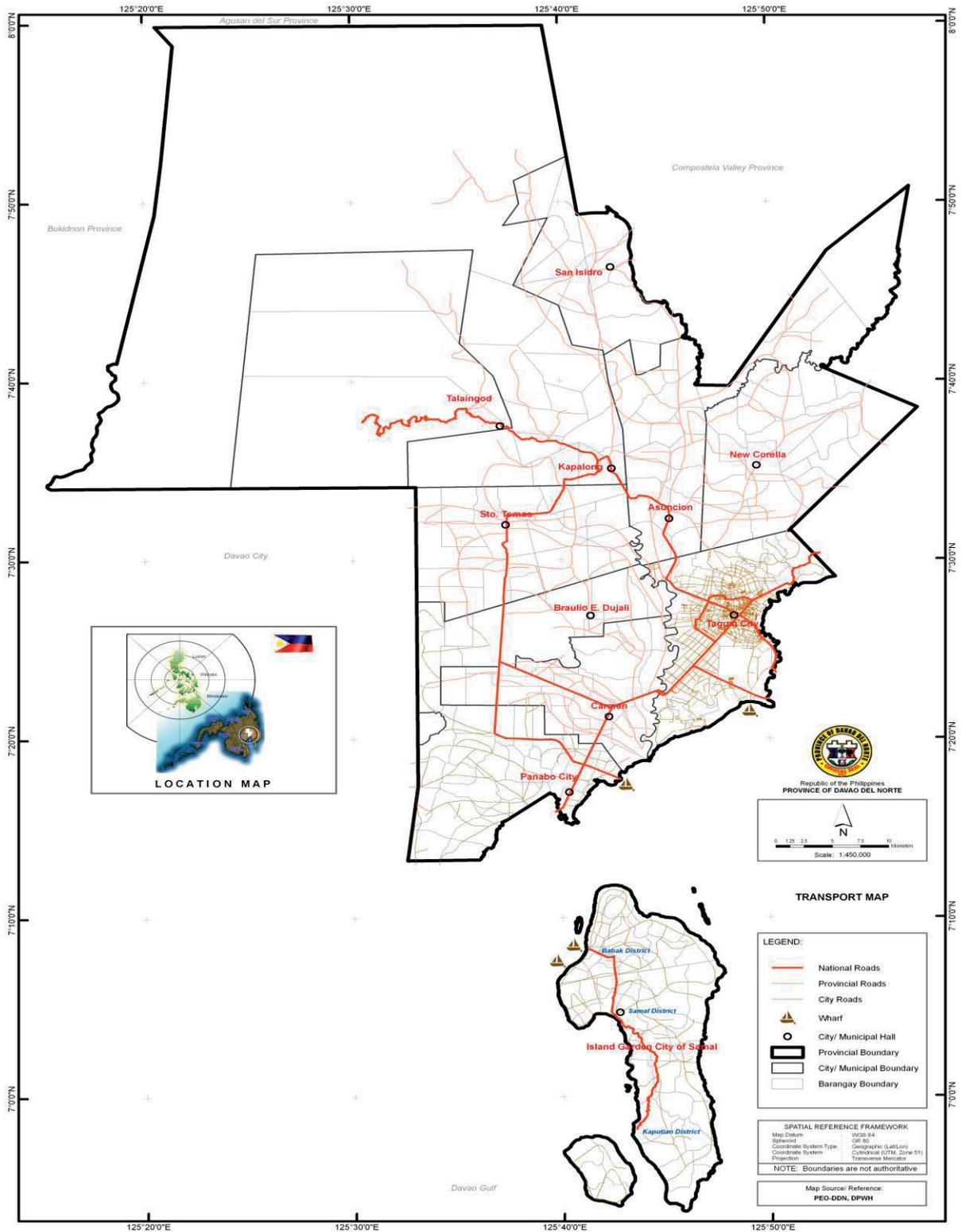
b. Other Access Routes

There are also other provincial and city roads that link the province to Compostela Valley and Davao City, however, these roads are gravel and earthroads and some portions are badly dilapidated. These are the following:

Igangon-Soop provincial road – This road connects the municipality of San Isidro to Compostela Valley via Laak. The five-kilometer road is gravel paved.

Sawata-San Vicente provincial road – This three-kilometer gravel paved road also connects the municipality of San Isidro to Compostela Valley via Laak.

Map 17: TRANSPORT MAP



Sonlon-Longanapan provincial road – The road is in mountainous terrain and connects the eastern barangays of Asuncion and northern barangays of New Corella to Compostela Valley via Longanapan, Laak. The road length is 10 kilometers of gravel paved and earthroad.

Limbaan-Sta. Fe-El Salvador provincial road □ Connects the municipality of New Corella to Compostela Valley via Nabunturan. The road is 16.2 kilometers of gravel road and some portions traverse in mountainous area.

Feeder Road 2, Sto. Tomas-Magwawa provincial road – This road has 11.57 kilometers of gravel-paved and 0.43 kilometer of concrete road. It connects from Poblacion Sto. Tomas to the mountainous areas of Pakibato District which is part of Davao City.

Katualan-Callawa and Malativas-Binowang Roads – These two-kilometer and one kilometer city roads, respectively, connect Panabo City to the remote districts of Davao City.

Kiotoy-Sta. Cruz road – This five-kilometer gravel-paved road connects Panabo City to Davao City via Sta. Cruz and Bunawan.

External Linkage Characteristics

**Table No. 3-62: Traffic Volume on Major Arterial Roads (Comparative/Projected)
 Davao Region**

| Road Name | Section | 1996 (AADT) | 2016 (AADT) | *Growth Ratio 1996- 2016 | 2007 (AADT) | 2013 (AADT) |
|------------------------------------|----------------------------|----------------|----------------|-----------------------------------|----------------|----------------|
| Davao del Norte | | | | | | |
| Agusan-Davao Road | Tagum- Mawab, ComVal | 3,278 | 12,000 | 3.70 | 11,175 | 13,587 |
| | Panabo City- Davao City | 8,345 | 30,000 | 3.60 | 24,868 | 33,881 |
| Surigao-Davao Coastal Road | Tagum Diversion | | | | 10,680 | |
| Other Provinces | | | | | | |
| Davao-Bukidnon Road | Calinan, Davao City | 1,211 | 3,000 | 2.50 | 2,876 | 3,784 |
| Davao City-Digos-G. Santos Road | Sta. Cruz, DS | 3,596 | 23,000 | 6.40 | 16,254 | 23,158 |
| | Digos, DS | 6,836 | 24,000 | 3.50 | 19,995 | 27,173 |
| | Sulop, DS | 1,204 | 8,000 | 6.60 | 5,575 | 7,958 |
| Digos-Cotabato Road | Bansalan, DS | 1,830 | 10,000 | 5.40 | 7,265 | 10,230 |
| Surigao-Davao Coastal Road | Lupon, DO | 1,423 | 5,000 | 3.50 | 4,162 | 5,656 |
| Agusan-Davao Road | Monkayo, ComVal | 1,460 | 8,000 | 5.50 | 5,877 | 8,286 |

Source: DPWH, DIDP Master Plan

*The growth ratio is based on the 1998 Davao Integrated Development Program Master Planning which in turn is sourced on DPWH Region XI and Master Plan Study on Visayas and Mindanao Islands Strategic Road Network Development Project undertaken by DPWH-JICA, 1997

Table No. 3-62 shows the traffic volumes on major trunkline roads of the province and of the equivalent roads in the other provinces. The 2016 AADT is based on the values derived from the study made by DPWH and JICA which was based on a future socioeconomic framework, present origin/destination matrices and forecast models formulated by existing transportation patterns, hence derived the 1996-2016 growth ratios. Data gathered for 2007 shows traffic volumes within the Davao del Norte only. For purposes of data consistency in terms of comparison to other provinces, the same growth ratio is used to project the 2007 and 2013 data.)

Davao City is the main junction point of all the major arterial roads located in the region. To take into consideration that Davao City is also the center for business and trade, security administration, as well as tourism and other social activities of the region. Table No. 3-63 presents the Annual Average Daily Traffic (AADT) of some major arterial national roads in Davao del Norte and also in other areas in the region.

It is shown in the table that the Davao-Agusan Road, especially in the Panabo City-Davao City section, has the highest volume of traffic as compared to other arterial roads in the region with a total of 24,868 number of traffic in 2007. This section is the bottleneck for the traffic coming to Davao City from the different areas in Davao del Norte, Compostela Valley, Davao Oriental and Agusan, and vice versa. The Tagum-Mawab section of the Agusan-Davao road and the Tagum section of the Surigao-Davao Coastal road also have relatively higher traffic volume compared to other road sections in the region, except to Sta. Cruz and Digos City sections of Davao del Sur.

**Table No. 3-63: Distribution of Unpaved National Roads by Province/City
Davao Region 2003**

| Province/City | Unpaved National Roads (Gravel and Earth Roads in kilometers) | Percent Distribution % |
|----------------------|--|-------------------------------|
| Davao del Norte | 55.55 | 8.75 % |
| Compostela Valley | 111.14 | 17.51 % |
| Davao Oriental | 226.45 | 35.67 % |
| Davao del Sur | 198.44 | 31.26 % |
| Davao City | 43.27 | 6.81 % |

Source: Davao Regional Development Plan 2004-2010

National roads play a vital role in providing inter-provincial linkage in the region. Major arterial roads facilitates the flow of economic and social activities between the major city which is Davao, and the provinces; the 2003 distribution of unpaved national roads, Davao del Norte has relatively low percentage of unpaved national road compared to other provinces. Most of these remaining unpaved length accounts to the proposed Kapalong-Talaingod-Bukidnon Road (Table No. 3-61).

c. Key Transport Infrastructure and Facilities

c.1. Bridges

There are six (6) bridges along the Agusan-Davao road within Davao del Norte section (Table No. 3-64). These are all classified as national bridges maintained by the Department of Public Works and Highways. These bridges are in excellent conditions which could serve four-lane traffic. The Gov. Miranda Bridge 1 and 2 only have two-lane capacity but each serves one-way traffic going to Davao City and Tagum City respectively.

**Table No. 3-64 : Bridges Along Major External Linkages
 Province of Davao del Norte, 2007**

| Name of Bridge | Construction Type | No. of Lanes Capacity | Length (Ln.M.) |
|-----------------------|--------------------------|------------------------------|-----------------------|
| Libuganon Bridge | RCDG | 4 lanes – 2 way | 36.69 |
| Gov. Miranda Bridge 1 | RCDG / Steel | 2 lanes – 1 way | 145.33 |
| Gov. Miranda bridge 2 | RCDG | 2 lanes – 1 way | 650.60 |
| Tuganay Bridge | Steel | 4 lanes – 2 way | 54.35 |
| Ising Bridge | RCDG | 4 lanes – 2 way | 25.50 |
| Lasang Bridge | RCDG | 4 lanes – 2 way | 55.34 |

Source: DPWH

c. 2. Inter-Provincial Public Transport Facilities

Along the Agusan-Davao and the Surigao-Davao trunkline, there are three land transport terminals that serve as collecting points for inter-provincial passenger traffic across Davao del Norte. These are the public terminals in Tagum City, Carmen and Panabo City. With Davao City as the key destination, inter-provincial public utility buses also avails these terminals as main stop over points in the province. Routes plying to Compostela Valley, Davao Oriental, Surigao del Sur, Agusan del Sur and Misamis, as well as, inter-island buses to Manila pass by these terminals.

The Tagum City public terminal has 24 bays capacity for inter-provincial buses. The terminal is adjacent to the public market with amenities, such as, commercial spaces and restrooms that serve the needs of the traveling passengers.

The Panabo City public terminal has 10 bays capacity for both north bound and south bound buses. The newly completed terminal also has commercial spaces and passengers' lounge that caters to the needs of the passengers.

The newly completed public terminal in Carmen has two bays for south and north bound buses. Like the Panabo public terminal, it is located adjacent to the national highway at the poblacion center.

The public terminal in Sto. Tomas also provides inter-provincial routes to Davao City via Carmen and Panabo City.

5.1.2 Sea Access

The private ports in Panabo City and Tagum City are the only existing ports that provide external linkages in the province. These ports are engaged in exporting agricultural products mainly bananas. In terms of sea transportation, the province is linked to other parts of the country mainly through, the passenger ferry services in the Port of Davao, and in the ports of Cagayan de Oro City and Nasipit, Agusan del Norte which is about 300 kilometers and 200 kilometers, respectively, from the province. The Port of Davao is connected by passenger ferry services with cities of Manila, Iloilo, Cebu, Zamboanga, and General Santos while the ports in Cagayan de Oro and Nasipit caters passenger ferry services to and fro cities in the Visayas and to Manila.

*Table No. 3-65 : Ports Engaged in Product Exportation
Province of Davao del Norte, 2007*

| Classification | Port Name | Location | Ownership | Major Cargoes |
|-----------------------|------------------|------------------------|--------------------------------------|--|
| Private | HPI Wharf | Madaum, Tagum City | Hijo Plantations Inc. | Mainly bananas; others- ipil-ipil and palm oil |
| Private | TADECO Wharf | San Pedro, Panabo City | Tagum Agricultural Development Corp. | Mainly bananas; others- fertilizers, etc. |
| Private | STANFILCO Wharf | Bayawa, Panabo City | STANFILCO | Mainly bananas; others- fertilizers, etc. |

Source: CDP, LGU

In the 1996 study of the Davao Integrated Development Program, STANFILCO and TADECO wharves handled 372,706 and 363,960 tons of cargoes, respectively, which was 50% of the total volume of cargoes handled for export by private ports in Region XI. During that period, the private ports in Region XI share about 95% of the total volume of products that are for export in the region.

5.1.3 Air Access

The province has no airport thus, it avails of the air transport services of the Davao International Airport in Davao City. The DIA is accommodating domestic passenger flights connecting with five cities in the country: Manila, Cebu, Cagayan de Oro, General Santos and Zamboanga.

5.1.4 Proposed Improvements

*Table No. 66: Proposed Improvements of Roads and Transport Facilities
 By Level of Importance, Province of Davao del Norte*

| Infra Facility | Level of Importance | Level of Resource Allocated | Priority Rank |
|--|---------------------|-----------------------------|---------------|
| Kapalong-Talaingod-Bukidnon Road | 1 | 3 | 4 |
| Asuncion-Igangon and Igangon-Soop Road | 1 | 1 | 2 |
| Sea transport Facilities | 3 | 1 | 4 |
| Sonlon-Longanapan Road | 3 | 1 | 4 |

Source: PEO, Davao del Norte

*Note: On the level of importance, the higher the importance the lower the score.
 On the level of resource allocation, the higher the resource allocated the higher the score.
 Facility gets the higher rank if score is lower.
 Facility gets the lower rank if score is higher.*

a. Kapalong-Talaingod-Bukidnon Road

The road is not yet fully developed, especially the Talaingod-Bukidnon section. Complete opening and improvement of this road will provide more development for the small and medium scale enterprises in the province as a market place for the agricultural and agro-forestry products from Bukidnon. Basic social services is also expected to have additional resources as food supply will increase sufficiency with the influx of more high quality agricultural and livestock products. Security problems will also be addressed in the area.

b. Asuncion-Igangon-Soop Road

Efficiency in the transport of products from the vast production areas in Laak, ComVal and some parts of Agusan del Sur will help improve the small and medium enterprises in Davao del Norte which serves as market place. Industries will also benefit, such as the wood industries. At present little resource allocation is directed to the said facility. In fact, 100% of the road is still unpaved.

c. Sea Transport Facilities

Large scale sea transport facilities in the province are engaged only in the exportations. With Cavendish bananas as one of the main export products in the province, government and private institutions should work hand in hand in improving the sea transport facilities in the province.

d. Sonlon-Longanapan Road

The road leads to areas in eastern part of Asuncion and part of Compostela Valley province suitable for agriculture and wood production. Marketing point of the products from these areas is Tagum City. Improvements of this road will invite landowners maximize the use of their lands to improve productions.

5.2 INTERNAL CIRCULATION

The internal circulation of the province is characterized by land and sea transportation. Except for the Island Garden City of Samal, all other municipalities and cities are interconnected to each other by national, provincial and city roads. The IGaCoS is connected to the mainland by passenger and RORO ferry services via Davao City.

5.2.1 Road Systems

a. Road Networks

The total road network in the province is 3,556.347 kilometers, which is categorized into five (5) types according to its administrative functions, namely the: national roads, provincial roads, city roads, municipal roads, and barangay roads. Table No. 3-67 shows the total road network per city and municipality, and per administrative functions.

Table No. 3-67 : Total Road Network by City/Municipality and by Administrative Functions Province of Davao del Norte, 2007

| Municipality/City | National Road | Provincial Road | City Road | Municipal Road | Barangay Road | Total Length |
|------------------------|----------------|-----------------|----------------|----------------|-----------------|-----------------|
| <i>Tagum City</i> | 47.920 | | 142.636 | | 321.507 | 512.063 |
| <i>Panabo City</i> | 34.237 | | 154.801 | | 227.524 | 416.562 |
| <i>IGaCoS</i> | 24.885 | | 242.500 | | 166.240 | 433.625 |
| Asuncion | 10.336 | 120.500 | | 13.940 | 224.420 | 369.196 |
| New Corella | | 156.040 | | 27.470 | 139.100 | 322.610 |
| Kapalong | 19.809 | 91.300 | | 11.485 | 180.570 | 303.164 |
| San Isidro | | 92.800 | | 65.000 | 55.380 | 213.180 |
| Talaingod | 33.068 | 54.700 | | 113.000 | 8.500 | 209.268 |
| Sto. Tomas | 13.480 | 161.150 | | 14.170 | 210.850 | 399.650 |
| Carmen | 18.433 | 123.200 | | 20.348 | 140.968 | 302.949 |
| B.E. Dujali | | 45.730 | | 0.842 | 27.508 | 74.080 |
| Davao del Norte | 202.168 | 845.42 | 539.937 | 266.255 | 1702.567 | 3556.347 |
| %Distribution | 5.68% | 23.77% | 15.18% | 7.49% | 47.87% | 100.00% |

Source: PEO, DPWH, LGU's

Note : *Italicized entries are the figures for the cities.*

The barangay roads accounts for the highest percentage of road length in the province with 47.87 percent followed by provincial roads with 23.77 percent. National roads and municipal roads have the lowest percentage of 5.68 and 7.49 percent, respectively. In terms of road right-of-way

national roads ranges from 20 to 60 meters, while provincial and city roads ranges from 15 to 20 meters. Municipal roads have road right-of-way that ranges from 10 to 20 meters, while barangay roads have minimum of eight (8) meters and maximum of 12 meters.

Among the three cities, the capital city Tagum has the largest total road network 512.063 kilometers which is also the largest for the whole province, but Tagum City has the least length of city roads among the cities. Tagum City also has the most national road of 47.92 kilometers, since it is located in the intersection of three major national roads in the province namely; the Agusan-Davao road, Surigao-Davao Coastal road and the TAKSDP circumferential road. Tagum City also has the most barangay roads in the province.

The Island Garden City of Samal is second to Tagum City in terms of total road network among the three cities and the province as a whole. It also has the most city roads of 242.50 kilometers, but the least barangay roads among the cities. This is because the provincial roads and the municipal roads of the former three municipalities in the island were converted to city roads. On the other hand, Panabo City has the least total of road networks which is 416.562 kilometers.

Among municipalities, Sto. Tomas has the most total road network of 399.65 kilometers and also has the most provincial roads with 161.15 kilometers. New Corella is second to Sto. Tomas in terms of provincial roads with 156.04 kilometers and is third in the total road network among municipalities 322.61 kilometers. Asuncion on the other hand is second to Sto. Tomas in total road network with 369.196 kilometers and also has the most barangay roads among municipalities with 224.42 kilometers.

B.E. Dujali has the least total road network of 74.08 kilometers. It also has the least provincial roads of 45.73 kilometers. Talaingod has the most national roads among the municipalities with a length of 33.068 kilometers. This is because larger portion of the Kapalong-Talaingod-Bukidnon road is within Talaingod. However, Talaingod has the least barangay road length of 8.50 kilometers.

**Table No.3-68: Distribution of All-Weather Barangay Roads by Province/City
 Davao Region, 2003**

| Province / City | All-Weather Barangay Roads (km) | % Distribution |
|-------------------|-----------------------------------|----------------|
| Davao del Norte | 1,845.44 | 30.57 % |
| Compostela Valley | 931.00 | 15.42 % |
| Davao Oriental | 889.62 | 14.73 % |
| Davao del Sur | 1,578.00 | 26.14 % |
| Davao City | 793.00 | 13.13 % |

Source: Davao Regional Development 2004-2010

In the 2003 data Davao del Norte has the most barangay roads in terms of length compared to other areas in the region. There is a reduction of length of barangay roads in Davao del Norte in the 2007 data. This is due to the conversion of some barangay roads to municipal or city roads. Barangay roads are important for the internal circulation in the province. They link barangays to provincial, municipal or city roads. They are also referred to as feeder roads, rural roads or farm to market roads.

b. Main Internal Circulation Routes

1. Tagum-Asuncion-Kapalong-Sto.Tomas-DAPECOL-Panabo-Circumferential Road (TAKSDP)

The TAKSDP circumferential road is a feeder for the Agusan-Davao national road. It connects the poblacion areas of Sto. Tomas, Kapalong and Asuncion to the centers of Tagum and Panabo cities. Its influence area includes the municipalities of Sto. Tomas, Kapalong, Asuncion, and also Talaingod, San Isidro and B.E. Dujali. There are several roads tributary to the TAKSDP that connects to the municipalities of Talaingod, San Isidro and to the center of B.E. Dujali. Other provincial and city roads also connect to the inner barangays and banana plantation areas in Sto. Tomas, Carmen, Kapalong, Asuncion and Panabo City. The TAKSDP road is vital for the export banana production which is the main economic feature in its influence area. This road is the main route for transport of bananas for export in going to the points of disposal in Panabo City wharves.

2. Carmen-DAPECOL-Road

The Carmen-DAPECOL Compound road is a bypass road of TAKSDP road. It connects areas of Sto. Tomas to the municipality of Carmen. It is the main transport route for agricultural products, such as, bananas coming from areas between Sto. Tomas and Carmen. This is also a main route of goods and commodities, and passenger traffic between Panabo City, Carmen and Sto. Tomas.

3. Boundary Tagum, Baka-New Corella Provincial Road

The Tagum-New Corella road is the main and the shortest route that links Tagum City and the urban center of New Corella. Its influence area includes the rural production areas of New Corella and the eastern barangays of Asuncion or KAMADI District. It is the main route for the transport of goods and commodities, and basic social services in its influence area. Agricultural products, such as, rice, corn, bananas, coconuts; and forestry products, such as, falcata and ipil-ipil are one of the main items transported in this route.

4. Asuncion-San Isidro Roads

The main route from Asuncion to San Isidro consists of two provincial road sections namely: the Asuncion-Madgao road (Km. Zero-Sagayen section), and the Sagayen-Sawata road. Section of the road also serves as link between Compostela Valley and Davao del Norte. This road is a tributary to the TAKSDP circumferential road. This road section traverses through the rice production areas between San Isidro and Asuncion. Banana production is also penetrating in the area. This route is also vital for the wood processing industries in Tagum City, Panabo City, Asuncion and Carmen with raw material sources from the production forestlands in San Isidro and Compostela Valley.

5. San Isidro-Kapalong Road

One of the roads tributary to TAKSDP circumferential road is the road from San Isidro to Kapalong consisting of the Pamacaun-Linao-Sawata Road (Sawata-San Miguel Section) and Kapalong-Mabantao-Florida road (Kapalong-Mabantao section). Its influence area is characterized by banana production which has expanded in the area, and production forestlands in the hinterlands of San Isidro and Kapalong.

6. Tagum City-Sto. Tomas Road

The road section composed of Magupising-Salvacion-Kinamayan and Kinamayan-Sto. Tomas road is the shortest route between Tagum City and the municipality of Sto. Tomas. This road traverses through the rice and banana production areas in Sto. Tomas. Several connecting roads also link to the other barangays of Sto. Tomas, Dujali, and to some urban barangays and banana plantation areas in Kapitalong.

7. Tuganay-Dujali Roads

The Tuganay-Dujali road is composed of Tuganay-Anibongan-San Isidro and San Isidro-Dujali-San Miguel road sections. It connects B.E. Dujali to the Agusan-Davao Road at Tuganay, Carmen. Other provincial roads also connect B.E. Dujali to Sto. Tomas and Tagum City. These roads are important for the growing banana production and fishery production in B.E. Dujali.

8. Kapitalong-Talaingod Road

This road section is part of the Kapitalong-Talaingod-Bukidnon national road. Vast areas of banana plantations are located within its influence area. The agro-forestry production areas in the hinterlands of Talaingod depend on this route to transport products to the processing areas in Tagum City and other areas. The road facilitates the delivery of basic social services and in addressing security concerns in its influence areas.

9. Babak-Samal-Kaputian Circumferential Road

The Babak-Samal-Kaputian road is located within the Island Garden City of Samal connecting the three districts of the city. This road is the main trunkline for the circulation of basic goods and commodities, as well as, basic social services, trade, and security services within the island. It plays a major role for tourism in the island. It provides access through land transport to the different areas of tourism destination. The road is also vital for the transport of perennial crop products, such as, mango and coconut.

Several city roads and barangay roads serve as tributary roads to the circumferential road. These roads lead to the inner barangays, as well as, to the inland and coastal areas of the island with tourism significance.

Table No.3-69: Average Travel Time from the Province to Davao City, Under Major External Routes

| City/Municipality | Travel Time |
|-------------------|-------------|
| Talaingod | 2hrs-15mins |
| Kapalong | 1hr-45mins |
| Asuncion | 1hr-15mins |
| San Isidro | 2hrs-15mins |
| New Corella | 1hr-30mins |
| Sto. Tomas | 1hr |
| Be Dujali | 45mins |
| Carmen | 30mins |
| IGaCoS | 1hr |
| Panabo City | 15mins |
| Tagum City | 1hr |

Source: PEO- Davao del Norte

The average travel time from the different cities and municipalities in the province to Davao City, the regional center is shown in Table No. 3-70. Talaingod and San Isidro are the farthest municipalities with respect to Davao City. Travel time from Tagum City is on average while Panabo City has the least time of travel.

Table No. 3-70: Average Travel Time from Major Provincial Urban Centers to Production Agricultural Areas, Province of Davao del Norte: CY 2007

| Major Urban Centers | Production Areas | | | | | | | | |
|---------------------|------------------|------------|------------|------------|-------------|------------|-----------|--------|------------|
| | Talaingod | Kapalong | Asuncion | San Isidro | New Corella | Sto. Tomas | BE Dujali | Carmen | IGaCoS |
| Tagum City | 1hr-20mins | 45mins | 30mins | 1hr-20mins | 30mins | 45mins | 20mins | 30mins | 1hr-30mins |
| Panabo City | 1hr-45mins | 1hr-20mins | 1hr-10mins | 2hrs | 1hr-10mins | 1hr | 45mins | 15mins | 45mins |

Source: PEO-Davao del Norte

The table reflects the average time of travel from the production areas in different municipalities to the two major urban centers of the province; Tagum and Panabo City. Tagum and Panabo City are categorized under small/medium city (Primary Urban Center A). Most of the agricultural and production areas are located in the municipalities. Carmen and IGaCoS are nearer in terms of time travel to Panabo City, while the rest of the municipalities take lesser time to travel to Tagum City.

c. Access to Social Services

Table No 3-71: Average Travel Time to Municipalities/Cities where Government and Major Hospitals are Located, Province of Davao del Norte: CY 2007

| Hospital Locations | Municipalities/Districts | | | | | | | |
|-------------------------|--------------------------|------------|------------|-------------|------------|-----------|-------------------------|----------------------------|
| | Talaingod | Asuncion | San Isidro | New Corella | Sto. Tomas | Be Dujali | Babak District (IGaCoS) | Kaputian District (IGaCoS) |
| Tagum City | 1hr-20mins | 30mins | 1hr-20mins | 30mins | 45mins | 20mins | | |
| Panabo City | 1hr-45mins | 1hr-10mins | 2hrs | 1hr-10mins | 1hr | 45mins | | |
| Kapalong | 20mins | 20mins | 45mins | 1hr-15mins | 25mins | 50mins | | |
| Carmen | 1hr-30mins | 1hr | 1hr-45mins | 1hr | 45mins | 25mins | | |
| Samal District (IGaCoS) | | | | | | | 15mins | 30mins |

Source: PEO-Province of Davao del Norte

Major private and government hospitals are located in Tagum City, Panabo City, Kapalong, Carmen and Island garden City of Samal. Talaingod, Asuncion, San Isidro and Sto. Tomas take lesser time to travel to Kapalong but larger hospitals are located in Tagum City. New Corella and B.E. Dujali take the least time to travel to Tagum City. Talaingod and San Isidro have the largest travel time to any of the hospital facilities in the province. In Island Garden City of Samal,

Kaputian District takes more time to travel to a hospital in Samal District as compared to Babak District which, on the other hand, also is nearer to Davao City than the other two districts.

Generally, schools and health centers are located in the center of barangay or municipality. In remote barangays, barangay centers are usually located near the larger clusters of settlements. In some cases, smaller clusters in sitios travel to the barangay center as far as five (5) kilometers or more.

5.2.2 Road Characteristics

a. Road Types

Table No. 3-72: **Inventory of National Roads
 Province of Davao del Norte, 2007**

| Name of Road/Location | Concrete (km) | Asphalt (km) | Gravel (km) | Total (km) |
|--|----------------|--------------|---------------|----------------|
| Agusan-Davao Road | | | | |
| Tagum City | 14.296 | 6.507 | | 20.803 |
| Carmen | 9.202 | | | 9.202 |
| Panabo City | 7.975 | | | 7.975 |
| Surigao-Davao Coastal Road | | | | |
| Tagum City | 6.848 | | | 6.848 |
| La Fortuna-Tagum Terminal-Capitol-Canocotan Road | | | | |
| Tagum City | 10.279 | | | 10.279 |
| Tagum-Asuncion-Kapalong-Sto. Tomas-DAPECOL-Panabo Circumferential | | | | |
| Tagum City | 9.99 | | | 9.99 |
| Asuncion | 10.336 | | | 10.336 |
| Kapalong | 11.14 | | | 11.14 |
| Sto. Tomas | 13.48 | | | 13.48 |
| Panabo City | 23.965 | | | 23.965 |
| Carmen-DAPECOL Compound Road | | | | |
| Panabo City | 2.297 | | | 2.297 |
| Carmen | 8.793 | | | 8.793 |
| Babak-Samal-Kaputian Road | | | | |
| IGaCoS | 21.025 | | 3.86 | 24.885 |
| Kapalong-Talaingod-Bukidnon Road | | | | |
| Kapalong | 0.491 | | 8.178 | 8.669 |
| Talaingod | | | 33.068 | 33.068 |
| Channelization | | | | |
| Carmen | 0.438 | | | 0.438 |
| TOTAL | 150.555 | 6.507 | 45.106 | 202.168 |

Source: DPWH-Engineering District, Province of Davao del Norte

Table No. 3-73 presents the length of provincial roads by type of pavement by city and municipality of Davao del Norte as of CY 2007. In another table (Annex B) in this document can be viewed the inventory of these provincial roads by city and municipality as supporting information to the table below.

**Table No. 3-73: Provincial Roads, by Type of Pavement
By City and Municipality
Davao del Norte, 2007**

| Road Name | Length in Kilometers | | | | |
|-------------|----------------------|---------|----------|-------|--------|
| | Gravel | Asphalt | Concrete | Earth | Total |
| Asuncion | 120.5 | 0 | 0 | 0 | 120.5 |
| Kapalong | 91.3 | 0 | 0 | 0 | 91.3 |
| New Corella | 145.674 | 0 | 10.366 | 0 | 156.04 |
| San Isidro | 92.4 | 0 | 0.4 | 0 | 92.8 |
| Talaingod | 54.7 | 0 | 0 | 0 | 54.7 |
| Carmen | 121.83 | 0 | 1.37 | 0 | 123.2 |
| Sto. Tomas | 155.58 | 0 | 2.91 | 0 | 158.49 |
| BE Dujali | 44.14 | 0 | 4.25 | 0 | 48.39 |
| Grand Total | 826.124 | 0 | 19.296 | 0 | 845.42 |

Source: PEO, Davao del Norte

**Table No. 3-74: Type of Road Pavement by Administrative Function
Province of Davao del Norte, 2007**

| Administrative Level | Concrete | Asphalt | Gravel | Earth | Total Length (km) |
|----------------------|----------------|---------------|------------------|----------------|-------------------|
| National Road | 150.555 | 6.507 | 45.106 | | 202.168 |
| Provincial Road | 19.296 | | 826.124 | | 845.420 |
| Municipal Road | 15.080 | 0.380 | 166.835 | 83.960 | 266.255 |
| City Road | 79.170 | 33.812 | 426.232 | 0.723 | 539.937 |
| Barangay Road | 39.757 | 36.684 | 1,341.847 | 284.279 | 1,702.567 |
| Total | 303.858 | 77.383 | 2,806.144 | 368.962 | 3,556.347 |
| %Distribution | 8.54% | 2.18% | 78.91% | 10.37% | 100.00% |

Source: PEO, DPWH, LGU's

The road network by type of pavement is being presented in Table No. 3-74. Concrete and asphalt represents the well-paved road existing in the province. Only 10.72 percent of the total roads in the province are paved with concrete or asphalt. Only 2.3 percent of the provincial roads are paved with concrete. National roads have the highest percentage of paved roads with 77.70 percent. Most of other roads are gravel paved with conditions that range from moderate to badly damaged road. The conditions of barangay roads are either paved, gravel or earth roads. Most of the paved barangay roads are located in urban areas.

Tagum City has the highest percentage of paved roads. Sixty percent of the 142.636 kilometer road network of Tagum is paved with either, asphalt or concrete. 89.79 percent of asphalt road in

the province is located in Tagum City, and only Tagum City has a government operated asphalt mixing facility in the province and utilized as an economic enterprise. This could open up possible opportunities for other municipalities in finding alternative means for improving the road conditions, because asphalt construction is cheaper than concrete pavement.

**Table No. 3-75 : Distribution of Unpaved Provincial Roads by Province
 Davao Region, 2003**

| Province | Unpaved Length (km) | % Distribution |
|-------------------|---------------------|----------------|
| Davao del Norte | 829.16 | 33.95 % |
| Compostela Valley | 778.00 | 31.86 % |
| Davao Oriental | 484.79 | 19.85 % |
| Davao del Sur | 350.00 | 14.33 % |

Source: Davao Regional Development Plan 2004-2010

Table No.3-75 shows the lengths of unpaved provincial roads of the four provinces in the region. Davao del Norte has the most unpaved length of provincial roads compared to other provinces in the region. Though the data shown was during 2003, the unpaved length of provincial road in the province slightly reduced to 826.124 kilometers in 2007.

b. Road Density

**Table No.3-76: Road Density by City/Municipality
 Province of Davao del Norte, 2007**

| Municipality/City | Total Road Network(km) | Road Density (km/km ²) | Total Road Requirement (based on national standard 1km/1sq.km.) | Road Gap (km) |
|------------------------|------------------------|------------------------------------|---|---------------|
| Tagum City | 512.063 | 2.667 | 192.000 | |
| Panabo City | 416.562 | 1.604 | 259.720 | |
| IGaCoS | 433.625 | 1.439 | 301.300 | |
| Asuncion | 369.196 | 1.224 | 301.560 | |
| New Corella | 322.610 | 1.004 | 321.480 | |
| Kapalong | 303.164 | 0.322 | 941.850 | 638.686 |
| San Isidro | 213.180 | 1.186 | 179.800 | |
| Talaingod | 209.268 | 0.460 | 454.960 | 245.692 |
| Sto. Tomas | 399.650 | 1.247 | 320.410 | |
| Carmen | 302.949 | 1.101 | 275.160 | |
| B.E. Dujali | 74.080 | 0.814 | 91.000 | 16.920 |
| Davao del Norte | 3,556.347 | 0.977 | 3,639.240 | 82.893 |

Source: DPWH, PEO, LGU

The total road requirement of the province as a whole is 82.893 kilometers based on the national standard of 1 km per 1 sq.km. of land area. However, uneven distribution of roads results to additional road requirements among municipalities, particularly Kapalong, Talaingod and Sto. Tomas, as based on standard. The road gaps present in Kapalong and Talaingod are justified by

the vast area of forestland in these municipalities. B.E. Dujali has additional road requirement of 16.92 kilometers.

**Table No.3-77 : Distribution of Road Requirements by Province/City
Davao Region, 2003**

| Province/City | Existing Road Network (km) | Standard Requirement (1km/1sq.km. land area) | Road Gap (km) |
|-------------------|----------------------------|--|---------------|
| Davao del Norte | 3,174.71 | 3,639.24 | 464.53 |
| Compostela Valley | 2,913.91 | 4,666.93 | 1,753.00 |
| Davao Oriental | 2,388.70 | 5,164.46 | 2,825.76 |
| Davao del Sur | 3,942.75 | 3,934.01 | - |
| Davao City | 1,729.14 | 2,443.61 | 714.00 |

Source: Davao Regional Development Plan 2004-2010

Based on the 2003 inventory of roads in the region, Davao del Norte has a relatively low road gap compared to some other provinces in the region. Considerably, the road gap of Davao del Norte decreased in the 2007 data. This is due to the increase of road network in the province from 2003 to 2007.

5.2.3 Traffic Volume

**Table No. 3-78: Traffic Volume on Some Major Internal Circulation Routes
Davao del Norte, 2007**

| Station | Road Section | Car | Jeepney | Bus | Truck | Total |
|--------------|----------------------|---------|---------|--------|--------|----------------|
| Km. 1456+250 | Tagum-Carmen | 135,604 | 18,172 | 98,464 | 80,892 | 333,132 |
| Km. 1470+000 | Tagum-Asuncion | 22,848 | 17,248 | 7,924 | 29,680 | 77,700 |
| Km. 1496+000 | Sto. Tomas-Carmen | 33,897 | 8,904 | 14,064 | 5,460 | 62,325 |
| Km. 1516+650 | Sto. Tomas-Panabo | 75,888 | 39,605 | | 34,666 | 150,159 |
| Km. 1512+000 | Babak-Samal-Kaputian | 9,308 | 4,988 | 2,634 | 4,113 | 21,043 |

Source: DPWH

Table No. 3-79 represents the average monthly traffic volume on some internal circulation routes in the province. It was observed that the largest traffic volume is at Tagum-Carmen section, considering that this section is along the Agusan-Davao Road trunkline. It is also significant to note the volume of truck traffic along the Sto. Tomas-Panabo section. This road section serves as collector road for the vast banana production areas in Panabo, Sto. Tomas, Kapalong and Asuncion. This road plays a vital role for the transport of Cavendish banana for export from the production areas to the wharves in Panabo City. Bus traffic is frequent at the Tagum-Carmen section. This bus traffic volume is characterized mainly by inter-provincial routes.

5.2.4 Land Transport Infrastructures, Facilities and Utilities

a. Bridges

*Table No.3-79: List of Existing Bridges along National Roads
by Type, by City and Municipality
Province of Davao del Norte, 2007*

| Municipality | Name of Bridge | Construction Type | Length (Ln.M.) |
|--------------|--------------------------|-------------------|----------------|
| Tagum City | 1. Libuganon Bridge | RCDG | 36.69 |
| | 2. Gov. Miranda Bridge 1 | RCDG / STEEL | 145.33 |
| | 3. Gov. Miranda Bridge 2 | RCDG | 650.60 |
| | 4. Pagsabangan Bridge | RCDG | 60.70 |
| | | | 893.32 |
| Asuncion | 1. Ilog Bridge | RCDG | 24.00 |
| | 2. Magatos Bridge | RCDG | 31.50 |
| | | | 55.50 |
| Kapalong | 1. Maniki Bridge | RCDG/STEEL | 178.51 |
| | 2. Kipaliko Bridge | RCDG | 36.50 |
| | 3. Gabuyan Bridge | RCDG | 12.60 |
| | | | 227.61 |
| Talaingod | 1. Sto. Niño Bridge 1 | RCDG | 18.00 |
| | 2. Sto. Niño Bridge 2 | RCDG | 27.53 |
| | 3. Nanaga Bridge 1 | STEEL | 45.90 |
| | 4. Nanaga Bridge 2 | RCDG | 23.90 |
| | 5. Mesolong Bridge | STEEL | 67.74 |
| | 6. Napisolan Bridge | STEEL | 46.67 |
| | | | 229.74 |
| Carmen | 1. Tuganay Bridge | STEEL | 54.35 |
| | 2. Ising Bridge | RCDG | 25.50 |
| | 3. Mangalcal Bridge | RCDG | 34.00 |
| | 4. Basak Bridge | RCDG | 12.00 |

| | | | |
|-------------|-------------------------|------|-----------------|
| | 5. New Camiling Bridge | RCDG | 12.55 |
| | 6. Alejal Bridge | RCDG | 12.00 |
| | 7. Magsaysay Bridge 2 | RCDG | 10.00 |
| | 8. Magsaysay Bridge 1 | RCDG | 10.00 |
| | | | 170.40 |
| Panabo City | 1. Lasang Bridge | RCDG | 55.34 |
| | 2. Tanglaw Bridge 4 | RCDG | 20.09 |
| | 3. Tanglaw Bridge 3 | RCDG | 20.00 |
| | 4. Tanglaw Bridge 2 | RCDG | 20.00 |
| | 5. Tanglaw Bridge 1 | RCDG | 32.60 |
| | 6. Locutan Bridge 2 | RCDG | 11.26 |
| | 7. Locutan Bridge 1 | RCDG | 20.60 |
| | 8. Tadeco Bridge | RCDG | 12.00 |
| | | | 191.89 |
| Sto. Tomas | 1. Feeder road 5 Bridge | RCDG | 25.53 |
| | 2. Menzi Bridge | RCDG | 40.86 |
| | | | 66.39 |
| IGaCoS | 1. Peñaplata Bridge | RCDG | 12.00 |
| | 2. Benoling Bridge | RCDG | 24.00 |
| | | | 36.00 |
| | Total | | 1,870.85 |

Source: DPWH

**Table No.3-80: Summary of Temporary and Permanent Bridges Along Local Roads
By City/By Municipality, Davao del Norte 2007**

| Municipality | Permanent | | | | | | | | | |
|-----------------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|-----------------|----------------|-----------------|
| | RCDG | | STEEL | | RCBC | | RCDG-1 lane | | Total | |
| | No. | Length(m) | No. | Length(m) | No. | Length(m) | No. | Length(m) | No. | Length(m) |
| Asuncion | 3 | 115.60 | | | | | 6 | 249.60 | 9 | 365.20 |
| New Corella | 16 | 266.30 | | | 4 | 28.00 | 5 | 154.00 | 25 | 448.30 |
| Tagum City | 11 | 282.78 | | | 7 | 158.00 | 2 | 8.22 | 20 | 449.00 |
| Kapalong | | | | | | | 4 | 96.00 | 4 | 96.00 |
| San Isidro | 1 | 60.00 | 1 | 50.00 | | | 6 | 127.00 | 8 | 237.00 |
| Talaingod | | | | | | | | | - | - |
| Sto. Tomas | 1 | 15.00 | | | 7 | 47.00 | 16 | 370.00 | 24 | 432.00 |
| Carmen | 4 | 93.00 | 1 | 15.00 | 7 | 48.00 | 5 | 88.00 | 17 | 244.00 |
| B.E. Dujali | | | 4 | 123.00 | | | 1 | 36.00 | 5 | 159.00 |
| Panabo City | 3 | 92.00 | | | | | 8 | 195.00 | 11 | 287.00 |
| IGaCoS | 3 | 47.00 | | | 3 | 9.00 | 1 | 30.00 | 7 | 86.00 |
| Province | 42 | 971.68 | 6 | 188.00 | 28 | 290.00 | 54 | 1,353.82 | 130 | 2,803.50 |
| % Distribution | 32.31% | 34.66% | 4.62% | 6.71% | 21.54% | 10.34% | 41.54% | 48.29% | 100.00% | 100.00% |

Source: PEO, LGUs

| Municipality | Temporary | | | | | |
|-----------------------|---------------|---------------|--------------|--------------|----------------|----------------|
| | Bailey | | Timber | | Total | |
| | No. | Length(m) | No. | Length(m) | No. | Length(m) |
| Asuncion | 3 | 88.45 | 1 | 10.00 | 4 | 98.45 |
| New Corella | 4 | 73.62 | | | 4 | 73.62 |
| Tagum City | | | | | 0 | - |
| Kapalong | 2 | 51.00 | | | 2 | 51.00 |
| San Isidro | 3 | 39.50 | | | 3 | 39.50 |
| Talaingod | 1 | 60.00 | | | 1 | 60.00 |
| Sto. Tomas | 5 | 69.00 | | | 5 | 69.00 |
| Carmen | | | | | 0 | - |
| B.E. Dujali | | | | | 0 | - |
| Panabo City | 1 | 24.00 | | | 1 | 24.00 |
| IGaCoS | 4 | 54.80 | | | 4 | 54.80 |
| Province | 23 | 460.37 | 1 | 10 | 24 | 470.37 |
| % Distribution | 95.83% | 97.87% | 4.17% | 2.13% | 100.00% | 100.00% |

Source: PEO, LGUs

The province has been adopting the single lane RCDG bridges, which connect provincial roads to barangay roads, and barangay to another. Other bridge design adopted was the two-lane RCDG bridge, which connects one municipality to another. There are also modular steel bridges existing in the province, which were implemented under the foreign assisted President's Bridge Program. There are 71 units of two-lane RCDG bridges and 54 units of one-lane RCDG bridges in the province. Bailey and timber bridges are considered temporary bridges. Out of the total 4,821 linear meters of bridges, 470 linear meters are temporary bridges which are all along local roads. There are 35 units of permanent bridges along national roads and 46 units are along local roads.

Based on the latest inventory of bridges, there are still road sections traversing river systems in the absence of bridges. Some of these roads are passable only when the river bed is dry, or when water level is low. There are also existing roads that are undeveloped due to the absence of bridges. In areas where bridges are not yet feasible or no roads are present, hanging bridges and cableways are the alternative means of transporting people and goods across the river banks.

Table No.3-81: List of River Systems Traversed by Roads without Bridges, Province of Davao del Norte

| City/ Municipality | River System | Name of Road Section where Proposed Bridge will be part of | Proposed Bridge | Length (m) |
|-----------------------|-----------------|---|---------------------------|---------------|
| Asuncion | Ilog Creek | Cambanogoy-Magatos Road | Cambanogoy/Magatos Br. | 30.00 |
| | Saug River | Cambanogoy-Buclad Road | Cambanogoy/Buclad Br. | 80.00 |
| | Macgum River | Napungas-Sonlon Road | Napungas/Sonlon Br. | 36.00 |
| | Camansa Creek | Sonlon-Camansa Road | Sonlon/Camansa Br. | 24.00 |
| | Saug River | Camansa-Buan Road | Camansa/Buan Bridge | 28.00 |
| | Madgao River | Mamangan-San Vicente Rd. | Mamangan Bridge | 38.00 |
| Kapalong | | Gupitan-Patel-Langan Rd. | | 100.00 |
| | Gupitan Creek | Monte Dujali-Gupitan Rd. | Gupitan Bridge | 12.00 |
| | Kapalong River | Monte Dujali-Kapatagan Rd. | Patel Bridge | 50.00 |
| | Libuganon River | Maniki-Mamacao Road | Mamacao Bridge | 60.00 |
| Carmen | Buhang Creek | Anibongan-New Maligaya Rd. | Anibongan/New Maligaya | 15.00 |
| | Tuganay River | Anibongan-New Maligaya Rd. | Anibongan/New Maligaya | 45.00 |
| | Ising River | Sadpodon-Ising-Panabo | Sadpodon/Ising Bridge | 24.00 |
| | Ising River | Lapaz-Lower Tuganay Coastal Rd. | Lapaz/Taba Bridge | 90.00 |
| | Tuganay River | Lapaz-Lower Tuganay Coastal Rd. | Taba/Lower Tuganay Bridge | 36.00 |
| | Buhang Creek | Prk. 4, San Isidro-Dujali Rd. | San Isidro Bridge | 15.00 |
| IGaCoS | Bagacay Creek | Tagbitan-ag - Sitio Bagacay Rd. | Tagbitan-ag Bridge | 30.00 |
| | Kunghok Creek | Libuak-Balet Road | Libuak/Balet Bridge | 20.00 |
| | Madale Creek | Kanaan-Pangubatan Road | Kanaan/Pangubatan Bridge | 20.00 |
| | Kanaan Creek | Kanaan-Bandera Road | Kanaan/Bandera Bridge | 20.00 |
| | Taglaya Creek | San Antonio-Tagbitan-ag Rd. | Tagbitan-ag Bridge | 20.00 |
| | Rabanal Creek | Sitio Tinago Road | Tinago Bridge | 30.00 |
| Talaingod | Bunawan Creek | Sto. Niño-Km. 31 | Angelo Bridge | 40.00 |
| | Bunawan Creek | Sto. Niño-Km. 31 | Paiton Bridge | 60.00 |
| | Kipaliko River | Tugas-Naseco Road | Naseco Bridge | 30.00 |
| | Gabuyan River | Talaingod-Bukidnon Road | Gabuyan Bridge | 30.00 |
| | Semong River | Palma Gil-Dagohoy Road | Palma Gil Bridge | 50.00 |
| | Davao River | Talaingod-Bukidnon Road | Lasang Bridge | 80.00 |
| | Semong River | Sto. Niño-Daligdigon Road | Daligdigon Bridge | 40.00 |
| | Upper Libuganon | Angelo-Paiton Road | Angelo/Paiton Bridge | 20.00 |
| | River | | | |
| | Semong River | Paiton-Biasong Road | Paiton/Biasong Bridge | 40.00 |
| | Upper Libuganon | Biasong-Mibulo Road | Bukag Bridge | 18.00 |
| | River | | | |
| | Gabuyan River | Igang-Tambuko Road | Papangi Bridge | 15.00 |
| | Gabuyan River | Kuyas-Sto. Niño Road | Kalagutay Bridge | 12.00 |
| New Corella | Mandapaan River | Mesaoy-New Bohol(Brgy. Road) | Mandapaan Bridge | 12.00 |

| | | | | |
|---------------------|----------------|---|------------------------|-----------------|
| | Mawab Creek | Sta. Fe-Mambing Road | Sta. Fe/Mambing Bridge | 12.00 |
| San Isidro | Madgao River | Pinamuno, San Isidro to Panamurin, Laak, ComVal Road | Pinamuno Bridge | 50.00 |
| | Anglas River | San Francisco-Everlasting Road, (Mamangan) | Mamangan Bridge | 30.00 |
| | Bugak Creek | Purok 4, Sabangan | Sabangan Bridge | 15.00 |
| | Mamangan Creek | Sambulawan, Sawata to Gumamela, Mamangan Road | Mamangan/Sawata Bridge | 15.00 |
| | Kasilak Creek | Agman-Kasilak Road(Linao) | Linao Bridge | 30.00 |
| Sto. Tomas | Tuganay River | Feeder 1-New Visayas Road | Tuganay bridge | 100 |
| | Tuganay River | Tulalian - Tibal-og Road | Tulalian Bridge | 12.00 |
| Total Length | | | | 1,534.00 |

Source: LGU's

b. Land Transport Terminals for Intra Provincial Circulation

The central bus and jeepney terminal in the province is located in Tagum City. Aside from the inter-provincial public transport, the terminal also caters to intra-provincial routes. The jeepney terminal in Tagum City is located in an open lot adjacent to the bus terminal and it has a passengers' canopy. It has a capacity of 10 bays and can accommodate 1,024 jeepneys in 16 hours. At present, the bus and jeepney terminal is being operated by the City Government of Tagum. In other municipalities, bus and jeepney terminals also exist and are being managed by the local government units.

Aside from the government operated terminal, there are also privately operated terminals for jeepneys and small buses in Tagum City. These are the two buildings opposite to the public terminal, and they can accommodate a total of 17 jeepneys simultaneously.

The capital Tagum City is linked through public land transportation to other municipalities by the following key routes:

- Tagum-New Corella
- Tagum-Kapalong via Asuncion
- Tagum-San Isidro via Asuncion
- Tagum-Talaingod via Asuncion and Kapalong
- Tagum-Sto. Tomas
- Tagum-B.E. Dujali
- Tagum-Davao City via Carmen and Panabo City

The jeepney terminal in Panabo City has 18 bays capacity for jeepneys. The key destinations include: Davao City, Carmen, B.E. Dujali and some hinter barangays of Panabo City such as DAPCO and Dalisay. In the IGaCoS, bus terminals are located in Babak and Peñaplata with destination to Davao City. Buses in the IGaCoS are transported to Davao City by private ferries.

c. Registered Motor Vehicles

Data on the registered motor vehicles has an increasing trend from year 2006 to 2007. There is only a slight increase for private cars and jeeps in 2007. On the other hand, motorcycles and tricycles have the highest increase of 42 percent from 2006 to 2007. This increase was brought about by the increase of commuting population. The recent increase in fares for public utility vehicles and fuel prices also triggers the riding public to resort to a more economical means of transportation, such as, motorcycles for personal activities, as well as, for livelihood means. The increase of registered trucks and trailers also implies an increase in economic activities. Trucks and trailers are usually used to transport certain commodities by traders. Trailers are also frequently used for transporting Cavendish bananas from the production areas to the points of disposal.

Table No.3-82: Registered Motor Vehicles, Davao del Norte

| Type of Motor Vehicle | Number of Registered Motor Vehicles | | % Increase/ Decrease |
|-----------------------|-------------------------------------|---------------|-------------------------|
| | Year 2006 | Year 2007 | |
| Cars/ Jeeps | 8,902 | 8,922 | 0.02% |
| Trucks/ Buses | 2,428 | 2,851 | 17.00% |
| Motor/ Tricycles | 32,839 | 46,801 | 42.00% |
| Trailers | 175 | 209 | 19.00% |
| Total | 44,344 | 58,783 | 32.56% |

Source: LTO, Tagum City, Davao del Norte

In 2007, there are only 85 government vehicles newly registered. There are no new registrations for public utility vehicles, while the private vehicles have the highest number of registration. This increase may be attributed to the increase of registered motorcycles.

Table No.3-83: Statistics on Registered Motor Vehicles
By Classification and Status: 2007

| Status | Classification of Registered Motor Vehicles | | | Total |
|-----------------------|---|---------------|--------------|----------------|
| | Private | For Hire | Government | |
| New | 17,096 | - | 85 | 17,181 |
| Renewal | 31,489 | 6,357 | 3,756 | 41,602 |
| Total | 48,585 | 6,357 | 3,841 | 58,783 |
| % Distribution | 82.65% | 10.81% | 6.53% | 100.00% |

Source: LTO, Tagum City, Davao del Norte

Various types of registered vehicles provide means of transport to public passengers. Basically, large buses ply inter-provincial routes; jeepneys for inter-municipal routes; and tricycles and motorcycles for intra-municipal and city routes. Franchising of tricycles are being processed at the municipal and city level, while the rest are being processed at the Land Transportation Franchising and Regulatory Board.

5.3 Sea Transport

At present, the more efficient means of moving people, goods and commodities from the IGaCoS to the mainland is sea transportation. Government ports are located in the Island Garden City of Samal managed by the city government. These ports are utilized as terminal ports for sea transport utilities transporting passengers and goods to and fro Davao City, and Talikud island.

No less than 30 motorboats transport passengers and goods from the different coastal barangays of IGaCoS to Davao City. Motorized bancas ferry passengers from various points in the island to Davao City, particularly at Sta. Ana Wharf and Sasa Wharf. The different beach resorts have their own seacrafts, and utilize their private wharves in transporting visitors and tourists. On peak days, it is estimated that about 3,000 to 5,000 visitors troop to various beaches of IGaCoS. Among key destinations points of tourists are the Paradise Beach Resort, Samal Casino Resort, the Pearl Farm Resort, and the resorts and eco-tourism spots around the shorelines of Talikud Island.

At present, privately operated ro-ro ferry boats bridge the IGaCoS to the mainland. A government owned ferry wharf is also located in Babak, but is currently unutilized. Ferry services became major means of transport of goods and commodities for the island.

5.3.1 Proposed Improvements

Table No: 3-84: **Proposed Improvements on Infrastructure Facilities, by Level of Importance, Resource Allocation and Priority, Province of Davao del Norte: CY 2007**

| Infra Facility | Level of Importance | Level of Resource Allocated | Priority Rank |
|----------------------------------|---------------------|-----------------------------|---------------|
| Asuncion-San Isidro Road Section | 1 | 1 | 2 |
| Tagum-Sto. Tomas Road Section | 1 | 2 | 3 |
| Tuganay-Dujali Road Section | 1 | 2 | 3 |
| Kapalong-Talaingod Road Section | 1 | 3 | 4 |
| Babak-Samal-Kaputian Road | 2 | 2 | 4 |
| T-A-S-K-D-P Circumferential Road | 1 | 3 | 4 |
| IGaCoS-Davao Link | 1 | 1 | 2 |
| Tuganay-La Paz Road Sections | 1 | 2 | 3 |

Source: PEO, DPWH and LGUs

Note: On the level of importance, the higher the importance the lower the score.
 On the level of resource allocation, the higher the resource allocated the higher the score.
 Facility gets the higher rank if score is lower.
 Facility gets the lower rank if score is higher.

1. Asuncion-San Isidro Road

Portion of this route serves as external link to Compostela Valley. Transport of basic agricultural products from Asuncion areas, such as rice, will become efficient once the road is improved. Other potential crop production especially in San Isidro, such as cacao, is also foreseen to be developed with the improvement of the inter-municipal link between the production areas of

Asuncion and San Isidro, and the market hub of Tagum City. At present 100% of the road section is still unpaved.

2. Tagum-Sto. Tomas Road

As of 2007 only 22 percent of this road is concreted. Improvement of this road will also improve the adjacent production areas of rice and bananas. Public transportation between Sto. Tomas and Tagum City will also become efficient.

3. Tuganay-Dujali Road

Some portion of this road lies in the flood prone areas. Improvement of this road will improve public transportation and delivery of basic social services. Aquaculture and banana production in B.E. Dujali will benefit from this improvement.

4. Kapalong-Talaingod Road

This road is part of the Kapalong-Talaingod-Bukidnon national road. This also serves as the main link of Talaingod to other parts in Davao del Norte. Delivery of basic social services to the ethnic cultural hub of Davao del Norte needs to be improved and at the same time security problems in the hinterlands of Davao del Norte also needs to be addressed by effective transportation.

5. Babak-Samal-Kaputian Circumferential Road

This road is maintained by the DPWH. Although 80 percent of the road section is already concrete, this road needs to be improved to meet settlement growth. IGaCoS is one of the fast growing area in the province and is one of the main tourism destinations in the region.

6. T-A-K-S-D-P Circumferential Road

Considering the expansion of the banana plantations is located in Panabo City, Kapalong and Sto. Tomas, and the growing settlements in Sto. Tomas, there will be an increased demand for transportation efficiency in the TAKSDP circumferential road. Traffic congestion is the problem deemed to be encountered in the said road section in the coming years, therefore improvements of the road is important. Moreover, this road will also serve the traffic of the Kapalong-Talaingod-Bukidnon Road once the road is fully operational.

7. RoRo Facilities (IGaCoS to Davao)

With the fast-growing settlements in the IGaCoS, there will be an increased demand for the delivery of basic social services; therefore, transportation by means of roro facilities to ply between the Island Garden City of Samal to the mainland and other parts of the region needs to be improved. In the long term plan, a bridge connecting the island and the mainland is most desired with due consideration to reduction in the cost of sea transport and the ultimate efficiency of a bridge over a ferry transport. Furthermore IGaCoS is the tourism center of the province. Already 80% of the Babak-Samal-Kaputian Circumferential Road is paved but the main obstacle in transportation is the connection of the island to the province.

8. Tuganay-La Paz Coastal Road

Carmen is suitable for crop production such as rice and cultivated annual crops. This proposed road is supposed to connect the hard to reach production areas in Carmen to market hubs of Panabo and Tagum City.

6.0 INCOME, EMPLOYMENT, SERVICE ACCESS AND POVERTY

Economic growth of a locality greatly affects the quality of life of the constituents. Employment and income affects expenditures. Ability to access goods and services may be limited to the point that basic needs are not met and will result poverty. Poverty, in turn, affects the quality of production and eventually economic development. This chapter therefore presents the symptoms of growth particularly on the social dimension of development of the province.

6.1 Employment

In 2007, the labor force of the province totaled 261,516 or 42.2 per cent of its population 15 years old and above. Out of this number, 93.8 per cent or 245,347 were gainfully employed (Table No. 3-32) and 6.2 per cent were reported unemployed. This is a projection made based on the available latest data published by the NSO (2000 Report).

*Table No. 3-85: Projected Labor Force
 Province of Davao del Norte, 2007*

| | MALE | FEMALE | TOTAL | % |
|------------------------|---------|---------|---------|------|
| 15 yrs. old & above | 231,809 | 136,941 | 368,750 | 42.2 |
| In the labor force | 192,772 | 68,744 | 261,516 | 70.9 |
| Employed | 182,363 | 62,984 | 245,347 | 93.8 |
| Unemployed | 10,410 | 5,761 | 16,171 | 6.2 |
| Not in the labor force | 39,037 | 68,197 | 107,234 | |

Source: PPDO projected computation

With the interventions of the Public Employment Services Office (PESO) of Davao del Norte, a total of 8,582 applicants in 2007 were given employment (Table No.3-86)

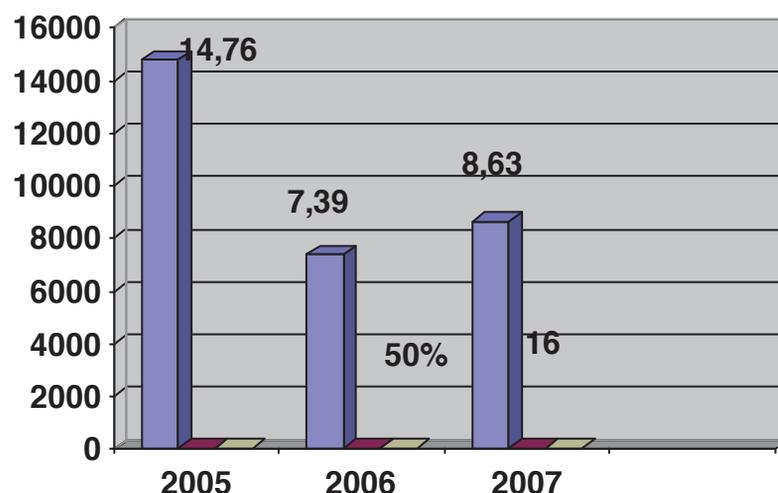
*Table No. 3-86: Employment Generation by the PESO
 Province of Davao del Norte, 2007*

| Particular | Number |
|------------------------------|--------|
| Job Vacancies | 20,761 |
| Applicants Registered | 14,912 |
| Applicants Referred | 10,143 |
| Applicants Placed | 8,582 |
| Jobs Fair Conducted | 6 |
| Applicants Registered | 2,355 |
| Applicants Hired on the Spot | 901 |

Source: PESO, Davao del Norte

Registered industries also reported an increasing trend of employment generation from 2006 to 2007 (Figure No. 3-16).

**Figure No. 3-16: Employment Generation by Registered Industries
Davao del Norte**



Employment rate of the province is more or less the same with the regional scenario of 94 per cent and a little bit higher than the National figure of 92.2 per cent (Table No. 3-87).

**Table No. 3-87: Employment Status, 2007
Provincial/Regional/National**

| Particular | Davao del Norte | Region XI | National |
|--------------------------------|-----------------|-----------|----------|
| Labor force participation rate | 42.2 | 66 | 64.8 |
| Employment rate | 93.8 | 94 | 92.2 |
| Unemployment rate | 6.2 | 6 | 7.8 |

Source: NSCB Report

While statistics suggests a good performance in employment generation, there remains a major concern on unemployment and underemployment in Davao del Norte. Availability for job opportunities can be another concern which must be looked into. Job mismatch is another issue being raised by some stakeholders.

6.2 Family Income

Based on the Family Income and Expenditure Survey conducted by NSO in 2006, the mean annual per capita income for Davao del Norte was estimated at P 25,384.00. For a family of five, annual family income was computed at P126,940.00 or P 10,578.00 monthly.

The latest data on the sources of income is NSO 2000 Report, so that based on projections; the major source of income is the industry on agriculture, fishery and forestry followed by the services sector. Based on this report, majority or about 63% of the income earners are the males, while the women account only 37% (Table No. 3-88).

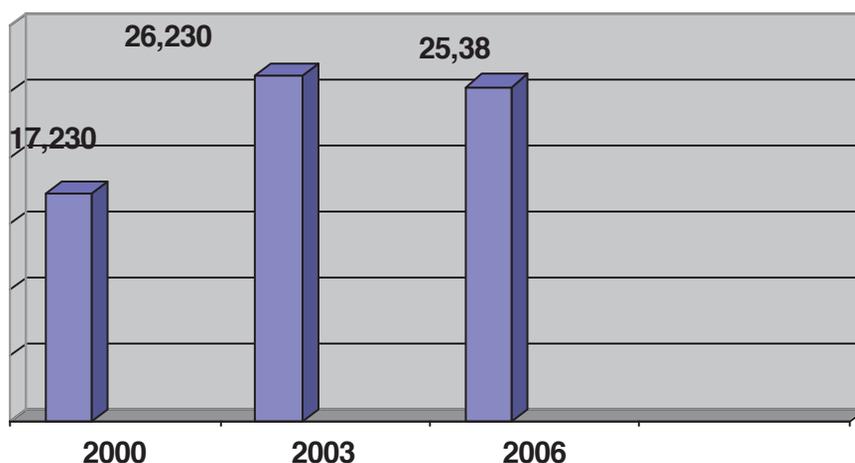
*Table No. 3-88: Sources of Income by Industry
 2007 Projections*

| Sources of Income | Male | Female | Total | % |
|---|----------------|----------------|----------------|------------|
| Agriculture, Fishery & Forestry | 142,053 | 72,428 | 214,481 | 58.2 |
| Mining & Quarrying | 6,073 | 4,820 | 10,894 | 2.9 |
| Manufacturing | 6,769 | 3,588 | 10,357 | 2.8 |
| Electricity, Gas & Water | 672 | 219 | 891 | 0.2 |
| Construction | 6,699 | 2,438 | 9,137 | 2.4 |
| Wholesale & Retail Trade | 19,936 | 9,189 | 29,124 | 7.9 |
| Transportation & Communication | 8,693 | 3,999 | 12,692 | 3.5 |
| Financing, Insurance, Real Estate & Business Services | 7,372 | 931 | 8,303 | 2.2 |
| Community, Social & Personal Services | 33,010 | 10,681 | 43,691 | 11.8 |
| Not Stated | 533 | 20,979 | 21,513 | 5.8 |
| TOTAL | 231,809 | 136,941 | 368,750 | 100 |

Source: PPDO projected computation

Between year 2000 and 2003, the reported mean per capita income in all income groups had increased to P 26,230.00 from P 17,230.00 in 2000 or having 52 per cent increase, while between 2003 and 2006, the reported mean per capita income decreased to P 25,384.00 or 3.2 per cent. This scenario has a direct bearing to poverty incidence in the province (Figure No. 3-17)

*Figure No. 3-17: Average Per Capita Income
 Davao del Norte, 2000 - 2006*



The series of surveys on Minimum Basic Needs conducted in 1999 and 2004 showed that low income had been placed as the top need of the populace. The latest survey in 2004 revealed that 45,807 or 30.37% of the surveyed families were reported to have an income below P 36,000.00 per annum and were considered poor families (Table No. 3-89).

**Table No. 3-89: Minimum Basic Needs Survey Result
Province of Davao del Norte, 1999 & 2004**

| CY 1999 SURVEY | | | CY 2004 SURVEY | | |
|--|--------------------|---|--|---------------------|---|
| Indicator | Household Affected | % of Total HHS (147,973) vs. No. of Hhs. Affected | Indicator | Households Affected | % of Total HHS (180,844) vs. No. of Hhs. Affected |
| 1. Families with income below P 36,000.00 per annum | 57,989 | 39.18% | 1. Families with income below P 36,000.00/ annum | 45,807 | 30.37% |
| 2. Family member age 18 and above not in school and unemployed | 40,805 | 27.57% | 2. Families with no proper waste disposal system | 39,571 | 26.23% |
| 3. Families with no access to potable water supply | 38,308 | 25.88% | 3. Families with no livestock raised | 32,397 | 21.18% |
| 4. Families with no compost pit | 28,453 | 19.22% | 4. Families with no access to potable water | 30,542 | 20.25% |
| 5. Families with no livestock raised | 25,728 | 17.28% | 5. Families with no backyard/ yard garden | 29,989 | 19.89% |
| 6. Families with children 3-5 years old not in Day Care Center | 23,395 | 15.81% | 6. 18 years old and above not in school and unemployed | 29,631 | 19.64% |
| 7. Families with no backyard/ farm garden | 20,286 | 13.70% | 7. Solo parents have not availed health services | 23,460 | 15.55% |
| 8. Families affected by calamities and disasters | 20,186 | 13.64% | 8. 3 - 5 year old children not in Day Care Center | 21,799 | 14.45 % |
| 9. Families with no sanitary toilet | 19,540 | 13.20% | 9. Families not practicing family planning | 22,900 | 15.18% |
| 10. Families not practicing family planning | 13,604 | 9.20% | 10. Families with no sanitary toilet | 19,184 | 12.72% |

Source: PSWDO, Davao del Norte

Also, based on 2004 MBN Survey, those families having annual income below P 36,000.00 were distributed in the different cities and municipalities as shown in Table No. 3-90.

**Table No. 3-90: Families with Income below P 36,000 per annum
 Davao del Norte, 2004**

| Cities/ Municipalities | No. of Families Affected | % |
|--|--------------------------|----|
| Asuncion | 3,646 | 37 |
| Kapalong | 6,307 | 50 |
| New Corella | 4,498 | 49 |
| Talaingod | 1,444 | 30 |
| San Isidro (part of Asuncion & Kapalong) | - | - |
| Tagum City | 8,248 | 20 |
| B. E. Dujali | 496 | 15 |
| Carmen | 5,551 | 46 |
| Sto. Tomas | 3,423 | 19 |
| Panabo City | 5,296 | 17 |
| Island Garden City of Samal | 6,904 | 37 |

Source: PSWDO, Davao del Norte

Comparing to the regional and national data on average family income for the last three censal periods, i.e. 2000, 2003 and 2006, Davao del Norte demonstrates a lower level in the latest 2006 survey. Please refer to Table No. 3-91.

**Table No. 3-91: Comparative Average Family Income
 Provincial / Regional / National**

| | 2000 | 2003 | 2006 |
|-----------------|------------|------------|------------|
| Davao del Norte | 85,685.00 | 131,150.00 | 126,940.00 |
| Region XI | 112,254.00 | 114,065.00 | 135,000.00 |
| Philippines | 145,000.00 | 148,000.00 | 173,000.00 |

Source: NSCB Report

Low income is a major concern of the populace of the province. As having been demonstrated in the statistical information, average income of the populace is very much lower than the regional and national scenario.

More than half of the income earners are dependent on agriculture for employment and income. Income on agriculture is more likely unstable because of its seasonality and vulnerability to market and trade exchange.

Family Income being the basic determinant factor in gauging the living condition of the populace should therefore be considered in addressing the economic and other development of the province.

6.3 Social Services

6.3.1 Health

a. Facilities

There are twenty-three (23) hospitals in Davao del Norte, four of which are government owned and operated such as the Davao Regional Hospital, a DOH tertiary hospital located in Tagum City and the three (3) provincial district hospitals located in the municipalities of Kapalong, Carmen and in the Island Garden City of Samal.

Kapalong District Hospital (KDH) is designed to cater the clients of Talaingod with a distance of 22 kilometers, San Isidro, Asuncion, New Corella and Kapalong. However, patients from Asuncion, New Corella and even San Isidro are usually brought to Tagum City where more sophisticated medical services can be availed of. KDH is a 50 - bed capacity hospital and has an occupancy rate of 80 %.

The municipalities of Braulio E. Dujali, Sto. Tomas, Carmen and the City of Panabo are catered by the Carmen District Hospital, a 25-bed capacity and with occupancy rate of 77%. Due to the inadequacy of health manpower as well as health facilities, patients with major ailments are brought to the private hospitals in Panabo City and even to Tagum and Davao City.

Samal District Hospital on the other hand, is a primary and a 25 bed capacity hospital. It caters the entire City covering 46 barangays and a total population of 90,291. It has an occupancy rate of 98%. Major ailments are usually referred to Davao City for further treatment.

Considering all public and private hospitals there are a total of 1,115 authorized hospital beds in the province. Taking into account the 847,440 population, a hospital bed ratio to population is computed at 1:760 which is higher than the national standard of 1:500. (See Table No. 3-92).

*Table No. 3-92: Hospital Bed – Population Ratio
Province of Davao del Norte, 2007*

| City/ Municipality | No. of Hospitals | | | Authorized Beds | | | |
|-----------------------|------------------|---------|-------|-----------------|---------|-------|------------------------|
| | Gov't. | Private | Total | Gov't. | Private | Total | Ratio to Population |
| Asuncion | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kapalong | 1 | 2 | 3 | 25 | 42 | 67 | 1:921 |
| New Corella | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| San Isidro | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tagum City | 1 | 4 | 5 | 200 | 370 | 570 | 1:379 |
| Talaingod | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carmen | 1 | 1 | 2 | 25 | 10 | 35 | 1:762 |
| Dujali | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Panabo City | 0 | 6 | 6 | 0 | 323 | 323 | 1:478 |
| Sto. Tomas | 0 | 5 | 5 | 0 | 77 | 77 | 1:262 |
| IGaCos | 1 | 1 | 2 | 25 | 18 | 43 | 1:2099 |
| Province | 4 | 19 | 23 | 275 | 840 | 1115 | 1:760 |

Source: PHO, Davao del Norte

Comparing to other provinces in the Region, Davao del Norte ranks second in the number of hospitals with the most number of authorized beds. In terms of its ratio of hospital bed to population, Davao del Norte also ranks second to Davao del Sur. (See Table No. 3-93).

**Table No. 3-93: Hospital Bed Capacity and Bed Population Ratio, 2007
By Province/ City**

| Province / City | Number of Hospital | | | Authorized Beds | | | Ratio to Population |
|-------------------|--------------------|---------|-------|-----------------|---------|-------|---------------------|
| | Gov't | Private | Total | Gov't. | Private | Total | |
| Compostela Valley | 4 | 10 | 14 | 70 | 166 | 236 | 1:2,701 |
| Davao del Norte | 4 | 19 | 23 | 275 | 840 | 1,115 | 1:760 |
| Davao Oriental | 5 | 4 | 9 | 160 | 93 | 253 | 1:1,921 |
| Davao del Sur | 7 | 36 | 43 | 190 | 919 | 1,109 | 1:742 |
| Davao City | 4 | 25 | 29 | 435 | 1,160 | 1,595 | 1:855 |
| Davao Region | 24 | 94 | 118 | 1,130 | 3,178 | 4,308 | 1:965 |

Source: NSCB Report

In other municipalities where hospitals are not available, health care services are augmented by the 13 Health Centers and 170 Barangay Health Stations where a total of 2,335 Barangay Health Workers (BHW) are assisting in delivering basic health services. (See Table No. 3-94).

**Table No. 3-94: Main Health Centers, Barangay Stations and Brgy. Health Workers
Province of Davao del Norte, 2007**

| AREA | Barangay Health Satations | | Number of Brgy. Health Stations | Number of Brgy. Health Workers |
|-------------|---------------------------|---------------------|---------------------------------|--------------------------------|
| | No. of Health Center | Number of Barangays | | |
| Asuncion | 1 | 20 | 14 | 252 |
| Kapalong | 1 | 14 | 13 | 155 |
| New Corella | 1 | 20 | 14 | 196 |
| San Isidro | 1 | 13 | 13 | 145 |
| Tagum City | 1 | 23 | 26 | 340 |
| Talaingod | 1 | 3 | 4 | 45 |
| Carmen | 1 | 20 | 11 | 177 |
| Dujali | 1 | 5 | 3 | 85 |
| Panabo City | 1 | 40 | 21 | 275 |
| Sto. Tomas | 1 | 19 | 16 | 180 |
| IGaCos | 3 | 46 | 35 | 485 |
| Province | 13 | 223 | 170 | 2,335 |

Source: PHO, Davao del Norte

Health facilities in the province still need upgrading and improvement. Additional medical equipment and facilities are necessary to advance the afforded health services to the populace.

b. Health Manpower

Considering the population of 847,440 in 2007, the doctor to population ratio is placed at 1:56,496. This is relatively higher by 64.60% or greater in number by 36,496 than the National Standards. Only the number of midwives is within the standard set by the national government. (See Table No. 3-95).

**Table No. 3-95: Doctor- Population Ratio
Province of Davao del Norte, 2007**

| Category | Number | Ratio to Proportion | National Standard Ratio |
|-----------------------|--------|---------------------|-------------------------|
| Physician | 15 | 1:56,496 | 1:20,000 |
| Nurses | 32 | 1:26,453 | 1:20,000 |
| Dentists | 19 | 1:44,602 | 1:50,000 |
| Midwives | 186 | 1:4,556 | 1:5,000 |
| Medical Technologists | 26 | 1:32,594 | |
| Sanitary Inspectors | 18 | 1:47,080 | 1:20,000 |

Source: PHO, Davao del Norte

The same scenario in the other areas of the Region has been observed regarding the health manpower ratio to population. There is a need for additional health personnel. Table No. 3-96.

**Table No. 3-96: Number of Selected Field Health Manpower & Ratio to Population
By Province/ City, 2007**

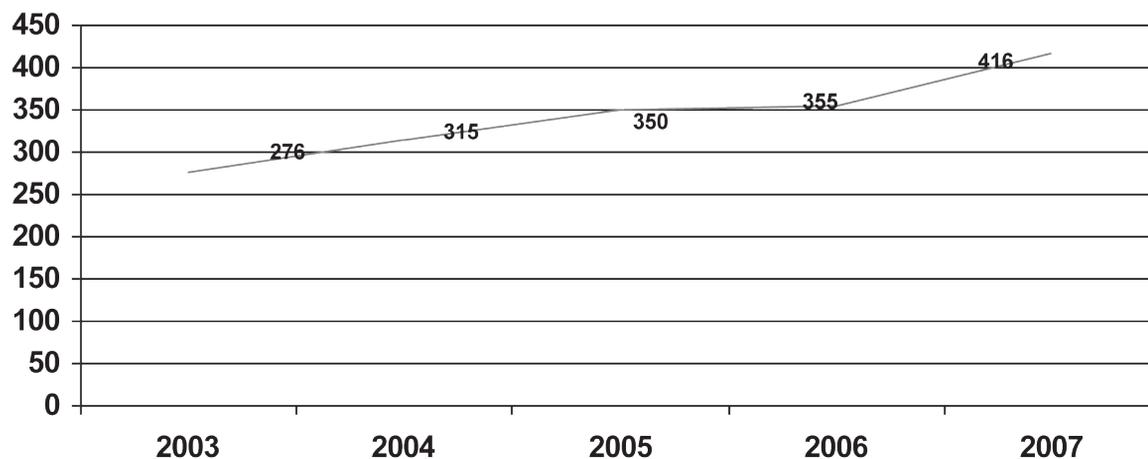
| MAN POWER | PROVINCE / CITY | | | | | | | | | | DOH STANDARD RATIO |
|-----------------------|-----------------|----------|------|----------|-----|----------|-----|----------|-----|----------|--------------------|
| | DN | | CV P | | DO | | DS | | DC | | |
| | No. | Ratio | No. | Ratio | No. | Ratio | No. | Ratio | No. | Ratio | |
| Doctors | 15 | 1:56,496 | 12 | 1:53,114 | 12 | 1:40,509 | 15 | 1:54,287 | 20 | 1:68,167 | 1:20,000 |
| Dentists | 32 | 1:26,483 | 12 | 1:53,114 | 11 | 1:44,191 | 14 | 1:58,743 | 17 | 1:80,196 | 1:50,000 |
| Nurses | 19 | 1:44,602 | 20 | 1:31,868 | 19 | 1:25,584 | 35 | 1:23,497 | 33 | 1:41,313 | 1:20,000 |
| Midwives | 186 | 1:4,456 | 156 | 1:4,086 | 173 | 1:2,810 | 207 | 1:3,973 | 82 | 1:16,626 | 1:5,000 |
| Sanitary Inspectors | 18 | 1:47,080 | 16 | 1:39,835 | 13 | 1:37,393 | 28 | 1:29,372 | 18 | 1:75,741 | 1:20,000 |
| Medical Technologists | 26 | 1:32,594 | 13 | 1:49,028 | 15 | 1:32,407 | 10 | 1:82,241 | 15 | 1:90,889 | |

Source: Provincial Health Office, Davao del Norte

c. Other Health Indicator

Mortality rate for the last five (5) years has been increasing from 276 per 100,000 population in 2003 to 416 in 2007. (Figure No. 3-18).

Figure No. 3-18: Mortality Rate per 100,000 populations
 Province of Davao del Norte, 2003 - 2007



Top most leading causes include heart diseases, pneumonia, cerebrovascular diseases and all forms of accident. Most of the common causes are closely related to the lifestyles of the populace. (Table No. 3-97).

Table No. 3-97: Leading Causes of Mortality per 100,000 Populations, and 5-year average
 Province of Davao del Norte, 2007

| CAUSES | 2007 | | 5-YEAR AVERAGE | |
|---|--------|------|----------------|------|
| | NUMBER | RATE | NUMBER | RATE |
| 1. Heart Disease | 594 | 70 | 322 | 39.6 |
| 2. Pneumonia | 452 | 53 | 300 | 36.9 |
| 3. Cerebro vascular Disease | 430 | 51 | 263 | 32.3 |
| 4. Accident all forms | 277 | 33 | 254 | 31.2 |
| 5. Malignant neoplasm, all forms | 265 | 31 | 179 | 22.0 |
| 6. Hypertensive disease | 188 | 22 | 199 | 24.5 |
| 7. Disease of the Digestive system | 180 | 21 | 118 | 14.5 |
| 8. Diseases of the Genitourinary system | 142 | 17 | 111 | 13.7 |
| 9. Tuberculosis, respiratory | 116 | 14 | 130 | 16.0 |
| 10. Diabetes Mellitus | 101 | 12 | 48 | 5.9 |

SOURCE: DOH XI - RHIS & Special Report

Considering other provinces in the region, cerebrovascular disease and pneumonia are the top leading causes of mortality which are placed at the third and second rank for Davao del Norte (Table No. 3-98).

Table No. 3-98: Mortality, Leading Causes Number and Rate per 100,000 population Region XI, 2007

| Causes | Davao del Norte | | COMVAL | | Davao Oriental | | Davao Sur | | Davao City | |
|---------------------------------|-----------------|------|--------|------|----------------|------|-----------|------|------------|------|
| | No. | Rate | No. | Rate | No. | Rate | No. | Rate | No. | Rate |
| Cerebrovascular disease | 430 | 51 | 412 | 65 | 188 | 39 | 240 | 29 | 1157 | 85 |
| Malignant neoplasm, all forms | 265 | 31 | 272 | 43 | 158 | 33 | 145 | 18 | 755 | 55 |
| Disease of Arteries | - | - | - | - | - | - | 93 | 11 | 748 | 55 |
| Heart diseases | 594 | 70 | - | - | 121 | 25 | - | - | 609 | 45 |
| Pneumonia | 452 | 53 | 270 | 42 | 315 | 65 | 142 | 17 | 416 | 31 |
| Diabetes Mellitus | 101 | 12 | 123 | 19 | - | - | 57 | 7 | 334 | 24 |
| Disease of genitourinary system | 142 | 17 | 201 | 32 | 64 | 13 | 66 | 8 | 331 | 24 |
| Disease of digestive system | 180 | 21 | 183 | 29 | 125 | 26 | 114 | 14 | 314 | 23 |
| Tuberculosis, respiratory | 116 | 14 | 182 | 29 | 57 | 12 | - | - | 310 | 23 |
| Hypertensive disease | 188 | 22 | 248 | 39 | 179 | 37 | 223 | 27 | - | - |
| Chronic Lower Respiratory | - | - | 110 | 17 | 45 | 9 | 194 | 24 | - | - |
| Assult | - | - | - | - | - | - | - | - | 369 | 27 |
| Accident, all forms | 277 | 33 | 406 | 64 | 157 | 32 | 108 | 13 | - | - |

Source: DOH XI □ RHIS & Special Report

Maternal mortality measures death among women during pregnancy, childbirth and postpartum. In Davao del Norte, the leading cause of maternal mortality is complications of labor and delivery which includes postpartum hemorrhage, retained placenta and uterine atony which was also experienced by other provinces of Davao Region. In 2007, there are nine (9) maternal deaths caused by this particular disease. To reduce or avoid the occurrence of cases, there is a need to upgrade the delivery system of essential health care package for pregnant women both to Rural Health Units and hospitals of the province. (See Table No. 3-100).

Table No. 3-99: Comparative Maternal Mortality Leading Causes By Province/ City, 2007

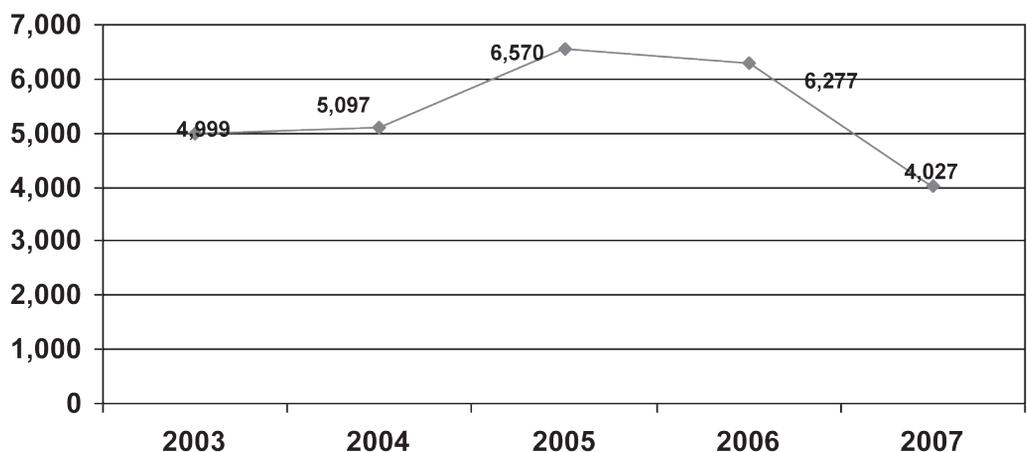
| | No. of Cases | | | | |
|--|--------------|--------|---------|----------|------------|
| | Davao Norte | Comval | Del Sur | Oriental | Davao City |
| 1. Complication of labor and delivery | 9 | 7 | 10 | 7 | 11 |
| 2. Complications related to Puerperium | 4 | 4 | 1 | | 8 |
| 3. Other Obstetric Condition | 4 | | | | 5 |
| 4. Other maternal disorder related to pug. | 3 | | | 1 | 2 |
| 5. Edecma, proteinura & hypertension | 2 | 18 | | | 6 |
| 6. Ectopic pregnancy | 1 | | | 1 | |
| 7. Eclampsia | | | | | |
| 8. Placenta Previa | 1 | 1 | | | 2 |

| | | | | | |
|--|--|--|--|--|---|
| 9. Pregnancy w/ abortive outcome | | | | | |
| 10. Maternal care related to the fetus & amniotic cavity & possible delivery problem | | | | | 2 |

Source: Provincial Health Office, Davao del Norte

Morbidity rate has been decreasing for the last three (3) years although it has increased from 2003 to 2004. (Figure No. 3-19).

Figure No. 3-19: MORBIDITY RATE PER 100,000 POPULATIONS
 Province of Davao del Norte, 2003 - 2007



Communicable diseases continue to dominate the ten (10) leading causes of morbidity. These include upper respiratory tract infection, lower respiratory infection, pneumonia, diarrhea and GE and tuberculosis. As presented in the 5- year period for Davao del Norte, acute upper respiratory infection shows a declining trend in morbidity rate from 2,035 in 2003 to 1,293 in 2007 though a very high rate of 2,256 was experienced in 2006. Hypertension, which is a non-communicable disease also shows a decreasing rate. (See Table No. 3-96).

Table No. 3-100: Leading Causes of Morbidity
 Province of Davao del Norte, CYs 2003-2007

| CAUSES | 2003 | | 2004 | | 2005 | | 2006 | | 2007 | |
|------------------------------------|---------------|------|---------------|------|---------------|-------|---------------|-------|---------------|-------|
| | No. of Deaths | Rate | No. of Deaths | Rate | No. of Deaths | Rate | No. of Deaths | Rate | No. of Deaths | Rate |
| Accute Upper Respiratory Infection | 16,212 | 2035 | 11,341 | 1391 | 10,906 | 1,307 | 19,256 | 2,256 | 10,955 | 1,293 |
| Lower Respiratory Infection | 4,728 | 594 | 6,786 | 833 | 9,840 | 1,180 | 4,614 | 540 | 4,892 | 577 |
| Pneumonia | 2,662 | 334 | 2,161 | 265 | 4,300 | 515 | 5,610 | 657 | 3,507 | 414 |

| | | | | | | | | | | |
|--|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| Genito-Urinary System Dis | 1,131 | 142 | 1,120 | 137 | 4,107 | 492 | 505 | 59 | 2,470 | 291 |
| Diarrhea & GE | 2,758 | 346 | 2,208 | 271 | 5,150 | 617 | 3,103 | 363 | 2,197 | 259 |
| Injuries to Unspecified path of the body | 1,792 | 225 | 278 | 34 | 3,708 | 445 | 2,050 | 240 | 1,746 | 206 |
| Septicemia (Sepsis) | 487 | 61 | 255 | 31 | 1,416 | 170 | 2,568 | 301 | 1,425 | 168 |
| Hypertensive Diseases | 1,709 | 215 | 1,749 | 215 | 1,902 | 228 | 2,753 | 322 | 1,152 | 136 |
| Dis. Of the Skin & Subcutaneous Tis. | 736 | 92 | 972 | 119 | 2,312 | 277 | 972 | 114 | 841 | 99 |
| Respiratory TB | 401 | 50 | 412 | 51 | 584 | 70 | 927 | 109 | 461 | 57 |
| Diabetes Mellitus | 76 | 10 | 60 | | 478 | 57 | 189 | 22 | 298 | 35 |

Source: Provincial Health Office, Davao del Norte

Comparing to other provinces in the region, Davao del Norte has the most reported cases on Acute Upper Respiratory Tract Infection.

**Table No. 3-101: Leading Causes of Morbidity
By Province / City, 2007**

| | | DEL NORTE | | COMVAL | | DEL SUR | | ORIENTAL | | DAVAO CITY | |
|-----|---|-----------|------|--------|-------|---------|-------|----------|-------|------------|------|
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| 1. | Acute Upper Respiratory Tract Infection | 19,955 | 1293 | 16,351 | 2,565 | 497 | 60 | 8,491 | 1,747 | 7,212 | 529 |
| 2. | Acute Lower Resp. Infection | 4,892 | 577 | 4,594 | 721 | 8,940 | 1,057 | 3,335 | 686 | 5,619 | 412 |
| 3. | Pneumonia | 3,507 | 414 | 7,285 | 1,143 | 1,426 | 173 | 2,283 | 470 | 5,391 | 395 |
| 4. | Diarrhea All Forms | 2,197 | 259 | 5,304 | 832 | 1,989 | 242 | 2,332 | 480 | 3,028 | 222 |
| 5. | Urinary Tract Infection | 2,019 | 238 | - | - | 342 | 42 | 1,526 | 314 | 1,533 | 112 |
| 6. | Respiratory Tuberculosis | 1,600 | 189 | 1,061 | 166 | 1,139 | 138 | 735 | 151 | 2,919 | 214 |
| 7. | Septicemia | 1,425 | 168 | - | - | - | - | - | - | - | - |
| 8. | Hypertensive Diseases | 1,152 | 136 | 6,482 | 1,017 | 656 | 80 | 1,016 | 209 | 2,058 | 151 |
| 9. | Schistosomiasis | 666 | 79 | 675 | 100 | - | - | - | - | - | - |
| 10. | Influenza | 526 | 62 | - | - | 652 | 79 | 1,243 | 359 | - | - |
| 11. | Diseases of the Heart | - | - | 3,239 | 508 | - | - | - | - | - | - |
| 12. | Anemia | - | - | 2,255 | 354 | - | - | - | - | - | - |
| 13. | Bronchial Asthma | - | - | - | - | 809 | 98 | 536 | 110 | 1,197 | 88 |
| 14. | Gastritis | - | - | - | - | - | - | 335 | 70 | - | - |
| 15. | Cerebrovascular Disease | - | - | - | - | 424 | 52 | - | - | - | - |
| 16. | Dengue | - | - | - | - | - | - | - | - | 2,833 | 208 |
| 17. | Malnutrition | - | - | - | - | - | - | - | - | 1,922 | 141 |
| 18. | Intestinal Parasitism | - | - | 1,061 | 166 | - | - | - | - | - | - |

Source: Provincial Health Office, Davao del Norte

The International Reference Standard (IRS) was adopted starting CY 2004 as a new tool to determine the nutrition status of Filipino children classifying them as Below Normal (BN), Below Normal Very Low (BNVL) Normal (N) and Above Normal (AN). This program is expected to provide a more realistic and accurate estimate of the prevalence of malnutrition, thus providing greater impetus for necessary interventions. Relative to this, a comprehensive monitoring and advocacy tools were implemented to promote optimum growth and development of children less than six (6) years old.

In Davao del Norte, the nutritional status of children below seven years old was determined through the conduct of Operation Timbang by Municipality/City. There were 11,817 pre-schoolers weighed wherein 1,161 or 9.82% were identified as Below Normal Very low or Severely Malnourished; 9,542 or 80.75% are Below Normal and 1,114 or 9.43% are Overweight. Most of the children falling under BNVL and BN came from Tagum City. The over-all result for Davao del Norte points out that the prevalence rate of malnourished among pre-school children is 11.04% and among the municipalities, Talaingod has the highest percentage rate of 22.35% followed by 13.53% of San Isidro and 12.88% of New Corella. Inadequate intake of food due to large families; under employment of parents as well as inadequate food production, were considered as the main causes of malnutrition. The presence of diseases and poor maternal care were also identified as contributory factors in malnutrition particularly to low birth weight among 0-6 month infants.

**Table No. 3-102: Operation Timbang Result, By City / Municipality
 Province of Davao del Norte, 2007**

| City/ Municipality | BNVL | BN | OVERWEIGHT | % |
|--------------------|-------|-------|------------|-------|
| Asuncion | 92 | 883 | 74 | 15.21 |
| B.E. Dujali | 9 | 119 | 4 | 5.71 |
| Carmen | 41 | 462 | 35 | 6.33 |
| Kapalong | 187 | 1,110 | 122 | 19 |
| New Corella | 63 | 639 | 28 | 12.88 |
| San Isidro | 51 | 411 | 169 | 13.53 |
| Sto. Tomas | 91 | 951 | 79 | 8.73 |
| Talaingod | 107 | 555 | 17 | 22.35 |
| IGACOS | 180 | 1,181 | 168 | 19 |
| Panabo | 100 | 1,165 | 96 | 7.03 |
| Tagum City | 240 | 2,066 | 322 | 9.96 |
| Davao del Norte | 1,161 | 9,542 | 1,114 | 11.04 |

Source: PHO-Davao del Norte

The comparative data on the nutritional status of school children shows that based on the Operation Timbang result for two school years, the percentage of malnourished children was reduced from 16.66% in SY 2006-2007 to 16.47% in SY 2007-2008. Out of the identified malnourished children in SY 2006 – 2007, only 19% or 1,698 were rehabilitated at the end of the school year. (See Table No. 3-103).

Table No.3-103: Nutritional Status of School Children, SY 2006-2008
Province of Davao del Norte

| | SY 2006 - 2007 | SY 2007-2008 |
|-----------------------|-----------------------|---------------------|
| Total Enrollment | 53,734 | 55,219 |
| Total Pupils Weighed | 53,667 | 55,219 |
| % Coverage | 96.8 | 100 |
| Malnourished Children | | |
| Number | 8,941 | 9,096 |
| Percentage | 16.66 | 16.47 |

Source : DepEd- Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

As shown in the comparative presentation in the prevalence of malnutrition covering the period 2003-2007, Table No. 3-104 it is very evident that a remarkable reduction for Davao del Norte was observed from 20.96% in 2003 down to 9.99% in 2007. This is a manifestation that the local unit had continuously advocating the implementation of service delivery points such as Health and Nutrition Posts

There is still a need to increase community awareness and improve service delivery for the protection of children particularly those in remote areas of the province.

While it is true that the supply of Vitamin A was more than adequate among 6.71 months old children which was distributed during Garantisadong Pambata activities.

Table No. 3-104: Prevalence of Malnutrition, By Province / City 2003-2007
Region XI

| Province / City | 2003 | 2004 | 2005 | 2006 | 2007 |
|------------------------|-------------|-------------|-------------|-------------|-------------|
| Davao del Norte | 20.96 | 25.02 | 12.62 | 10.7 | 9.99 |
| Compostela Valley | 24.8 | 18.02 | 14.8 | 11.6 | 10.82 |
| Davao Oriental | 28.7 | 18.4 | 17.96 | 16.9 | 16.11 |
| Davao del Sur | 28.4 | 18.8 | 16.42 | 15.3 | 14.87 |
| Davao City | 21.3 | 11.9 | 9.16 | 6.9 | 6.75 |

Source: DOH-Region XI

The percentage of infants with low birth weight shows a declining trend from 3.47% in 2003 or 1.10% in 2006 and an increased percentage of 2.30% in 2007. For the entire Davao Region, Davao del Norte ranks second. The comparative scenario is presented in Table No. 3-105.

**Table No.3-105: Percent of Infants with Low Birth Weight
By Province / City, 2003-2007**

| PROVINCE/ CITY | 2003 | | | 2004 | | | 2005 | | | 2006 | | | 2007 | | |
|-------------------|-------------|-------------------|------|-------------|-------------------|------|-------------|-------------------|------|-------------|-------------------|------|-------------|-------------------|------|
| | Total LB | Birthwt <2500g | % |
| Davao del Norte | 14,851 | 516 | 3.47 | 16,150 | 263 | 1.63 | 16,747 | 239 | 1.43 | 18,144 | 199 | 1.10 | 17,880 | 412 | 2.30 |
| Compostela Valley | 12,155 | 255 | 2.10 | 14,479 | 306 | 2.11 | 14,245 | 300 | 2.11 | 14,365 | 287 | 1.10 | 14,342 | 208 | 1.45 |
| Davao Oriental | 8,470 | 212 | 2.50 | 9,252 | 212 | 2.3 | 9,580 | 204 | 2.13 | 9,595 | 115 | 1.2 | 9,916 | 251 | 2.53 |
| Davao del Sur | 15,675 | 313 | 1.10 | 16,944 | 350 | 2.07 | 18,229 | 348 | 1.91 | 18,223 | 401 | 2.20 | 18,415 | 466 | 2.53 |
| Davao City | 23,670 | 970 | 4.10 | 25,635 | 1,020 | 3.98 | 29,159 | 1,583 | 5.43 | 29,325 | 968 | 3.30 | 29,895 | 877 | 2.93 |
| Davao Region | 59,979 | 1,750 | 2.92 | 66,310 | 1,888 | 2.85 | 71,213 | 2,435 | 3.42 | 71,508 | 1,771 | 2.48 | 72,568 | 2,214 | 3.05 |

Source: DOH-Region XI

6.3.2 Education Services

a. Facilities

In the elementary level, there are a total of 344 schools, 291 of which are public schools and the 53 are private schools. The Island Garden City of Samal has the most number of schools. (Table No. 3-106) Access to elementary education is already available in all barangays of the province.

**Table No. 3-106: Education Facilities, by level
Province of Davao del Norte, CY 2006**

| City/ Municipality | Elementary | | | Secondary | | |
|--------------------|------------|---------|-------|-----------|---------|-------|
| | Public | Private | Total | Public | Private | Total |
| Asuncion | 27 | 1 | 28 | 3 | 1 | 4 |
| B.E. Dujali | 10 | 2 | 12 | 3 | 1 | 4 |
| Carmen | 21 | 2 | 23 | 6 | - | 6 |
| Kapalong | 29 | 3 | 32 | 7 | 3 | 10 |
| New Corella | 26 | 2 | 28 | 3 | 2 | 5 |
| San Isidro | 15 | - | 15 | 3 | - | 3 |
| Sto. Tomas | 25 | 9 | 34 | 7 | 5 | 12 |
| Talaingod | 12 | - | 12 | 2 | - | 2 |
| IGACOS | 51 | 4 | 55 | 10 | 5 | 15 |
| Panabo | 44 | 11 | 55 | 10 | 8 | 18 |
| Tagum | 31 | 19 | 50 | 7 | 10 | 17 |
| Davao del Norte | 291 | 53 | 344 | 61 | 35 | 96 |

Source: DepEd □ Divisions of Davao del Norte, Tagum City, Panabo City and IGaCos

In the secondary level, there are a total of 96 schools, 61 of which are public schools and the 35 are private institutions. Panabo City has the most number of schools followed by Tagum City (Table No. 3-106).

Tertiary schools are also available. A total of 17 schools/ colleges/ universities are offering various courses/ degrees. Some of the schools are extension of colleges/ universities operating in Davao City. (Table No. 3-107).

**Table No. 3-107: Educational Facilities, Tertiary
Province of Davao del Norte, 2006**

| | INSTITUTION | LOCATION |
|-----|---|-----------------|
| 1. | ACES Tagum College | Tagum City |
| 2. | AMA Computer College of Davao | Tagum City |
| 3. | Arriesgado College Foundation | Tagum City |
| 4. | Davao del Norte State College | Panabo City |
| 5. | Holy Cross of Davao College | IGACOS |
| 6. | Liceo de Davao | Tagum City |
| 7. | North Davao College | Panabo City |
| 8. | North Davao College Foundation | Tagum City |
| 9. | Queen of Apostles College Seminary | Tagum City |
| 10. | Samal Institute | IGACOS |
| 11. | Saint Mary's College | Tagum City |
| 12. | STI College of Mindanao | Tagum City |
| 13. | UM Panabo College | Panabo City |
| 14. | UM Peñaplata College | IGACOS |
| 15. | UM Tagum College | Tagum City |
| 16. | University of Southeastern Philippines | Tagum City |
| 17. | Kapalong College of Arts, Sciences & Technology | Kapalong |

Source : CHED, Region XI

Technical and vocational education is also provided by several TECVOC schools. There are a total of 36 schools offering mostly short term courses. Tagum City has the most number of tech voc schools (Table No. 3-108)

**Table No.3-108: TECH VOC Schools
Province of Davao del Norte, 2008**

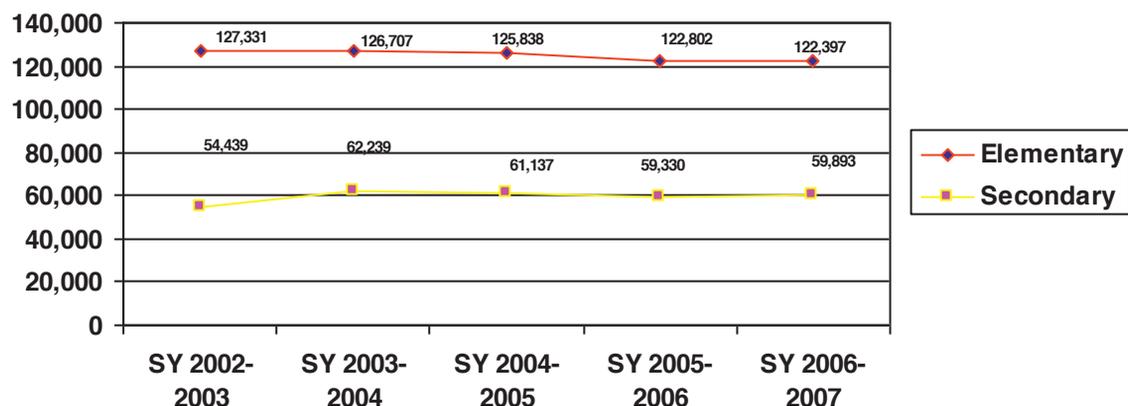
| CITY / MUNICIPALITY | NO. OF TECH. VOC SCHOOL |
|-----------------------------|--------------------------------|
| B.E. Dujali | 1 |
| Island Garden City of Samal | 1 |
| Kapalong | 2 |
| New Corella | 1 |
| Panabo City | 7 |
| Sto. Tomas | 3 |
| Tagum City | 21 |
| Davao del Norte | 36 |

Source: TESDA, Davao del Norte

b. Enrolment

Enrolment in the elementary level has been decreasing for the last (5) school years, while in the secondary, a slight decrease was observed from SY 2003 - 2004 to SY 2006 - 2007 (Figure No.3-20).

Figure No.3-20: **Enrolment By Level**
Province of Davao del Norte, 2002 - 2007



Enrolment in the tertiary level has also been increasing from 14,889 in SY 2005-2006 to 15,378 in SY 2006-2007. However, this data does not represent the students who are residents of Davao del Norte alone as there are those who came from outside the province. The University of Mindanao in Tagum City has the most number of students enrolled in various courses.

Table No.3-109: **Enrolment, by School**
Province of Davao del Norte, SY 2005-2007

| Name of School | SY 2005-2006 | SY 2006-2007 | Increase/Decrease |
|--|---------------|---------------|-------------------|
| 1. ACES | 497 | 547 | 50 |
| 2. AMA | 821 | 757 | (64) |
| 3. Arriesgado | 1,011 | 650 | (361) |
| 4. Davao del Norte State College | 1,191 | 1,088 | (103) |
| 5. Holy Cross of Davao - Babak | 46 | 91 | 45 |
| 6. Liceo de Davao | 70 | 53 | (17) |
| 7. North Davao College - Panabo | 437 | 457 | 20 |
| 8. North Davao College - Tagum | 936 | 983 | 47 |
| 9. Queen of Apostles College Seminary | 120 | 124 | 4 |
| 10. Samal Institute – Peñaplata | 109 | - | - |
| 11. Saint Mary’s College | 2,145 | 2,844 | 699 |
| 12. STI College | 226 | 294 | 68 |
| 13. University of Mindanao - Panabo | 845 | 929 | 84 |
| 14. University of Mindanao - Tagum | 4,474 | 4,832 | 358 |
| 15. University of Mindanao – Peñaplata | 125 | 198 | 73 |
| 16. University of Southeastern Phils. | 1,688 | 1,167 | (521) |
| 17. Kapitalong College of Arts | 148 | 364 | 216 |
| TOTAL | 14,889 | 15,378 | 489 |

Source: CHED, Region XI

Enrolment at the technical vocational courses has been fluctuating for the past four (4) years. Be it noted that the participation of female is higher in courses more likely biased for women. Table Nos. 3-110 and 3-111.

**Table No.3-110: TECH – VOC Enrollment, by Sex and Year
Province of Davao del Norte, 2003-2007**

| SCHOOL YEAR | TOTAL | ENROLMENT | | | |
|-------------|-------|-----------|-------|------|-------|
| | | Female | | Male | |
| | | No. | % | No. | % |
| 2003-2004 | 4269 | 1765 | 41.34 | 2504 | 58.66 |
| 2004-2005 | 5092 | 3022 | 59.35 | 2070 | 40.65 |
| 2005-2006 | 2939 | 1556 | 52.94 | 1383 | 47.06 |
| 2006-2007 | 3254 | 1912 | 58.76 | 1342 | 41.24 |

Source: TESDA, Davao del Norte

**Table No.3-111: TECV – VOC Enrollment by Course
Province of Davao del Norte, 2003-2007**

| COURSE / DEGREE PROGRAM | Summary of Enrollment (2003-2007) | | | | |
|--|-----------------------------------|--------|-------|------|-------|
| | Total | Female | | Male | |
| | | No. | % | No. | % |
| A'rch Drafting | 62 | 13 | 21.0 | 49 | 79.0 |
| Automotive Technology | 2805 | 2 | 0.1 | 2803 | 99.9 |
| Building Construction | 4 | | 0.0 | 4 | 100.0 |
| Basic Engine Trouble Shooting | 116 | | 0.0 | 116 | 100.0 |
| Business Information Management | 271 | 208 | 76.8 | 63 | 23.2 |
| Caregiver | 187 | 75 | 40.1 | 112 | 59.9 |
| Computer Programming | 1787 | 932 | 52.2 | 855 | 47.8 |
| Computer Secretarial | 1409 | 1291 | 91.6 | 118 | 8.4 |
| Computer System Network and Technology | 226 | 83 | 36.7 | 143 | 63.3 |
| Computer System Design and Programming | 285 | 163 | 57.2 | 122 | 42.8 |
| Computer Technician | 1845 | 712 | 38.6 | 1133 | 61.4 |
| Computer Technology | 1231 | 598 | 48.6 | 633 | 51.4 |
| Diploma in Computer Electronics Technology | 167 | 20 | 12.0 | 147 | 58.0 |
| Diploma in Computer Studies | 75 | 50 | 66.7 | 25 | 33.3 |
| Diploma in E- Commerce Programming | 413 | 289 | 70.0 | 124 | 30.0 |
| Diploma in Performing Arts | 142 | 117 | 82.4 | 25 | 17.6 |
| Diploma in Information Technology | 258 | 151 | 58.5 | 107 | 41.5 |
| Electrical Technology | 333 | | 0.0 | 333 | 100.0 |
| Electronics Technology | 677 | 8 | 1.2 | 669 | 98.8 |
| Food Trades | 36 | 20 | 55.6 | 16 | 44.4 |
| Garments | 15 | 15 | 100.0 | | 0.0 |
| Hotel and Restaurant Management | 1760 | 1190 | 67.6 | 570 | 32.4 |
| Natural Therapeutic | 244 | 179 | 73.4 | 65 | 26.6 |
| Office Management | 440 | 413 | 93.9 | 27 | 6.1 |
| Practical Nursing | 120 | 79 | 65.8 | 41 | 34.2 |
| Pre-Licensing Course | 447 | 10 | 2.2 | 437 | 97.8 |
| RAC | 193 | | 0.0 | 193 | 100.0 |

Source: TESDA, Davao del Norte

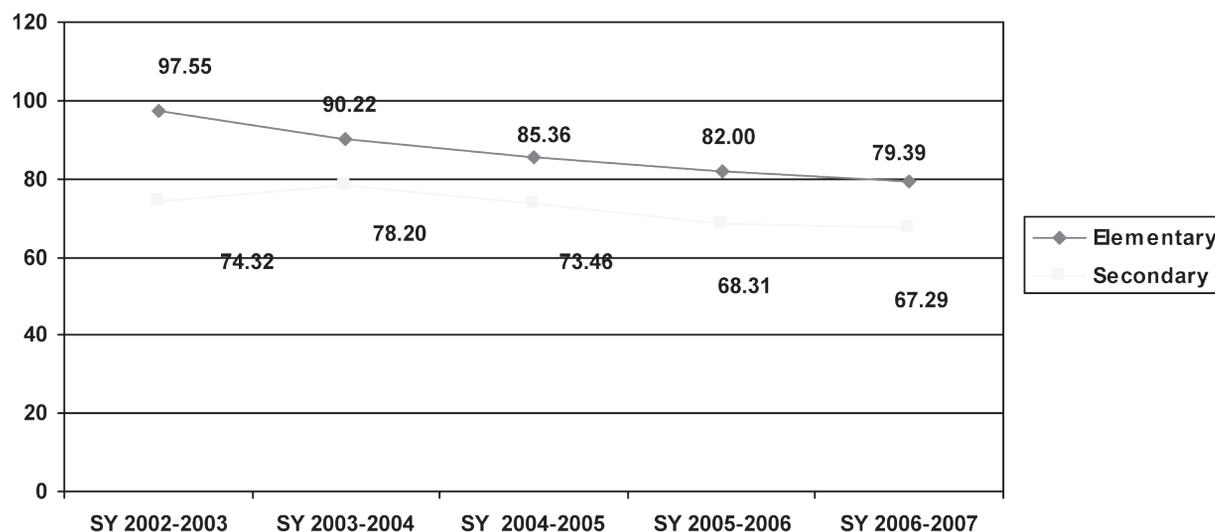
c. Performance Indicators

1. Participation Rate or Net Enrolment Rate (NER)

Net enrolment ratio or participation rate is the ratio of the enrolment for the age group corresponding to the official school age in the elementary and secondary level to the population of the same age group in a given year. The official school age is 6-11 for elementary and 12-15 for secondary.

At the elementary level, gross participation rate or net enrolment rate for the last five (5) years showed a declining trend, i.e. 97.55% in SY 2002-2003 to 79.39% for SY 2006-2007. At the secondary, the same scenario has been observed although an increase was experienced from SY 2002-2003 (74.32%) to SY 2003-2004 (78.20%). Declines in NER is an indication that the province is still far from achieving the goal of providing basic education to all based on the United Nation’s Millennium Development Goal (MDG) on education.

*Figure No. 3-21: Gross Participation Rate/ Net Enrolment Ratio
 Davao del Norte, SY 2002-2003 - SY 2006-2007*



Considering other divisions in the region the declining Net enrolment ratio is a common scenario in all areas both in the elementary and secondary level. Table Nos. 3-112 and 3-113.

**Table No. 3-112: Net Enrolment Ratio - Elementary Level by Division
Region XI, 2003 – 2007**

| DIVISION | SY 2003-2004 | SY 2004-2005 | SY 2005-2006 | SY 2006-2007 |
|-------------------|--------------|--------------|--------------|--------------|
| Compostela Valley | 77.16% | 74.94% | 71.01% | 68.72% |
| Davao City | 81.39% | 80.29% | 77.33% | 75.19% |
| Davao del Norte | 79.52% | 76.65% | 72.50% | 69.08% |
| Davao del Sur | 75.24% | 71.86% | 67.02% | 62.67% |
| Davao Oriental | 85.25% | 84.17% | 80.86% | 75.66% |
| Digos City | 74.81% | 72.93% | 69.67% | 67.32% |
| IGACOS | 80.59% | 76.91% | 74.53% | 73.98% |
| Panabo City | 83.63% | 80.53% | 77.47% | 75.52% |
| Tagum City | 75.66% | 76.10% | 70.52% | 68.58% |
| TOTAL REGION XI | 79.42% | 77.46% | 73.71% | 70.67% |

Source: DepEd □ Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

**Table No.3-113: Net Enrolment Ratio - Secondary Level by Division
Region XI, 2003 – 2007**

| DIVISION | SY 2003-2004 | SY 2004-2005 | SY 2005-2006 | SY 2006-2007 |
|-----------------|--------------|--------------|--------------|--------------|
| COMVAL | 67.68% | 65.33% | 64.15% | 60.56% |
| Davao City | 72.50% | 61.49% | 64.95% | 63.17% |
| Davao del Norte | 63.52% | 55.17% | 53.47% | 51.84% |
| Davao del Sur | 43.22% | 39.81% | 37.32% | 34.99% |
| Davao Oriental | 59.59% | 57.94% | 56.67% | 53.48% |
| Digos City | 96.33% | 101.42% | 91.44% | 77.59% |
| IGACOS | 61.43% | 55.27% | 53.95% | 55.63% |
| Panabo City | 74.42% | 68.06% | 64.06% | 59.62% |
| Tagum City | 74.29% | 65.94% | 55.25% | 63.88% |
| TOTAL REGION XI | 64.68% | 58.88% | 58.34% | 55.58% |

Source: DepEd □ Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

Other Performance Indicators in the public elementary and secondary schools are summarized in Table No. 3-114 and 3-115 respectively.

**Table No. 3-114: Summary of Performance Indicators, Public Elementary
Province of Davao del Norte, 2002 – 2007**

| Indicators | 2002-2003 | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| Participation Rate | 95.15 | 87.81 | 82.81 | 79.30 | 76.71 |
| Survival Rate | 63.96 | 71.63 | 71.18 | 68.62 | 46.44 |
| Transition Rate | 98.74 | 96.25 | 94.06 | 93.55 | 90.44 |
| Graduation Rate | 98.69 | 98.87 | 98.17 | 96.86 | 97.58 |
| Retention Rate | 87.85 | 86.58 | 90.56 | 90.69 | 91.89 |
| Drop-out Rate | 0.46 | 0.04 | 0.05 | 0.06 | 0.05 |

Source: DepEd □ Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

**Table No. 3-115: Summary of Performance Indicators, Public Secondary
 Province of Davao del Norte, 2002 – 2007**

| | School Year | | | | |
|--------------------|-------------|-----------|-----------|-----------|-----------|
| | 2002-2003 | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 |
| Participation Rate | 74.32 | 78.20 | 73.46 | 68.31 | 67.29 |
| Retention Rate | 83.75 | 87.36 | 67.50 | 77.48 | 87.19 |
| Drop-out Rate | 4.98 | 5.72 | 7.34 | 5.65 | 5.79 |
| Transition Rate | 88.78 | 83.29 | 71.27 | 90.95 | 82.67 |
| Survival Rate | 66.29 | 63.18 | 67.5 | 68.51 | 61.88 |
| Graduation Rate | 97 | 98.12 | 91.87 | 92.35 | 93.37 |

Source: DepEd Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

2. National Achievement Test (NAT)

The Academic Performance in the elementary is measured by the National Achievement Test which was administered to Grade VI pupils. It comes in 5 learning areas of Science, Math, English, Filipino and HEKASI. Per data presented in Table No. 3-116, it shows that the Mean Percentage Scores (MPS) is fluctuating resulting to a way far behind the mastery level of 75%. The four year comparative data of NAT Performance of the cities and municipalities, shows a very low achievement rate as against the 75% target. Factors from the level of the students, teachers and related resources were considered to have contributed to the low ratings.

**Table No. 3-116: National Achievement Test Performance, Elementary Level
 Province of Davao del Norte, SY 2004-2007**

| City/Municipality | School Year | | |
|-------------------|-------------|-----------|-----------|
| | 2004-2005 | 2005-2006 | 2006-2007 |
| Asuncion | 53.08 | 43.71 | 67.32 |
| B.E. Dujali | 59.92 | 48.71 | 58.78 |
| Carmen | 61.45 | 60.39 | 58.65 |
| Kapalong | 59.49 | 57.81 | 58.67 |
| New Corella | 57.63 | 49.91 | 51.41 |
| San Isidro | 59.69 | 65.58 | 64.37 |
| Sto. Tomas | 60.61 | 49.94 | 58.97 |
| Talaingod | 52.53 | 57.01 | 49.95 |
| IGACOS | 48.74 | 63.39 | 55.83 |
| Panabo | 53.95 | 48.29 | 49.31 |
| Tagum | 57.57 | 53.59 | 58.82 |
| Davao del Norte | 56.79 | 54.39 | 57.46 |

Source: DepEd Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

In the Regional Ranking of Mean Percentage Scores for ten Divisions covering SY 2007- 2008 in Region XI, IGACOS ranks second with 70.35% to Digos City with 77.85% rating. For the entire country, Region XI ranks number 15.

**Table No. 3-117: Mean Percentage Score - Elementary Level by Division
Region XI**

| Division | Division MPS | | Increment | Rank |
|-------------------|--------------|--------------|-----------|------|
| | SY 2006-2007 | SY 2007-2008 | | |
| Digos City | 79.38 | 77.85 | -1.53 | 1 |
| IGACOS | 55.83 | 70.35 | 14.52 | 2 |
| Davao del Sur | 63.94 | 67.95 | 4.01 | 3 |
| Davao del Norte | 59.73 | 64.44 | 4.71 | 4 |
| Mati City | | 63.79 | | 5 |
| Davao Oriental | 50.98 | 63.37 | 12.39 | 6 |
| Compostela Valley | 59.52 | 62.39 | 2.87 | 7 |
| Panabo City | 49.31 | 59.62 | 10.31 | 8 |
| Tagum City | 58.82 | 56.19 | -2.63 | 9 |
| Davao City | 51.67 | 53.89 | 2.22 | 10 |

Source: DepEd, Region XI

The Academic Performance of the Secondary Schools as measured by the 4th year National Achievement Test covering Science, Math, English, Filipino and Araling Panlipunan was very low. The data presented in Table No. 3-118 shows a decrease of 1.06% in the mean percentage score over that of 2005. The five subject areas were all far behind the 75% mastery level of competence. English subject got the highest while science got the lowest for the past two years. The low performance could be due to poor study habits, nutrition, lack of family support and motivation to study of the students.

Taking into consideration the level of performance and in terms of achievement rate gained by the different schools divisions of Region XI, Tagum City ranks number five (5) followed by Davao del Norte. IGACOS, Panabo City and Davao del Sur got the highest rank while Davao City got the lowest rank. For the entire Davao Region, the Mean Percentage Score for SY 2007-2008 is placed at 44.30.

**Table No. 3-118: National Achievement Test
Davao Region, SY 2007-2008**

| Region | No. of Students | Math | English | Science | Filipino | Aral Pan | Total MPS | Rank |
|----------------------|-----------------|-------|---------|---------|----------|----------|-----------|------|
| Davao del Sur | 5,946 | 46.38 | 55.76 | 51.67 | 46.50 | 59.68 | 52.00 | 1 |
| Davao Oriental | 6,776 | 41.26 | 52.21 | 47.29 | 46.49 | 54.64 | 48.38 | 2 |
| ComVal | 9,912 | 41.80 | 51.02 | 47.61 | 46.12 | 53.04 | 47.92 | 3 |
| Digos City | 1,456 | 32.72 | 54.92 | 44.23 | 43.85 | 55.27 | 46.20 | 4 |
| Tagum City | 3,204 | 34.96 | 52.25 | 43.64 | 43.32 | 54.60 | 45.75 | 5 |
| Davao del Norte | 4,879 | 33.85 | 48.87 | 39.61 | 40.09 | 51.88 | 42.86 | 6 |
| IGACOS | 1,260 | 33.69 | 47.56 | 39.65 | 38.84 | 51.74 | 42.30 | 7 |
| Panabo City | 2,199 | 35.65 | 46.41 | 35.14 | 38.06 | 45.58 | 40.17 | 8 |
| Davao City | 17,850 | 30.86 | 45.44 | 34.83 | 38.69 | 44.27 | 38.82 | 9 |
| Region XI | 53,482 | 36.76 | 49.55 | 42.00 | 42.45 | 50.77 | 44.30 | |
| TOTAL COUNTRY | 1,183,871.00 | 42.85 | 53.46 | 46.71 | 47.64 | 55.63 | 49.26 | |

Source: DepEd, Region XI

3. Literacy

Literacy in the province shows in irregular trend and an indication that the target of 2% yearly increase was not attained. Except for calendar year 2005, a downward rate was experienced. Illiteracy rate on the other hand, was also increasing though a reduced rate was attained in Calendar Year 2006. Table No. 3-119 shows the five year comparison.

**Table No. 3-119: Literacy and Illiteracy Rate, by year
 Province of Davao del Norte, 2002-2006**

| Calendar Year | Literacy Rate | Illiteracy Rate |
|---------------|---------------|-----------------|
| 2002 | 95.38 | 4.62 |
| 2003 | 94.02 | 5.98 |
| 2004 | 93.38 | 6.62 |
| 2005 | 96.52 | 3.47 |
| 2006 | 94.36 | 5.64 |

Source: DepEd □ Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

The Alternative Learning System (ALS) of the Department of Education and the LGUs plays an important role in attaining the goal of “Education for all”. It aims on the attainment of functional literacy especially the out of school youth, the adult and the indigenous people.

Towards raising the literacy and numeracy skills of the poor and also to expand access to basic education, non-formal education has been established. From 2002 to 2006, a total of 836 literacy classes were organized with a total enrollment of 22,323, wherein 42.17% or 9,413 were females and 55.60% or 12,412 were males.

**Table No. 3-120: Literacy Classes and Enrolment (Non-Formal Education)
 Province of Davao del Norte, 2002-2006**

| Year | No. of Classes | Total | Enrolment | | | |
|------|----------------|-------|-----------|-------|-------|-------|
| | | | Female | % | Male | % |
| 2002 | 120 | 3,286 | 1,613 | 49.09 | 1,673 | 50.91 |
| 2003 | 241 | 6,041 | 2,288 | 37.87 | 3,753 | 62.13 |
| 2004 | 148 | 3,758 | 1,735 | 46.17 | 2,023 | 53.83 |
| 2005 | 173 | 4,802 | 1,762 | 36.69 | 2,540 | 52.89 |
| 2006 | 154 | 4,436 | 2,015 | 45.42 | 2,421 | 54.58 |

Source: DepEd □ Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

4. Resource Indicators

4.1 Teaching Force

Available teachers at the elementary totaled 3,122 and 1,314 teachers at the secondary level. Teaching force in the province is female dominated having 89% female teachers in the elementary and 76% female teachers at the secondary.

Taking into account the current enrolment (SY 2006-2007) of 116,245 in the elementary and 42,339 in the secondary, the teacher – pupil/ student ratio is placed at 1:37 and 1:32 respectively. This scenario is within the national standard of 1 teacher for every 40 students/ pupils. There seems to be sufficient number of teachers in both level, but taking into consideration the school to school requirements, there is reported lack of teachers in some schools. Table Nos. 3-121 and 3-122.

*Table No. 3-121: Public Elementary Resource Indicators
Province of Davao del Norte, CY 2006*

| City/ Municipality | Current Enrolment 2006-2007 | Actual No. of Teacher | Teacher- Pupil Ratio | Actual No. of Classrooms | Classroom- Pupil Ratio | Actual No. of Armchair s | Armcha ir - Pupil Ratio |
|-----------------------|-----------------------------------|-----------------------------|----------------------------|--------------------------------|---------------------------|-----------------------------------|----------------------------------|
| Asuncion | 7,519 | 213 | 1:35.30 | 186 | 1:40.42 | 7,463 | 1:1.01 |
| B.E. Dujali | 2,839 | 78 | 1:36.40 | 76 | 1:37.36 | 3,792 | 1:0.75 |
| Carmen | 8,489 | 240 | 1:35.37 | 216 | 1:39.30 | 9,827 | 1:0.86 |
| Kapalong | 9,143 | 226 | 1:40.46 | 189 | 1:48.38 | 7,513 | 1:1.22 |
| New Corella | 6,990 | 188 | 1:37.18 | 199 | 1:35.13 | 6,829 | 1:1.02 |
| San Isidro | 3,730 | 106 | 1:35.19 | 95 | 1:39.26 | 3,791 | 1:0.98 |
| Sto. Tomas | 13,043 | 396 | 1:32.94 | 333 | 1:39.17 | 12,687 | 1:1.01 |
| Talaingod | 2,131 | 47 | 1:45.34 | 43 | 1:49.56 | 1,632 | 1:1.31 |
| IGACOS | 13,534 | 386 | 1:35.06 | 394 | 1:34.35 | 1,177 | 1:1.07 |
| Panabo | 21,735 | 566 | 1:38.40 | 574 | 1:37.87 | 1,742 | 1:1.01 |
| Tagum City | 27,092 | 676 | 1:40.00 | 610 | 1:44.00 | 3,383 | 1:2.00 |
| Davao del Norte | 116,245 | 3,122 | 1:37.23 | 2,915 | 1:39.88 | 59,836 | 1:1.94 |

Source: DepEd □ Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

*Table No.3-122: Public Secondary Education Resource Indicators
Province of Davao del Norte*

| City/Municipality | Current Enrolment 2006-2007 | Actual No. of Teacher | Teacher- Pupil Ratio | Actual No. of Classrooms | Classroom- Pupil Ratio | Actual No. of Armchairs | Armchair- Pupil Ratio |
|-------------------|-----------------------------------|-----------------------------|-------------------------|--------------------------------|---------------------------|-------------------------------|-----------------------------|
| Asuncion | 2,487 | 74 | 1:33.61 | 45 | 1:55.27 | 2,146 | 1:1.158 |
| B.E. Dujali | 1,590 | 47 | 1:33.81 | 30 | 1:53.0 | 1,563 | 1:1.017 |
| Carmen | 3,235 | 76 | 1:42.56 | 54 | 1:59.91 | 2,429 | 1:1.332 |
| Kapalong | 3,421 | 112 | 1:30.54 | 61 | 1:56.08 | 2,633 | 1:1.30 |
| New Corella | 2,408 | 63 | 1:38.22 | 39 | 1:61.74 | 1,352 | 1:1.781 |
| San Isidro | 1,508 | 47 | 1:32.08 | 25 | 1:60.32 | 1,075 | 1:1.403 |
| Sto. Tomas | 5,377 | 142 | 1:37.87 | 100 | 1:53.77 | 5,016 | 1:1.072 |
| Talaingod | 408 | 15 | 1:27.20 | 9 | 1:45.33 | 394 | 1:1.035 |
| IGACOS | 5,220 | 136 | 1:38.38 | 94 | 1:55.53 | 2,240 | 1:1.96 |
| Panabo | 9,070 | 245 | 1:37.02 | 164 | 1:55.30 | 6,902 | 1:1.30 |
| Tagum City | 12,987 | 357 | 1:36.1 | 229 | 1:56.00 | 9,840 | 1:3.10 |
| Davao del Norte | 42,339 | 1,314 | 1:32.22 | 850 | 1:49.81 | 35,590 | 1:1.19 |

Source: DepEd □ Divisions of Davao del Norte, Tagum City, Panabo City and IGaCoS

4.2 Classrooms

In 2006, available classrooms in the elementary totaled 2,915 and 850 in the secondary. Classroom – student ratio is computed at 1:39 in the elementary and 1:49 in the secondary. The Provincial Scenario at the secondary is a little bit higher than the national standard of 40 students per classroom. Taking into account the school to school requirements, additional classrooms at the secondary level is a felt need.

4.3 Chairs/ Armchairs

Data reveals additional requirements of chairs in both level. Table Nos. 3-117 and 3-118 above.

6.3.3 Housing

a. Assessment of Existing Situation

The importance of adequate housing is recognized by the Millennium Development Goals (MDG) which aims to improve the lives of millions of poor people. Housing is an essential component of the nation’s economy and one indicator of national economic direction. Home ownership is usually the major form of investment for individuals and households and a key to financial stability and upward social mobility.

The number of housing units in Davao del Norte in year 2000 has a total of nearly 147,989 with 99 percent of these occupied and the remaining .01 percent vacant. From 1990 to 2000, there is an increase of 35 percent in the number of housing units in the province, an indication of increased affordability of people in acquiring decent shelters for the past ten years. An additional of 38,224 units is shown in table 3-123.

**Table No. 3-123: Housing Units, Occupied and Vacant by Censal Year
 Davao del Norte**

| Year | Total | Occupied | % | Vacant | % |
|------|---------|----------|------|--------|------|
| 1970 | 42,595 | 41,827 | 0.98 | 768 | 0.02 |
| 1980 | 75,565 | 72,443 | 0.96 | 3122 | 0.04 |
| 1990 | 109,765 | 105,442 | 0.96 | 4343 | 0.04 |
| 2000 | 147,989 | 147,427 | 0.99 | 562 | 0.01 |

Source: National Statistics Office, 2000

More than 73 percent of the units occupied are occupied by their owners; in 1990 around 78 percent of the total units were owner occupied. An indication of a stable tenurial status enjoyed by the constituents of the province and higher compared to the regional percentage of 67 percent. Only 15 percent of the total households are occupying for free the units they are residing in.

Table No. 3-124: Household in Occupied Housing Unit by Tenure Status of Housing Unit, Davao del Norte Tenure Status of the Housing Unit

| | Total Households in Occupied Housing Units | Owned/Being Amortized | Rented | Being Occupied for free with consent of Owner | Being Occupied for free w/o consent of Owner | Not Reported |
|-----------------|---|------------------------------|---------------|--|---|---------------------|
| Davao del Norte | 150,844 | 110,443 | 13,179 | 21,958 | 842 | 4,422 |

Source: National Statistics Office, 2000

Most of the occupied housing units are single houses, representing 93 percent of the total, a percentage that had been 98 percent in 1990. The remaining .07 percent is multi residential and duplex type of residences.

Table No. 3-125: Occupied Housing Units, Household, Household Population By type of building, Davao del Norte

| Type of Building | Occupied Housing Unit | Number of Household | Number of Household Population | Ratio | |
|-------------------------|------------------------------|----------------------------|---------------------------------------|---|--|
| | | | | Households to occupied Housing Units | Household Population to occupied Housing Unit |
| Total | 147,427 | 150,844 | 742,206 | 1.02 | 5:1 |
| Single House | 137,809 | 140,465 | 694,880 | 1.02 | 5:1 |
| Duplex | 2,907 | 3,055 | 14,263 | 1.05 | 5:1 |
| Multi Residential | 4,644 | 5,222 | 22,431 | 1.12 | 5:1 |
| Commercial/Ind'l | 421 | 444 | 1,865 | 1.05 | 4:1 |
| Agr'l | | | | | |
| Institutional | 37 | 37 | 131 | 1.1 | 4:1 |
| Living | | | | | |
| Quarters | 20 | 20 | 58 | 1.1 | 3:1 |
| Other housing | 1,589 | 1,601 | 8578 | 1.01 | 5:1 |
| Unit | | | | | |
| Not Reported | | | | | |

Source: National Statistics Office, 2000

The ratio of household to occupied housing unit is 1.02 as the table shows, which indicates existence of doubled-up households and a shortage of 3,417 housing units due to doubling of household. Further revealing that household population per occupied housing unit is 5:1, which suggests that in every housing unit there are 5 occupants present.

Table No. 3-126: Household by type of Building Tenure, Status of the Lot, Unit, Province of Davao del Norte

| Tenure Status Of Housing Unit | Total Household | | Type of Building | | | | | | Not Reported |
|--------------------------------|-----------------|------|------------------|--------|------------------------------|-----------------------------|-------------------------------|--------------------|--------------|
| | No. | % | Single | Duplex | Multi Unit (3 units or more) | Comm'l/ Industrial/ Agric'l | Institutional Living Quarters | Other Housing Unit | |
| Total | 150,844 | | 140,465 | 3,055 | 5,222 | 444 | 37 | 20 | 1,601 |
| Owned Being amortized | 79,424 | 0.53 | | | 735 | 140 | 16 | 4 | 67 |
| Rented | 19,723 | 0.13 | 77,486 | 976 | 1,610 | 121 | 4 | 2 | 40 |
| Rent-free w/ consent of Owner | 40,710 | 0.27 | 16,989 | 957 | 2,150 | 119 | 12 | 8 | 67 |
| Rent-free w/o consent of Owner | 3,004 | 0.02 | 37,531 | 823 | 228 | 19 | 1 | 2 | |
| Not Reported | 7,983 | 0.05 | 2,653 | 65 | 499 | 45 | 4 | 4 | 3 |
| | | | 5,806 | 201 | | | | | 1,424 |

Source: National Statistics Office, 2000

Table 3-127 reflects the tenural status of lots by type of building, which shows that 53% of the total households owned and amortized the lots where their houses are constructed. Still there are 27% enjoying rent-free status of the lots they occupy.

Table No. 3-127: Occupied Housing Units by Condition (State of repair) of the Building, Year Built, Davao del Norte

| Year Built and City/ Municipality | Total Occupied Housing Unit | Needs No Repair/ Needs Minor Repair | Needs Major Repair | Dilapidated/ Condemn |
|-----------------------------------|-----------------------------|-------------------------------------|--------------------|----------------------|
| Total | 147,427 | 99,421 | 28,865 | 1,164 |
| 1996-2000 | 50,169 | 32,628 | 8,426 | 318 |
| 1991-1995 | 36,486 | 25,647 | 6,777 | 287 |
| 1981-1990 | 31,846 | 22,376 | 6,830 | 261 |
| 1971-1980 | 15,759 | 11,139 | 3,606 | 144 |
| 1991-1970 | 5,072 | 3,385 | 1,396 | 50 |
| 1960 or earlier | 2,369 | 1,520 | 723 | 53 |
| Not Applicable | 15 | 6 | 6 | 2 |
| Don't Know/ Not Reported | 5,711 | 2,720 | 1,102 | 49 |

Source: National Statistics Office, 2000

The above table depicts the condition of the housing units and shows that 32,628 or 65 percent of the total units needs minor repair only. Most of the houses are built with the use of strong materials 74 percent used galvanized iron for the roofs and wood for the outer walls, reflecting a similar percentage with that of the regional total. Majority of these units are also being built after year 1996 so repairs are only minimal.

Table No. 3-128: Blighted Areas/Squatter Areas, Davao del Norte

| Location | Number of Families | Assistance Received | Status |
|-------------|--------------------|-----------------------|--------|
| Tagum | 1,026 | 102 families | |
| Panabo | 1,064 | resettled | |
| New Corella | 78 | 56 families resettled | |
| Carmen | 533 | 13 families resettled | |
| Kapalong | 263 | 350families resettled | |
| Asuncion | - | - | |
| Sto. Tomas | - | - | |
| Talaingod | - | - | |
| San Isidro | - | - | |
| B.E. Dujali | - | - | |
| IGaCos | - | - | |
| Total | 2,964 | | |

Source: National Statistics Office, 2000

Table 3-125 depicts the number of squatters in the province showing a total of 2,964 families living in squatter's area. The cities of Tagum and Panabo have the most number of squatter families in the province. The fact that these two cities are highly urbanized it is expected that the migration of people from rural areas to the cities worsen the problem of squatters or informal settlements.

b. Access to Housing

Many homeowners purchased their homes during the housing boom in the 1990's. Real estate developers were offering housing units to both low income and middle class clients; commercial banks have teamed up with real estate developers to offer mortgage facilities to a growing number of middle class consumers wanting to buy houses; and land dealers have made it easy for individuals to buy and build their own houses.

In 2000, local government initiatives to meet the current housing needs in the province is intensified, access to low cost housing/subdivisions are made possible to the low income group, while relocation sites and resettlements are provided to squatters or informal settlers. Out of the total 2,964 informal settlers in the province, only 19 percent has been provided resettlement assistance by the government.

**Table No.3-129: Inventory of Subdivisions and Resettlement
 Province of Davao del Norte: CY 2007**

| City/Municipality | No. of Subdivision | No. of Resettlements Sites | No. of Gawad Kalinga Communities |
|-------------------|--------------------|----------------------------|----------------------------------|
| Tagum | 75 | 4 | 2 |
| Panabo | 67 | 4 | 1 |
| New Corella | 1 | - | |
| Carmen | 1 | 1 | 1 (pipeline) |
| Kapalong | 2 | 1 | 1 |
| Asuncion | 3 | - | 1 (pipeline) |
| Sto. Tomas | 12 | - | 1 (pipeline) |
| Talaingod | - | - | |
| San Isidro | - | - | |
| B.E. Dujali | - | - | |
| IGaCos | - | - | 1 |
| Total | 161 | 10 | |

Source: C/MCDP

Table No. 3-129 reflects the number of subdivisions and resettlements showing that Tagum City and Panabo has the most number of subdivisions and resettlements to provide shelter for the ever increasing influx of urban migrants in these cities for the past years.

Sometime in year 2003, the first Gawad Kalinga community was established in the province, has benefited and helped fifty three (53) poor families to own a home and belong to a productive community. The construction of these houses for the poorest of the poor is being initiated by a non-government organization in partnership with the local government units and a thousands of volunteers who believes in the motto of “less for self, more for others, enough for all”..

To date, two (2) Gawad Kalinga sites are being prepared to benefit 300 poor families and another three (3) sites in the pipeline waiting for generous donors and volunteers to help thousands of poor families in the province through a simple strategy of providing land for the landless, homes for the homeless, food for the hungry and as a result providing dignity and peace for every Filipino.

It may seem a gigantic task on the part of LGUs whose one mandate is to implement programs and projects on low cost housing and other mass dwelling units for the under privilege and homeless, but the challenge is, there is always a solution to the problem of poverty and the concept of Gawad Kalinga in terms of providing shelter maybe an alternative.

A report from NSO Davao Quickstat on Private Building Construction for the year 2005 reveals that 3,594 residential units has been constructed and only 1,550 units constructed in year 2006 respectively. This is an indication of a declining affordability in terms of residential construction during this period.

6.4.3 Security

Peace and order condition is a vital component of economic growth and also a basic attribute to poverty.

Davao del Norte is generally peaceful, but is not spared of criminalities / atrocities and terrorist related incidents.

a. Crime Incidence

As shown in the crime volume for the last 5 years, highest cases were reported in 2005 and henceforth crime volume has been decreasing. This decrease is attributed by the intensified campaign against illegal drugs, gambling and other forms of criminalities. Please refer to Table No. 3-126.

Table No. 3-130: Crime Incidence, by Year, Davao del Norte, 2003- 2007

| Crime by type | Volume of crime by type | | | | |
|-------------------------|-------------------------|------|------|------|------|
| | 2003 | 2004 | 2005 | 2006 | 2007 |
| All crimes | 349 | 465 | 1017 | 770 | 766 |
| Index Crimes | 138 | 228 | 458 | 387 | 388 |
| Murder | 28 | 95 | 137 | 161 | 133 |
| Homicide | 22 | 21 | 61 | 37 | 125 |
| Physical Injury | 39 | 44 | 133 | 88 | 17 |
| Rape | 22 | 13 | 22 | 27 | 15 |
| Robbery | 19 | 28 | 59 | 41 | 71 |
| Theft | 8 | 27 | 46 | 29 | 27 |
| Non-index Crimes | 211 | 237 | 559 | 383 | 378 |

Source: PNP, Davao del Norte

For the reported crimes against person and properties otherwise called index crimes, Tagum City registered the highest number of cases in 2007, while New Corella has the lowest reported cases. (Table No. 3-131).

Table No.3-131: INDEX CRIMES by LGU, DAVAO DEL Norte, 2007

| UNIT/STN | Murder | Homicide | Physical Injury | Rape | Robbery | Theft | TOTAL |
|--------------|------------|------------|-----------------|-----------|-----------|-----------|------------|
| Asuncion | 3 | 10 | 2 | 1 | 3 | 4 | 23 |
| BE Dujali | 8 | 5 | 0 | 0 | 5 | 0 | 18 |
| Carmen | 5 | 8 | 0 | 3 | 2 | 0 | 18 |
| IGCS | 12 | 16 | 2 | 2 | 4 | 2 | 38 |
| Kapalong | 7 | 9 | 0 | 0 | 2 | 1 | 19 |
| New Corella | 3 | 3 | 1 | 0 | 0 | 0 | 7 |
| Panabo | 19 | 11 | 0 | 0 | 6 | 1 | 37 |
| San Isidro | 6 | 8 | 3 | 0 | 0 | 0 | 17 |
| Sto Tomas | 14 | 13 | 0 | 0 | 7 | 4 | 38 |
| Tagum City | 52 | 40 | 9 | 9 | 42 | 13 | 165 |
| Talaingod | 4 | 2 | 0 | 0 | 0 | 2 | 8 |
| TOTAL | 133 | 125 | 17 | 15 | 71 | 27 | 388 |

Source: PNP, Davao del Norte

For the crimes against existing laws or non-index crimes, also Tagum City registered the highest reported cases, while San Isidro has the lowest (Table No. 3-132).

Table No. 3-132: **NON-INDEX CRIMES by LGU, Davao del Norte, 2007**

| SPECIAL LAWS | POLICE STATION | | | | | | | | | | | |
|--------------|----------------|-----------|-----------|-----------|-----------|-------------|-----------|------------|------------|-----------|-----------|------------|
| | Asuncion | BE Dujali | Carmen | IGCS | Kapalong | New Corella | Panabo | San Isidro | Sto. Tomas | Tagum | Talaingod | TOTAL |
| RA 1780 | 3 | 4 | 4 | 0 | 0 | 0 | 5 | 1 | 7 | 7 | 1 | 32 |
| RA 8294 | 0 | 3 | 5 | 3 | 1 | 5 | 9 | 0 | 3 | 16 | 0 | 45 |
| RA 9165 | 0 | 0 | 1 | 2 | 1 | 0 | 8 | 0 | 5 | 8 | 1 | 26 |
| RA 9287 | 5 | 3 | 0 | 1 | 2 | 0 | 9 | 0 | 3 | 9 | 1 | 33 |
| RA 4136 | 12 | 1 | 0 | 1 | 34 | 36 | 19 | 1 | 18 | 19 | 16 | 157 |
| RA 8550 | 1 | 2 | 0 | 13 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 21 |
| PD 856 | 0 | 1 | 0 | 0 | 11 | 0 | 0 | 0 | 1 | 14 | 3 | 30 |
| ESTAFA | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| TAX CODE | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| RA 907 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| RA 9239 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| RA 9262 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| RA 9211 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| RA 4419 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| PD 1612 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 |
| PD 1619 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| PD 969 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| PD 705 | 2 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 1 | 0 | 0 | 8 |
| TOTAL | 23 | 14 | 13 | 22 | 49 | 45 | 52 | 3 | 38 | 97 | 22 | 378 |

Source: PNP, Davao del Norte

According to women's and children's desk statistics crimes against women show an increasing trend from 2006 to 2007. Wife battering has the highest reported cases followed by physical injuries.

Table No. 3-133: **Reported Crimes Against Women, Davao del Norte, 2006 – 2007**

| Types of Cases | 2006 | 2007 |
|-------------------------|------------|------------|
| Rape | 14 | 13 |
| Attempted Rape | 6 | 4 |
| Battered Wife (RA 9262) | 224 | 293 |
| Physical Injuries | 107 | 207 |
| Threats | 17 | 19 |
| Acts of Lasciviousness | 21 | 10 |
| Slander | 2 | 4 |
| Grave Oral Defamation | 10 | 5 |
| Attempted homicide | 1 | |
| Frustrated homicide | 1 | 6 |
| Parricide | 1 | |
| Murder | 1 | |
| Concubinage | | 1 |
| Abandonment | | 1 |
| Others | 4 | 9 |
| TOTAL | 409 | 572 |

Source: PNP, Davao del Norte

Data on violence against women committed in 2007 showed that majority of the perpetrators are known to the victims, in fact 40% of the reported cases are committed by the husbands. The reported cases were usually committed inside the house, thus Violence Against Women (VAW) cases are domestic in nature.

Table No.3-134: No. of Perpetrators of Violence Against Women, by Relation to Victim, Davao del Norte, 2007

| Relation to Victim | No. of Perpetrators | % |
|--------------------|---------------------|-----|
| <i>Husband</i> | 234 | 40 |
| Live-in Partners | 102 | 17 |
| No Relation | 89 | 15 |
| Unidentified | 0 | |
| Brother-in-Law | 3 | .5 |
| Husband's Father | 11 | 1.9 |
| Brother | 9 | 1.5 |
| Relative | 94 | 16 |

Source: PNP, Davao del Norte

Table No. 3-135: Cases on Violence Against Women by Place and Time of Commission, Province of Davao del Norte, 2007

| Type of Cases | Total No. of Cases | Place of Commission | | | | | | Time of Commission | | | |
|------------------------|--------------------|---------------------|----|-------------------|----|--------------|----|--------------------|----|-----------|----|
| | | Inside the House | | Outside the House | | Public Place | | Daytime | | Nighttime | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % |
| Rape | 13 | 8 | 61 | 3 | 23 | 2 | 15 | 5 | 38 | 8 | 62 |
| Battered Wife | 293 | 253 | 86 | 33 | 11 | 7 | 3 | 123 | 42 | 170 | 58 |
| Acts of Lasciviousness | 10 | | | 3 | 30 | 7 | 70 | 5 | 50 | 5 | 50 |
| Threat | 19 | 12 | 63 | 2 | 3 | 5 | 2 | 7 | 36 | 12 | 64 |
| Physical Injuries | 207 | 136 | 65 | 25 | 12 | 31 | 14 | 200 | 96 | 7 | 4 |

Source: PNP, Davao del Norte

Statistics show that majority of the women victims are in the middle ages. Forty-eight percent (48%) of the victims has ages from 21 to 40 years old (See Table No. 3-136).

Table No. 3-136: No. of Victims of Violence Against Women, by Age Group, Davao del Norte, 2007

| Type of Cases | Ages of Victims | | | | | Total |
|------------------------|-----------------|-------|-------|-------|------------|-------|
| | 16-20 | 21-30 | 31-40 | 41-50 | 51 & Above | |
| Rape | 6 | 4 | 3 | | 0 | 13 |
| Battered Wife | 73 | 99 | 99 | 50 | 15 | 293 |
| Acts of Lasciviousness | 6 | 4 | | 0 | 0 | 10 |
| Threat | 6 | 4 | 4 | 5 | 0 | 19 |
| Physical Injuries | 70 | 65 | 50 | 40 | 20 | 207 |
| Total | 161 | 176 | 156 | 96 | 35 | 572 |

Source: PNP, Davao del Norte

Comparing to other provinces in Region XI, Davao del Norte has the second highest number of reported cases in all crimes in 2007, next to Davao City (Table No. 3-137). Average monthly crime rate is also higher compared to other provinces in the region, and even the regional figure of 6.3% in 2007.

Table No. 1-137: Index and Non-Index Crimes by LGU Region XI, 2007

| | Davao City | Davao Sur | COMVAL | DAVAO ORIENTAL | DAVAO NORTE |
|-------------------------|------------|-----------|--------|----------------|-------------|
| All Crimes | 1530 | 375 | 436 | 256 | 766 |
| Index Crimes | 765 | 213 | 209 | 133 | 388 |
| Murder | 267 | 58 | 53 | 34 | 133 |
| Homicide | 26 | 20 | 13 | 18 | 125 |
| Physical Injury | 208 | 47 | 55 | 41 | 17 |
| Rape | 78 | 29 | 33 | 26 | 15 |
| Robbery | 59 | 16 | 31 | 7 | 71 |
| Theft | 127 | 43 | 24 | 9 | 27 |
| Non-Index Crimes | 765 | 162 | 227 | 123 | 378 |
| Ave. monthly crime rate | 9.46 | 4.02 | 5.16 | 4.30 | 8.84 |

Source: PNP, Davao del Norte

Note: Average monthly income rate per 100,000 populations in Region XI in 2007 is 6.3%.

On the average, crime solution efficiency for the last 2 years shows a remarkable trend; however there were instances wherein low level of solution were made particularly in cases of murder and robbery. Please refer to Table no. 3-138

**Table No. 3-138: Crime Solution Efficiency
Province of Davao del Norte, 2006 -2007**

| Type of Offenses | 2006 (%) | 2007(%) |
|------------------|----------|---------|
| Murder | 70 | 43 |
| Homicide | 81 | 85 |
| Physical Injury | 57 | 53 |
| Robbery | 80 | 29 |
| Theft | 83 | 78 |

Source: PNP, Davao del Norte

Comparing to other provinces and regional data, crime solution efficiency in Davao del Norte in 2007 is a little bit lower than the regional report (NSCB, Davao Region Statistics, updated in April 2008) of 84.75% and second to Davao City's record of 81.11% (Table No.3-139).

**Table No. 3-139: Crime Solution Efficiency (All Crimes)
Region XI, 2007**

| | Crime Solution Efficiency (2007) |
|-----------------|----------------------------------|
| Davao City | 81.11% |
| Davao del Sur | 92.53% |
| COMVAL Province | 90.37% |
| Davao Oriental | 90.23% |
| Davao del Norte | 83.80% |
| Region XI | 84.75% |

Source: PNP, Region XI

b. Police Force

Davao del Norte has a total 626 police force, the 563 or 90%% are male officers while 63 or 10% are female officers. Women law enforcers are holding positions from Police Officer I up to Police Senior Officers. Majority of the female police officers are assigned as Women's and Children's Desk Officers of the existing Police Stations in the province.

Translated into personnel to population ratio, each police officer is protecting 1,353 persons from various crimes. This scenario is more than the national record of 1:747 in year 2006 and does not meet the standard requirement of one law enforcer for every 1,000 persons in municipalities and one law enforcer for every 750 persons in component cities, as set forth in Republic Act 6975, the Philippine National Police Law, as amended by Republic Act No. 8551. Please refer to Table No. 3-140.

Table No.3-140 : Protective Personnel/ Services/ Police, Ratio to population, By City/Municipality, Davao del Norte, 2007

| City / Municipality | Population 2007 | POLICE FORCE | | | | |
|------------------------|-----------------|---------------|------------|------------|---------------------|-----------------|
| | | Current Force | | | Ratio to Population | No. of Stations |
| | | F | M | Total | | |
| Tagum City | 215,967 | 9 | 94 | 103 | 1:2,097 | 4 |
| New Corella | 46,311 | 3 | 24 | 27 | 1:1,715 | 1 |
| Asuncion | 50,731 | 3 | 28 | 31 | 1:1,636 | 1 |
| <i>San Isidro</i> | 24,696 | 3 | 24 | 27 | 1:915 | |
| <i>Sub-Total</i> | 337,705 | | | | | |
| Sto. Tomas | 97,210 | 3 | 31 | 34 | 1:2,859 | 1 |
| Kapalong | 61,763 | 3 | 28 | 31 | 1:1,992 | 1 |
| Talaingod | 19,600 | 2 | 23 | 25 | 1:784 | 1 |
| <i>Sub-Total</i> | 178,573 | | | | | |
| Panabo City | 154,329 | 5 | 60 | 65 | 1:2,374 | 1 |
| Carmen | 61,656 | 4 | 26 | 30 | 1:2,055 | 1 |
| B.E. Dujali | 24,886 | 3 | 19 | 22 | 1:1,131 | 1 |
| <i>Sub-Total</i> | 240,871 | | | | | |
| IGaCoS | 90,291 | 6 | 69 | 75 | 1:1,203 | 3 |
| DNPO | | 14 | 45 | 59 | | |
| 1101 st PMG | | 5 | 92 | 97 | | |
| GRAND TOTAL | 847,440 | 63 | 563 | 626 | 1:1,353 | 15 |

Source: PNP, Davao del Norte

To augment the existing police forces, Community-Oriented Policing System (COPS) has been established primarily to ensure that police assistance can be easily extended. Centers such as KAUBAN OUTPOSTs are also established so that police services are within the reach of the people, particularly those living in remote and isolated areas. Anti-crimes group are also organized which are voluntary in nature and mostly civilians and private organizations.

c. Police Equipment and Facilities

There are a total of fifteen (15) police stations in the province with 3 patrol cars. The existing equipment and facilities are not sufficient and need upgrading.

**Table No.141 : Summary of Police Equipment Facilities,
Province of Davao del Norte, 2007**

| UNIT | Short Firearms | | | Long Firearms | | | No. of Vehicle |
|--------------|----------------|-----------|------------|---------------|-----------|-----------|----------------|
| | Cal. 38 | Cal. 45 | 9 mm | M16 | M14 | Shot-gun | Patrol Cars |
| Tagum City | 20 | | 26 | 55 | 1 | 11 | 5 |
| New Corella | 8 | 1 | 4 | 19 | 6 | 1 | 2 |
| Asuncion | 5 | 2 | 4 | 14 | 1 | | 2 |
| San Isidro | 6 | 2 | 7 | 13 | 3 | | 1 |
| Sto. Tomas | 2 | 3 | 7 | 22 | 4 | | 2 |
| Kapalong | 2 | 2 | 6 | 21 | 3 | | 2 |
| Talaingod | 4 | 2 | 5 | 14 | 5 | | 1 |
| Panabo City | 1 | 6 | 24 | 36 | | | 3 |
| Carmen | 3 | | 8 | 23 | 2 | | 3 |
| B.E. Dujali | | | 6 | 11 | 2 | | 2 |
| IGaCoS | 5 | 1 | 14 | 39 | 2 | | 3 |
| DNPPPO | 4 | 16 | 21 | 25 | 5 | 12 | 2 |
| 1101STPMG | 13 | 5 | 25 | 86 | 14 | | 5 |
| TOTAL | 73 | 40 | 157 | 365 | 45 | 24 | 33 |

Source: PNP, Davao del Norte

The security force in Davao del Norte has to double its efforts in combating criminalities and other lawless elements in the society.

d. Fire Force/ Facilities

The current fire force of the province is 122, with eight (8) fire officers, 110 non-officers and 4 civilian staff. When translated into fire force and population ratio, each fire officer is serving 7,182 populations, which is beyond the standard set by Republic Act No. 6975 of one (1) fire officer for every 2,000 population.

There are only seven (7) fire stations operating in the province. These include the Tagum City Fire Station with three (3) units fire truck; the IGaCoS Fire Station with also three (3) units fire truck; the Panabo Fire Station with five (5) units fire truck and the Kapalong/Sto. Tomas/Carmen and Asuncion Fire Stations with one (1) unit fire truck each. The existing fire station in Tagum City is augmented by an NGO managed REACT fire brigade, with one (1) fire station and one (1) fire truck.

Four (4) LGUs to include Talaingod, Braulio E. Dujali, New Corella and San Isidro have no fire stations; however they are strategically located and adjacent to LGUs with available fire stations. There is also no office for the provincial fire marshal. They are only sharing a space at the Tagum Fire Station.

e. Fire Incidence

Record shows that the extent of fire damage in the last three (3) years had been decreasing although the reported fire damaged in 2006 reached the largest amount. Please refer to Table No. 3-142.

Table No.3-142 : Fire Incidence in Davao del Norte, 2005 - 2007

| Particular | 2005 | 2006 | 2007 |
|-------------------------|------------|------------|-----------|
| Fire Incidence Reported | 89 | 70 | 36 |
| Fire Damaged Reported | 19,866,000 | 29,128,500 | 7,430,700 |

Source : Bureau of Fire Protection, Davao del Norte

Fire incidence in 2007 is lower than the reported fire incidence in the region (79 reported incidences).

6.3.5 Social Welfare

In its efforts to alleviate poverty, Davao del Norte continued to provide social welfare programs for the disadvantaged children, youth, elderly and disabled persons and the indigenous peoples and other disadvantaged groups

a. Children and Youth Welfare

Around 49% of the total populace aged 0 -14 years old which implies bigger requirements for social services including welfare-services. The development of pre-schoolers is catered by the 425 day care centers provincewide. 71% or 303 of the daycare centers are duly accredited with DSDW Region XI while accreditation of the 122 centers or 29% is still going – on. Tagum City has the most number of day care centers while San Isidro has the least number. (Table No. 3-143).

Table No. 3-143 : Day Care Centers Profile
 Davao del Norte, 2007

| Municipality/ City | No. of Brgys. | No. of DCCs | No. of DCWs | No. of DCC Accredited | % | DCC not accredited | % |
|-----------------------|------------------|----------------|----------------|-----------------------------|--------------|-----------------------|--------------|
| Tagum City | 23 | 82 | 80 | 46 | 56.09 | 36 | 43.90 |
| Asuncion | 20 | 26 | 26 | 16 | 61.54 | 10 | 38.46 |
| Kapalong | 14 | 39 | 39 | 29 | 74.36 | 10 | 25.64 |
| San Isidro | 13 | 16 | 16 | 7 | 43.75 | 9 | 56.25 |
| Talaingod | 3 | 17 | 17 | 16 | 94.11 | 1 | 5.89 |
| New Corella | 20 | 34 | 34 | 29 | 85.30 | 5 | 14.70 |
| BE Dujali | 5 | 18 | 18 | 18 | 100 | - | - |
| Carmen | 20 | 35 | 35 | 31 | 88.58 | 4 | 11.42 |
| IGACOS | 46 | 56 | 56 | 34 | 60.72 | 22 | 39.28 |
| Panabo City | 40 | 61 | 60 | 57 | 93.44 | 4 | 6.56 |
| Sto. Tomas | 19 | 41 | 40 | 20 | 48.79 | 21 | 51.21 |
| Total | 227 | 425 | 421 | 303 | 71.29 | 122 | 28.71 |

Source: PSWDO, Davao del Norte

Enrollment in day care centers had been slightly increasing for the last 5 years. An increase of 1.35% was reported in year 2007. (Table No. 3-144).

**Table No. 3-144: Statistics on Day Care Service Program
Davao del Norte: CYs 2003-2007**

| Municipality/ City | 2003 | | 2004 | | 2005 | | 2006 | | 2007 | |
|-----------------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|
| | DCC | Children |
| Tagum City | 75 | 3765 | 76 | 3534 | 82 | 3370 | 80 | 3703 | 82 | 3389 |
| New Corella | 30 | 973 | 33 | 1011 | 30 | 870 | 32 | 870 | 34 | 1012 |
| Asuncion | 32 | 973 | 32 | 1181 | 26 | 936 | 26 | 915 | 26 | 936 |
| Sto. Tomas | 38 | 1433 | 38 | 39 | 40 | 1300 | 40 | 1300 | 41 | 1428 |
| Kapalong | 49 | 1790 | 49 | 729 | 39 | 1233 | 40 | 1125 | 39 | 1233 |
| Talaingod | 18 | 723 | 17 | 340 | 20 | 815 | 17 | 651 | 17 | 657 |
| Panabo City | 57 | 1266 | 37 | 1307 | 60 | 2215 | 61 | 2202 | 61 | 2215 |
| Carmen | 35 | 1094 | 35 | 1041 | 35 | 1160 | 35 | 974 | 35 | 1039 |
| BE Dujali | 18 | 493 | 19 | 487 | 18 | 517 | 18 | 501 | 18 | 487 |
| IGACOS | 59 | 1758 | 57 | 1813 | 56 | 1689 | 57 | 1589 | 56 | 1689 |
| San Isidro | - | - | - | - | 16 | 531 | 16 | 510 | 16 | 610 |
| Total | 411 | 14268 | 393 | 11482 | 422 | 14636 | 422 | 14496 | 425 | 14695 |

Source: PSWDO, Davao del Norte

Comparing with other provinces, Davao del Norte has the second highest number of day care centers and enrollees next to Davao del Sur. (Table No. 3-145).

**Table No. 3-145 : Profile of Day Care Center/Workers
Region XI, 2007**

| Province | No. of Municipality/ City | No. of Day Care Centers | No. of Children Served |
|-----------------|------------------------------|----------------------------|---------------------------|
| Davao del Norte | 11 | 425 | 14,695 |
| Comval Province | 11 | 407 | 12,660 |
| Davao del Sur | 15 | 521 | 14,975 |
| Davao Oriental | 11 | 342 | 11,283 |

Source: DSWD, Region XI

The Youth Sector comprises around 25 per cent of the total population. As pillars of the nation, they ought to have strong foundation. Out of school youth had been reported and organized in 2007. A total of 524 youth members were organized in 6 LGUs, the 350 or 67% are males. (Table No. 3-146).

Table No. 3-146 : Profile Out of School Youth, Davao del Norte: CY 2007

| City/ Municipality | No. of Female | No. of Male | Total | Working Member | Un- employed |
|-----------------------|------------------|----------------|------------|-------------------|-----------------|
| Sto. Tomas | 38 | 74 | 112 | - | - |
| IGACOS | 24 | 26 | 50 | - | - |
| Carmen | 6 | 20 | 26 | 9 | 74 |
| Asuncion | 36 | 62 | 98 | - | - |
| Talingod | 25 | 103 | 128 | - | - |
| Tagum City | 45 | 65 | 110 | - | - |
| Total | 174 | 350 | 524 | 9 | 74 |

Source : PSWDO, Davao del Norte

In 2007, persons with disabilities were reported at 741. The municipality of Carmen has the most number of registered disabled persons while Sto. Tomas has the least. There are more male disabled persons than the female. (Table No. 3-147).

**Table No. 3-147: Profile of Registered Persons with Disability
 Province of Davao del Norte: CY 2007**

| City/Municipality | No. of registered PWDs | | |
|---|------------------------|------------|------------|
| | F | M | Total |
| Tagum City Association for Persons with Disability TCAP | 87 | 113 | 200 |
| Panabo Association for Differently Abled Persons PADAP | 15 | 55 | 70 |
| IGACOS Association for Differently Abled Persons | 11 | 21 | 32 |
| New Corella Association for Differently Abled Persons | 14 | 31 | 45 |
| Asuncion Association for Differently Abled Persons | 10 | 27 | 37 |
| Talaingod Association of Persons with Disability | 35 | 20 | 55 |
| Kapalong Association for Differently Abled Persons | 15 | 25 | 40 |
| San Isidro Association for Differently Abled Persons | 8 | 18 | 26 |
| Carmen Parents Mobilization Action Group | 82 | 119 | 201 |
| BE Dujali Association for Disabled Persons | 10 | 17 | 27 |
| Sto. Tomas Association for Disabled Persons | 7 | 1 | 8 |
| Total | 294 | 447 | 741 |

Source: PSWDO, Davao del Norte

b. Indigenous Peoples

There are several indigenous groups in Davao del Norte but the major tribes include the Mandaya, Dibabaon, Manguangan, Ata Manobo, Mansaka, Kalagan (Non Muslim) and Sama (IGACOS). The rest of the tribes are considered migrant IPs. (Table No.3-148).

Table No.3-148 : Indigenous Tribes in Davao del Norte, CY 2007

| GROUP | Population | GROUP | Population |
|------------|------------|-----------------|------------|
| Abeling | 57 | Iwak | 1 |
| Abiyan | 266 | Kalanguya | 21 |
| Agta | 10 | Kalinga | 7 |
| Applai | 45 | Kamayo | 310 |
| Ata Manobo | 17,264 | Kankanaey | 1,468 |
| Atta | 2,832 | Mamanwa | 8 |
| Ayangan | 37 | Mandaya | 8,971 |
| Ayta | 787 | Mangyan | 48 |
| Badjao | 6 | Mansaka | 1,502 |
| Bagobo | 548 | Matigsalog | 509 |
| Bilaan | 192 | Negrito | 14 |
| Bukidnon | 206 | Palawanon | 27 |
| Davaweño | 50,195 | Ratagnon | 1 |
| Dibabawon | 6,330 | Sama (Bangenge) | 19 |

| | | | |
|----------|-----|------------|-------|
| Dumagat | 59 | Sama/Samal | 3,160 |
| Hanunuo | 86 | Sangil | 9 |
| Higaonon | 55 | Subanen | 419 |
| Ibaloi | 16 | Tagabawa | 7 |
| Ibanag | 267 | Tagakaolo | 11 |
| Ibontoc | 38 | Tagbanwa | 3 |
| Ifugao | 321 | Talaandig | 2 |
| Ilongot | 940 | T'boli | 4 |
| Isinai | 5 | Tigwahanon | 2 |
| Isneg | 3 | Tiruray | 30 |

Source: NSO, Davao del Norte

Government and non-government initiatives have been in place towards the welfare of the IPs, however, a lot of work is yet to be undertaken for them to have a better quality of life.

The indigenous peoples are highly vulnerable and have the lowest socio-economic status according to the Regional Development Plan (2004 - 2010). They are not involved in the decision making process and are very much disadvantaged in terms of educational status, health and access to employment. They occupy the poor families of the province.

6.4 UTILITY / INFRASTRUCTURE SERVICES

Infrastructure development is a vital component in community growth and progress. Adequate and sustainable infrastructure need to be in place to ensure high quality of life of the constituents. Easy access to safe and potable water, sanitation facilities and electrification should therefore be afforded accordingly.

6.4.1 Water and Sanitation

Potable Water

As of 2007, about 89% of the household population had access to potable water sources, but only 31% or 43,925 households were served with level III water facilities, which can be considered as sustainable service. A sizeable portion of household remains dependent on level I and II water system and other sources. (See Table No. 3-149).

Table No 3-149: Existing Water Supply Source by Cities/Municipalities by Household Served, Davao del Norte As of 2007

| Municipalities / Cities | # of HH** | Water Supply Sources & HH** Served | | | | | | | | | | HH** w/ access to potable water | |
|-------------------------|----------------|------------------------------------|----------------|---------------|----------------|----------------|----------------|------------------|----------------|------------|----------------|---------------------------------|-----------|
| | | # of Level I | HH** w/ access | # of Level II | HH** w/ access | # of Level III | HH** w/ access | Doubtful Sources | HH** w/ access | Peddlers | HH** w/ access | # of HH** | % |
| | | | | | | | | | | | | | |
| Asuncion | 10,715 | 287 | 5,122 | 10 | 1,699 | 5 | 1,317 | 172 | 616 | 26 | 1,961 | 10,099 | 94 |
| Carmen | 12,597 | 327 | 4,382 | 32 | 95 | 4 | 1,826 | 50 | 4,044 | - | 2,232 | 8,535 | 68 |
| B.E. Dujali | 3,908 | 37 | 1,283 | 3 | 101 | 1 | 198 | 1,147 | 1,313 | 40 | 1,312 | 2,595 | 66 |
| IGaCos | 19,913 | 347 | 5,213 | 99 | 8,879 | 30 | 3,971 | 859 | 1,166 | 6 | 265 | 18,328 | 94 |
| Kapalong | 12,779 | 877 | 7,021 | 8 | 1,145 | 11 | 2,571 | 25 | 788 | 14 | 1,254 | 11,991 | 94 |
| New Corella | 9,889 | 164 | 2,251 | 48 | 3,211 | 17 | 2,892 | 949 | 1,298 | 4 | 134 | 8,488 | 86 |
| Panabo City | 30,186 | 13,916 | 20,185 | 2 | 316 | 10 | 4,824 | 853 | 2,067 | 258 | 1,551 | 26,878 | 93 |
| San Isidro | 5,557 | 48 | 1,585 | 19 | 1,506 | 6 | 680 | 97 | 5,067 | - | - | 3,771 | 68 |
| Sto. Tomas | 15,861 | 2,745 | 8,544 | 59 | 727 | 10 | 3,527 | 1,352 | 3,023 | 44 | 481 | 13,279 | 84 |
| Tagum City | 34,561 | 156 | 4,035 | 3 | 240 | 19 | 27,909 | - | - | 117 | 2,368 | 34,561 | 100 |
| Talaingod | 2,969 | 76 | 650 | 36 | 1,353 | 1 | 210 | 32 | 756 | - | - | 2,213 | 75 |
| Total | 158,935 | 18,980 | 60,271 | 319 | 19,272 | 114 | 48,925 | 5,536 | 20,138 | 509 | 11,558 | 140,738 | 89 |
| % | | | 38% | | 12% | | 31% | | 13% | | 7% | | |

Source: Provincial Health Office (PHO)

Notes: HH** - Actual household survey conducted by PHO Field workers.

Water services in component cities and even in some municipalities are provided by the Local Water Districts which are operating under the technical and financial assistance of the Local Water Utility Administration (LWUA). Government constructed water systems are also catering the water needs of the other areas which are operated and managed either by the Rural Waterworks and Sanitation Associations (RWSAs), municipal and barangay government, water committees or merely association.

As of 2005, Davao del Norte had the largest proportion of population served with potable water at 82 percent. Davao Oriental and Davao del Sur had 61.7 percent and 74.2 percent respectively. In region XI as of 2004, Davao del Norte has the most number of operational water districts, namely: B.E. Dujali Water District, Carmen Water District, New Corella Water District, Island Garden City of Samal Water District, Panabo City Water District and Tagum City Water District. A total of 20,349 connections were reported in 2004. (Table No. 3-150).

Map 18: EXISTING INFRASTRUCTURE MAP

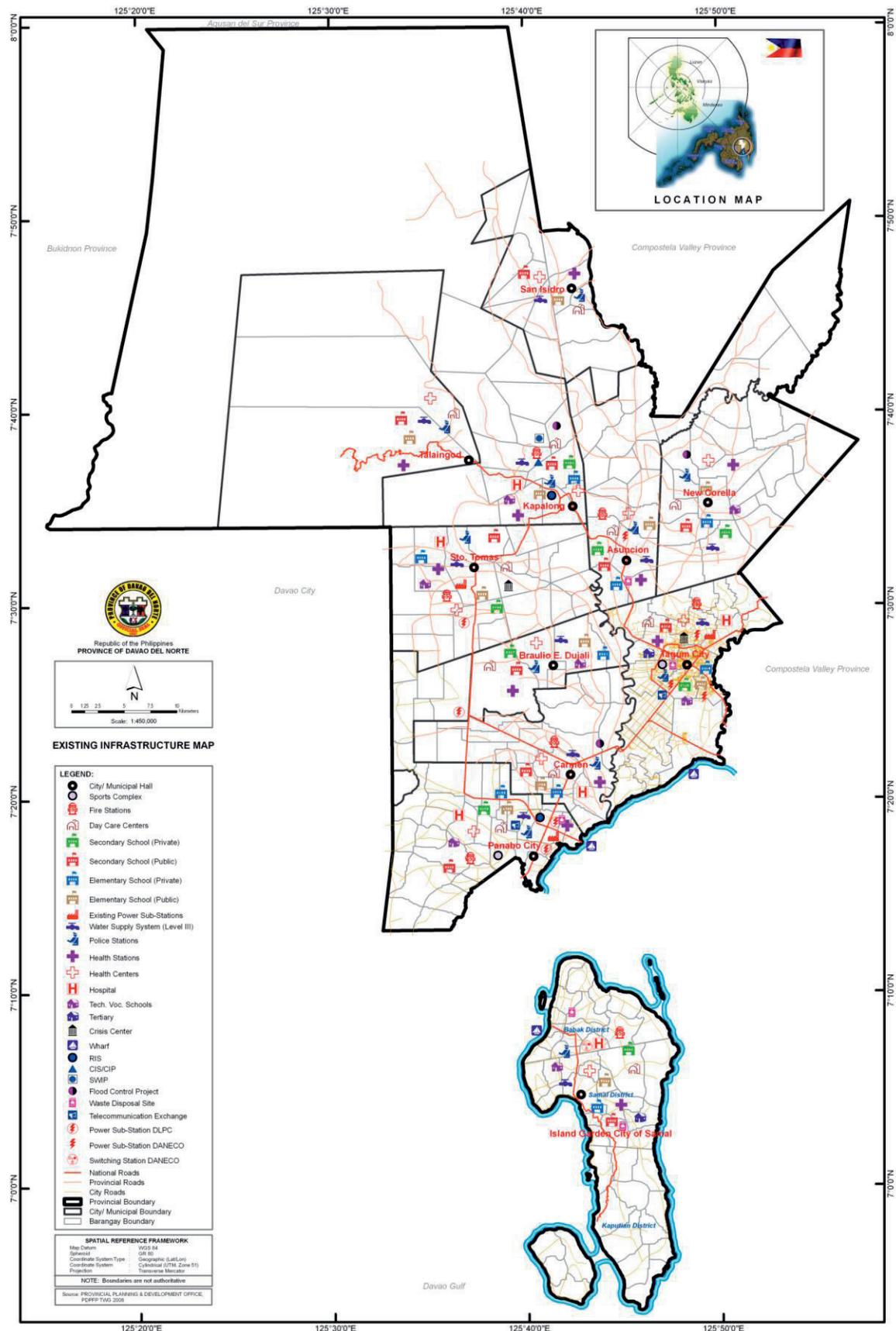


Table No. 3-150 : Water District Service Connections in Davao del Norte As of 2004

| Name of Water Districts | Service Connections | | | Total | Minimum Charge (Php) |
|--|---------------------|------------|------------|---------------|----------------------|
| | Residential | Government | Commercial | | |
| B.E. Dujali Water District | 11 | | | 11 | 238.30 |
| Carmen Water District | 409 | | | 409 | 218.60 |
| Island Garden City of Samal Water District | 1,249 | | | 1,249 | 155.90 |
| New Corella Water District | 740 | | | 740 | 156.30 |
| Panabo Water District | 2,371 | | | 2,371 | 155.50 |
| Tagum Water District | 15,551 | | | 15,551 | 117.20 |
| Total | 20,349 | | | 20,349 | |

Source: LWUA Website

The prevalence of water peddlers in most areas of the province is a strong indication of water shortage or poor water qualities. Water trucks from outside Davao del Norte mostly from Davao City delivered water through water trucks to these peddlers. Processed water is also available particularly in the urban centers.

As the population increases, the demand for potable water also increases. It is a known fact that water sources are depleting due to environmental destruction and changes, so that provision of adequate and sustainable potable water must be considered religiously in development planning undertakings. There is a need to consolidate the utilization of available resources in order to answer the long term water requirement of the increasing populace.

6.4.2 Sanitation

There are no sewerage facilities with treatment plant in the province. Domestic wastewater is disposed through septic tanks, storm drainage, canals and other disposal system without treatment. Excreta are commonly disposed by households through septic tanks and closed pits. As of 2007 86% of the total households are using sanitary toilets. Tagum City has the highest number of household with sanitary toilets, while Talaingod has the least number. (Table Nos. 3-151 and 3-152).

Table No.3-151 : Comparative Status of Toilet Facilities, 2003-2007
Province of Davao del Norte

| Year | Total # of HH** | Status of Toilet Facilities per HH** | | | | | |
|------|-----------------|--------------------------------------|----|----------------------------|----|---------------------|----|
| | | HH** w/ sanitary toilet | % | HH** w/ in-sanitary toilet | % | HH** without toilet | % |
| 2003 | 151,450 | 119,912 | 79 | 17,409 | 11 | 14,282 | 9 |
| 2004 | 150,000 | 120,000 | 80 | 15,000 | 10 | 15,000 | 10 |
| 2005 | 145,081 | 117,599 | 81 | 14,180 | 10 | 13,309 | 9 |
| 2007 | 158,935 | 134,076 | 86 | 11,018 | 7 | 9,486 | 6 |

Source: Provincial Health Office

(Note: HH** - Actual household survey conducted by PHO Field workers)

Table No 3-152 : Toilet Facilities, Davao del Norte, 2007

| Municipalities/ Cities | No. of HH** | Status of Toilet Facilities per HH** | | | | | |
|---------------------------|----------------|--------------------------------------|---------------|--|-----------|------------------------------|-----------|
| | | HH** using Sanitary Toilets | % | HH** using Unsanitary Toilets | % | No. of HH** w/o toilet | % |
| Asuncion | 10,715 | 9,490 | 89% | 842 | 8% | 383 | 4% |
| Carmen | 12,597 | 12,053 | 96% | 184 | 1% | 342 | 3% |
| B.E. Dujali | 3,908 | 3,788 | 97% | 72 | 2% | 48 | 1% |
| IGaCos | 19,913 | 15,360 | 77% | 1,345 | 8% | 3,203 | 16% |
| Kapalong | 12,779 | 10,042 | 79% | 2,271 | 18% | 466 | 4% |
| New Corella | 9,889 | 8,329 | 84% | 998 | 10% | 562 | 6% |
| Panabo City | 30,186 | 24,692 | 82% | 3,334 | 11% | 2,045 | 7% |
| San Isidro | 5,557 | 3,576 | 64% | 1,846 | 33% | 135 | 2% |
| Sto. Tomas | 15,861 | 13,299 | 84% | 1,610 | 10% | 952 | 6% |
| Tagum City | 34,561 | 34,183 | 99% | - | 0% | 369 | 1% |
| Talaingod | 2,969 | 1,321 | 44% | 524 | 18% | 1,124 | 38% |
| Davao del Norte | 158,935 | 136,133 | 85.65% | 13,026 | 8% | 9,629 | 6% |

Source: Provincial Health Office (PHO)

Note: HH** - Actual household survey conducted by PHO Field workers.

Table No. 3-152 shows that there is still a need to further educate the constituents on the values of proper sanitation particularly in the rural areas. Proper sanitation relates closely to the availability of water facilities in the locality.

Power/Electricity

Energization has been afforded by the Davao Light and Power Company (DLPC) covering the municipalities of Carmen, Sto. Tomas, B.E. Dujali, and Panabo City, and Davao del Norte Electric Cooperative (DANECO) covering the rest of the LGU's of the province. Both distributors obtained their electric power from Mindanao's power grid of the National Power Corporation (NPC). DANECO has a power capacity of 98.66 MW comprising eleven (11) substations of its entire coverage including Compostela Valley Province. There are three (3) sub-stations located in Tagum City with a total capacity of 40 MVA and one (1) in Asuncion with 5 MVA. The DLPC has four (4) sub-stations with a total capacity of 65 MVA (Table No.3-153).

Table No 3-153 : Existing Power Sub-Stations, Davao del Norte 2008

| Power Distributor | Location of Station | Capacity |
|-------------------|-------------------------|---------------|
| 1. DANECO | Mirafuentes, Tagum City | 10 MVA |
| | Canocotan, Tagum City | 10 MVA |
| | Apokon, Tagum City | 20 MVA |
| | Asuncion | 5 MVA |
| | Total | 45 MVA |
| 2. DLPC | Cagangohan, Panabo | 10 MVA |
| | San Vicente, Panabo | 20 MVA |
| | Marsman, Sto. Tomas | 15 MVA |
| | TADECO, Panabo | 20 MVA |

| | | |
|--------|-----------------------------|----------------|
| | Total | 65 MVA |
| 3. NPC | Tindalo Station, Nabunturan | 100 MVA |
| | Maco Sub-Station, Maco | 100 MVA |
| | Total | 200 MVA |

Source: Davao Light and Power Company, Davao del Norte Electric Cooperative National Power Corporation, Davao del Norte Sub-Office

All barangays in the province are already covered by the energization program. This is a little bit higher than the regional figure of 99.74% coverage and national scenario of 96.63% coverage.

In terms of household connection, only 78.32% of the potential households were energized as of December 2007. Davao Light and Power Company (DLPC) have a higher coverage of 99.60% than DANECO which has only 66% coverage. (Table No. 3-155).

Table No. 3-154: **Service area connection of DANECO and DLPC (e.g. Barangay Served / Unserved), As of December, 2007**

| Cities/Municipalities Coverage/Energized | No. of Potential Barangays | No. of Energized Barangays | (%) | No. of Potential Households | No. of House Connection | (%) |
|--|----------------------------|----------------------------|---------------|-----------------------------|-------------------------|---------------|
| DANECO: | | | | | | |
| New Corella | 20 | 20 | 100% | 8,683 | 4,256 | 49% |
| Asuncion | 20 | 20 | 100% | 9,337 | 5,021 | 54% |
| Tagum City | 23 | 23 | 100% | 42,434 | 40,165 | 95% |
| Kapalong | 14 | 14 | 100% | 11,798 | 5,410 | 46% |
| Talaingod | 3 | 3 | 100% | 3,890 | 584 | 15% |
| San Isidro | 13 | 13 | 100% | 4,683 | 1,875 | 40% |
| Babak, IGaCoS | 16 | 16 | 100% | 6,548 | 3,265 | 50% |
| Penaplata, IgaCoS | 15 | 15 | 100% | 5,044 | 2,180 | 43% |
| Kaputian, IgaCoS | 15 | 15 | 100% | 5,796 | 1,888 | 33% |
| Total | 139 | 139 | 100% | 98,213 | 64,644 | 66% |
| DLPC: | | | | | | |
| Sto. Tomas | 19 | 19 | 100% | 16,810 | 16,111 | 95.84% |
| Panabo City | 40 | 40 | 100% | 27,225 | 26,965 | 99.04% |
| Carmen | 20 | 20 | 100% | 11,073 | 11,073 | 100% |
| B.E. Dujali | 5 | 5 | 100% | 3,397 | 3,397 | 100% |
| Total | 84 | 84 | 100% | 57,806 | 57,546 | 99.6% |
| Davao del Norte | 223 | 223 | 100% | 156,019 | 122,190 | 78.32% |
| Region XI | 1,160 | 1,157 | 99.74% | - | - | - |
| Philippines | 41,980 | 40,567 | 96.63% | - | - | - |

Source : Davao del Norte Electric Cooperative (DANECO) and DLPC, DOE Website
11th Status Report on EPIRA Implementation (ER Program Secretariat – DOE)

Among the three (3) component cities of the province, Panabo City had the highest number of household connection with 99.04 percent, and among the eight (8) municipalities, Talaingod had the lowest with 15 percent.

Considering other provinces of Region XI as of 2005, Davao del Norte with a household energization rate of 60.61% is next to Davao del Sur with 72.4% and followed by Davao Oriental with 58.6% and Compostela Valley with 49.28 %.

While power supply is currently sufficient, there is no guarantee that it can meet the future demand with the rapid expansion of commercial and industrial activities within the province. To meet the power requirements, it is essential to develop alternative sources of energy which is readily available in the province, such as hydropower, solar energy and windmill.

6.4.4 Drainage/Flood Control

a. Drainage System

The existing drainage network in the province is not sufficient to contain floods especially in the lowland areas. Several measures were already taken such as improvement of the drainage facilities, re-channeling and desilting of creeks and rivers and watershed management which were long term schemes.

However, as urban areas are expanding due to rapid increase in development and population, urban drainage systems remain constant and under sub-standard conditions. Some are of inadequate designs to cater the discharge/volume of water, which aggravate the drainage problem of the area.

b. Flood Control

Flooding is a yearly occurrence in the province particularly in the lowland areas. Recent studies reveal that flooding is primarily caused by continued destruction of the vegetative cover and the changing land use patterns brought about by urban development. The rapid soil erosion in the upland resulted to too much siltation of the rivers and other waterways. Flooding is aggravated by the undisciplined activities of people in clogging drainage facilities in the lowland particularly in urban centers and in obstructing the natural drainage waterways both in the urban and rural areas. Major flood control projects and structures had been constructed by the Department of Public Works and Highways, such as: (a) Libuganon Flood Control, (b) Carmen Flood Control, (c) Tuganay Flood Control, (d) Lasang Flood Control and (e) Tagum Drainage.

Disaster preparedness and management has always been the main concern of the Provincial Disaster Coordinating Council (PDCC). Massive advocacy and capability building programs had been undertaken which were actively participated by the local officials, rescue teams and the general public. Civic and non-government organizations also provided support and active involvement during floods.

Table No. 3-155: Disaster Data in Davao del Norte, 2003 – 2007

| Date of Occurrence | Type of Disaster | No. of Mun. / Cities Affected | No. of Brgys. Affected | No. Families Affected | No. of Dependents Affected | No. of Casualty | No. of Damage House | | Total Amount of Damage ('000) | | |
|--------------------|-----------------------------|-------------------------------|------------------------|-----------------------|----------------------------|-----------------|---------------------|-------------------|-------------------------------|--------------|---------|
| | | | | | | | Totally Damaged | Partially Damaged | Infra. | Crops | Fishery |
| Nov. 1, 2007 | Flood | 1 (B.E. Dujali) | 436 | 2,180 | | | | | 1,500 | 247.90 | |
| Sept. 24, 2007 | Strong wind (freak tornado) | 1 (Mun. of Sto. Tomas) | 3 | 20 | | | 10 | 2 | | 2,200 | |
| Feb. 9-10, 2007 | Flood | 6 | 63 | 24,562 | 94,315 | | 4 | | 28,808 | 49,645.92750 | 31,830 |
| Feb. 6, 2006 | Flood | 1 (New Corella) | | | | | | | | | |
| Feb. 4, 2006 | Flood | 1 (Sto. Tomas) | 1 | 859 | 3,436 | | | | 2,910 | | |
| Jan. 25-26, 2006 | Flood | 1 (Mun. of Carmen) | 10 | 5,615 | | | | | | 10,000 | |
| Jan. 10-11, 2006 | Flood | 6 | | | | | | | | | |
| Oct. 2005 | Flood | 1 (Asu.) | 4 | 1,127 | 4,508 | | | | 1,000 | 778.428 | |
| March 6-7, 2004 | Flood | 1 (New Corella) | 15 | 10,500 | 42,000 | | | | | | |
| Feb. 12-13, 2004 | Flood | 6 | 63 | 20,939 | 85,699 | | 2 | | | 49,292 | |
| Dec. 20-22, 2003 | Flood | 6 | 56 | 21,938 | 88,310 | | | | 15,600 | 30,478.625 | 6,950 |

Source: PSWDO, PDCC

Table No. 3-156: Flood Prone Areas, Davao del Norte

| Municipality | Area (Sq.m) | % Share |
|------------------------|---------------|-----------|
| Asuncion | 83.25 | 9 |
| Carmen | 100.93 | 11 |
| Kapalong | 20.97 | 2 |
| New Corella | 44.26 | 4 |
| Panabo City | 30.80 | 3 |
| Sto. Tomas | 23.74 | 2 |
| Tagum City | 64.25 | 7 |
| Davao del Norte | 407.26 | |
| Region XI Total | 904.64 | 45 |

Source: RFPF XI 2003 -2030

Note: Data may not add up due to rounding

Davao del Norte has a total of 407.26 hectares identified as flood prone areas, and represents 45% share in the whole region. The municipality of Carmen has the largest area of 100.93 hectares or 11% share in the flood prone areas of the province.

Flooding problems need both the short term and long term control measures. Provision of flood control measures such as construction of protection dikes, cut-off channels, cross drainage along highways, desiltation of rivers are among the immediate solutions. Since denudation of the vegetative cover has been identified as the main cause of floods, reforestation and watershed rehabilitation programs can be undertaken as long term activities. Agricultural and other economic activities in the upland should also consider the aspect of maintaining a healthy ecological balance in sustaining the ecosystems and preventing environmental hazards.

6.4.5 Solid Waste Management

Solid waste disposal in the province is a vital component in environmental protection. However less attention has been afforded by most LGU's. The passage of R.A. 9003 otherwise known as Ecological Solid Waste Management Act of 2000 mandated each LGU's Barangays, Municipality/City for the mandatory implementation.

Table No 3-157: Percentage distribution of household type of garbage disposal.

| Municipal/City | 2007 Population | No. of HH | % distribution of household type of garbage disposal (In metric tons) | | | | Level of Desegregation |
|-----------------------|-----------------|----------------|---|--------------|--------------|-------------------------|------------------------|
| | | | Pick up by Garbage Truck Daily | Burning | Composting | Burying Feed to Animals | |
| Tagum City | 215,967 | 44,194 | 53.2 | 15.6 | 23.40 | 7.8 | City/Barangay |
| Panabo City | 154,329 | 30,866 | 72.7 | 2.7 | 18.90 | 5.7 | City/Barangay |
| IGaCoS | 90,291 | 18,059 | 76.0 | 2.0 | 12.00 | 10 | City/Barangay |
| Sub-Total/Ave. | 460,587 | 93,119 | 64.2 | 8.6 | 19.70 | 7.5 | |
| New Corella | 46,311 | 9,263 | 2.09 | 18.77 | 49.27 | 29.87 | Mun./Barangay |
| Asuncion | 50,731 | 10,147 | 3.0 | 2.8 | 60.00 | 34.2 | Mun./Barangay |
| Kapalong | 61,763 | 12,478 | 12.15 | 37.44 | 15.28 | 35.13 | Mun./Barangay |
| Talaingod | 19,600 | 3,290 | 12.0 | 20.0 | 5.0 | 63.00 | Mun./Barangay |
| San Isidro | 24,696 | 4,940 | 81.00 | 6.0 | 85 | 12.00 | Mun./Barangay |
| Sto. Tomas | 97,210 | 19,442 | 95.00 | 3.00 | 95.0 | 3.0 | Mun./Barangay |
| B.E. Dujali | 24,886 | 4,978 | 5.0 | 6.00 | 47 | 70.00 | Mun./Barangay |
| Carmen | 61,656 | 12,332 | 26 | 6.00 | 64 | 4.0 | Mun./Barangay |
| Sub-Total/Ave. | 386,853 | 76,870 | 37.0 | 12.20 | 58.5 | 24.0 | |
| Total/Ave (DDN) | 847,440 | 169,989 | 52.00 | 10.0 | 38.0 | 15.0 | |

Source: NSO 2007 Census of Population Report, Waste Garbage Indicators-City ENRO's, MENRO's, MPDO's 2006 & 2007.

Note: No. of Household HH is computed from 2007 Census of population in an ave. of 5 household size.

On a city level, pick up by garbage truck ranges 53.2% to 76% and averages to 64.2%, the remaining 35.8% was disposed by composting, feed to animals and seldom by burning (Table No. 3-158). The frequency of disposal was performed daily to pick up by garbage trucks, Composting and Feed to Animals. Its level of desegregation is city and barangay.

Likewise, at the barangay / municipal level, pick up by garbage trucks ranges from 5.0% to 95% and averages to 37%. However, the aggregate total average of composting, burying and feed to animals is 94.7%. This suggests that these types of garbage disposal are also practiced by those households serviced by garbage pick up trucks. The frequency of garbage collection in barangay and municipal levels is daily and seldom on burning. On national data, based on JICA Study (1999), estimated countrywide collection is placed at 40% on municipal LGU and 70% on major cities.

6.4.6 Other Services

It is important that the necessary community services are made available for the whole community, for everyone to enjoy a full and active life. There should be easy access to excellent modern health and social care services. There is also a need to encourage learning throughout life by supporting a range of learning opportunities, regardless of age or ambition. Everyone should have access to the opportunities and facilities they need to realized their personal, academic and professional goals.

a. Communication Services

Efficient and adequate communication facilities are vital to the province's effort towards development. The fastest way to connect the province to other province in the region and in the country and to the rest of the world is through a well-developed communication system, with facilities and services that are affordable and accessible to people and business.

Davao del Norte is not far among other develop provinces in terms of services and facilities development. However, if other country of which is highly developed in technology as a benchmark, we are outlying in terms of development and services.

A communication service is necessary to participate and become globally competitive in economic activity. It is encourage that private sector will lead this undertakings;

b. Broadcast Media

Davao del Norte has one (1) commercial radio station, the UMBN-DXDN, An amplified modulation radio station located at Tagum City, It covers not only in Davao del Norte but also in Compostela Valley Province and reaching secondary areas like Davao Oriental, Davao del Sur, Davao City and even in Bukidnon Province. On the other hand, there are already three (3) Frequency Modulated (FM) radio stations located at Tagum City with very good signals reaching all over the province and even in other near provinces.

Moreover, three (3) cable networks cater Davao del Norte namely; The North Cable Vision, Home Channel Network and the Dream Satellite Cable Network. Most subscribers of these networks are located in urban areas; however the Dream Satellite Network subscribers are not limited to urban areas it reaches to the rural areas since the network is using through the satellite broadcasting.

c. Telephone and Telegraph Stations Services

Davao del Norte is also fast advancing in terms of communication facilities. Major telephone lines like SMART Broadband, DATELCO, DOTC-TELOF and PhilCom. Are servicing several parts of the province, however operational areas are concentrated in the urban areas in some municipalities and cities, advance information technology such as electronic mail and cellular phone companies are also available in the province. Internet café's are now a fast growing business in the province, except in the upland areas.

**Table No.3-158: Number of Landlines Telephone Subscriber
Province of Davao del Norte, As of April, 2008**

| Service Area | Type of Exchange | Equipped Capacity | Installed Lines | No. of Subscribers | Household Population | % |
|--------------------------|------------------|-------------------|-----------------|--------------------|----------------------|-------|
| Tagum City DOTC-TELOF | Landline | 2,120 | 2,120 | 546 | 34,561 | 19.63 |
| DGCI | | 2,500 | 2,300 | 1,921 | | 5.55 |
| SMART | | - | - | 4,316 | | 12.49 |
| Broadband | | - | - | - | | - |
| Panabo City PhilCom | Landline | 3,788 | 3,700 | 656 | 30,061 | 2.18 |
| Asuncion DOTC-TELOF | Landline | 800 | 800 | 48 | 10,715 | 0.44 |
| Kapalong DOTC-TELOF | Landline | 848 | 848 | 211 | 12,779 | 1.65 |
| Sto Tomas DOTC-TELOF | Landline | 800 | 800 | 5 | 15,861 | 0.031 |
| PhilCom | | 1,336 | 1,700 | 393 | | 2.48 |
| Carmen PhilCom | Landline | - | 10 | 5 | 12,597 | 0.039 |

Source: DOTC-TELOF, DGCI, PhilCom and SMART Broadband

SMART Broadband was formerly the CRUZTELCO has the highest number of subscribers, having 19.63% concentrated only in Tagum City.

The use of cellular phones is becoming more convenient to the people in the province, because of the series of cell sites that constructed in the upland areas, thus contributes to low subscription of landlines telephones.

d. Publications

National newspapers and magazines are accessible in the province since these are available daily in most urban areas of each municipalities and cities, while local newspapers are available on twice weekly or in a weekly basis. The local publication that circulates in the province are Trends and Times, Mindanao Goldstar Daily, Ang Mantalaan (The Mindanao Patrol) and even other local publication from different provinces circulates in Davao del Norte.

There are two (2) newsletters being published by the province namely: The Executive Reports and the Legislative Updates. These newsletters are official publications of the Province of Davao del Norte to update the local constituents of the various undertakings, developments, news and other important information of the provincial government of Davao del Norte.

Postal Services

At present, Postal District Office is positioned at Tagum City. There are 61 administrative personnel in the office which covers and serves the whole province of Davao del Norte and partly in the province of Compostela Valley and Davao Oriental. (Refer to Table 3-159). Mail and deliveries are made daily by a mail car from the regional post office in Davao City. However, the use of cellular phone text messaging communication, it reduces the volume of letters that letter carriers delivered everyday.

Table No. 3-159 : Postal Personnel to Population by Municipality, Province of Davao del Norte, as of 2008

| City/Municipality | No. of Personnel | Number of Letter Carrier | Population | Ratio |
|-------------------|------------------|--------------------------|------------|----------|
| District Office | 2 | - | - | - |
| Tagum City | 31 | 14 | 215,967 | 1:6,966 |
| Asuncion | 3 | 1 | 50,731 | 1:16,910 |
| Carmen | 2 | 1 | 61,656 | 1:30,828 |
| Dapecol | 1 | - | - | - |
| Kapalong | 5 | 3 | 61,763 | 1:12,352 |
| Laak | 1 | - | - | - |
| New Corella | 2 | 1 | 46,311 | 1:23,155 |
| Panabo City | 10 | 6 | 154,329 | 1:15,432 |
| Sto. Tomas | 4 | 2 | 97,210 | 1:24,302 |
| IGaCoS | - | - | 90,291 | - |

Source: Philippine Postal Corp. (Davao del Norte / ComVal) Postal District Office & NSO 2007 Census of Population.

The emergence of mobile phone communication in the province has affected the operation of the local post offices. It has been noted that the volume of letters from the sending public had drastically reduced, thereby weakening its earning capacity.

In Tagum City and some other Cities and Municipalities, private forwarders such as LBC and JRS are augmenting the services of the post offices.

It is important that the necessary infrastructure and community services are made available for the whole community, for everyone to enjoy a full and active participation in community. Everyone should have access to the opportunities and facilities they need to realize their personal, academic and professional goals. Adequate infrastructure provision also needs to be in place to ensure everyone can enjoy the same high quality of life, with all the services they need to ensure their physical, social and spiritual being.

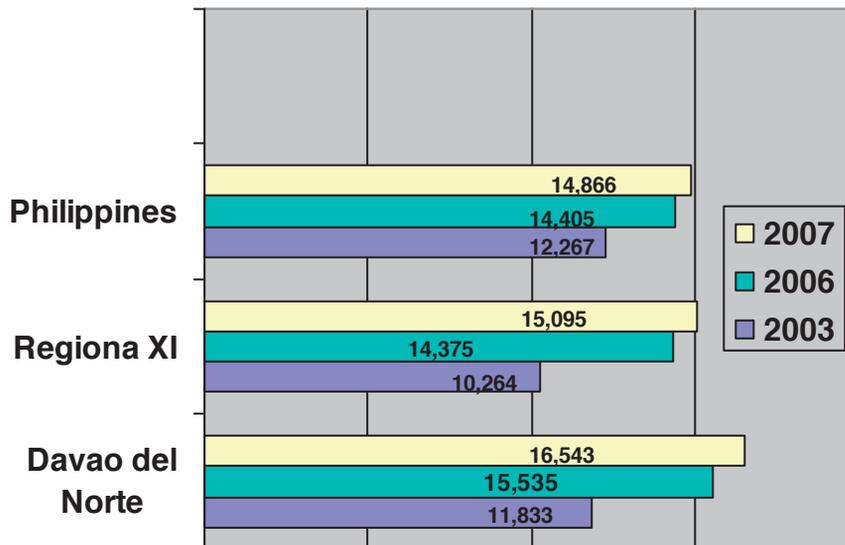
Adequate infrastructure facilities must be in place to accommodate the needs created by new developments, and should be located in the most appropriate locations to allow for the efficient use of it.

6.5 Poverty

As defined in the National Strategy to Fight Poverty by the UN Joint Consultative Group on Policy, Poverty connotes a deprivation to a social standard, or the lack of the minimum entitlements of households in society which the government must seek to provide, either directly or indirectly.

In terms of annual per capita poverty threshold, a person in Davao del Norte needs a yearly income of P 16, 543 in 2007 in order to meet the minimum basic needs. A family of five would therefore need an annual income of P 82,715.00 or a monthly income of P 6,892.00. Comparing to the regional and national figures, the province registered a higher annual per capita poverty threshold (Figure No.3-22).

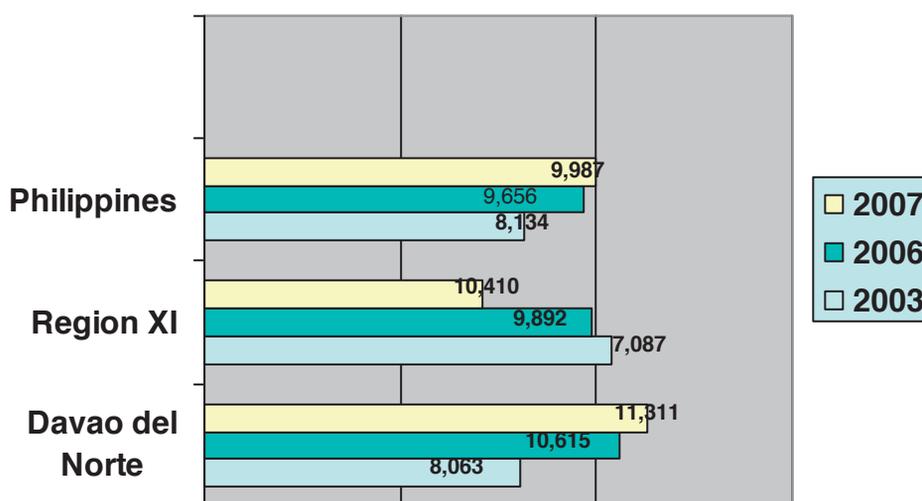
**Figure No. 3-22 : Annual per Capita
POVERTY & THRESHOLD
Provincial / Regional / National**



Source: NSCB

The annual per capita food threshold or the cost of food to satisfy the nutritional requirements was estimated at P 11,311 in 2007. Again, a family of five members was estimated to consume an amount of P 56,555.00 annually or P 4,712.00 monthly for the food requirements. Davao del Norte registered a higher annual per capita food threshold level than the regional and national levels.

**Figure No. 3-23 : Annual Per Capita
FOOD THRESHOLD
Provincial / Regional / National**



Source: NSCB

Comparing to other provinces in the region data shows that the living standard in Davao del Norte is the highest, higher even than the regional data. Living in Davao del Sur is less costly compared to other provinces in Region XI. Table No. 3-160.

*Table No. 3-160 : Annual Per Capita Poverty / Food Threshold
 Region XI, 2007*

| | Poverty Threshold | Food Threshold |
|-------------------|--------------------------|-----------------------|
| Davao del Norte | 16,543 | 11,311 |
| Davao del Sur | 14,983 | 9,925 |
| Davao Oriental | 13,843 | 10,231 |
| Compostela Valley | 14,758 | 10,496 |
| Region XI | 15,095 | 10,410 |

Source: NSCB

6.5.1 Poverty Incidence

Family Income and Expenditure Survey (FIES) 2006 reported that 37 families out of 100 families in Davao del Norte were considered poor or were below the estimated poverty threshold level or those having family income below P 6,892.00. It has a reported increase of 24% when compared to 30 poor families in every 100 families in 2003. It is even higher when compared to the regional and national estimates. Please refer to Table No. 3-161.

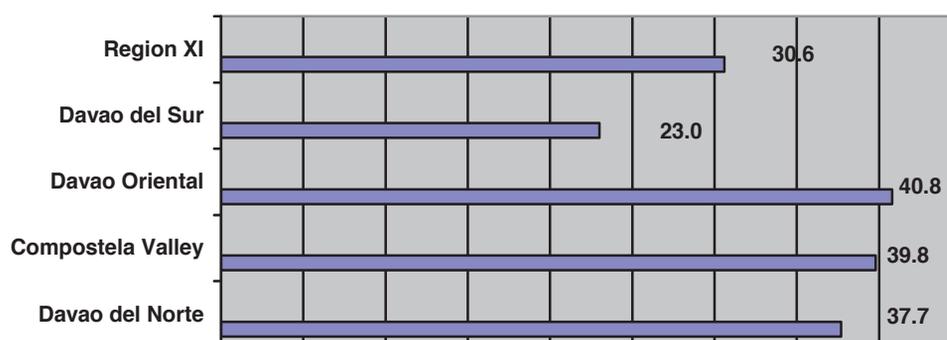
Table No.3-161 : Poverty Incidence Among Families

| | 2000 | 2003 | 2006 | Increase/Decrease | |
|-----------------|------|------|------|-------------------|-----------|
| | | | | 2000- 2003 | 2003-2006 |
| Davao del Norte | 39.5 | 30.3 | 37.7 | (9.2) | 7.3 |
| Region XI | 27.9 | 28.5 | 30.6 | 0.5 | 2.1 |
| Philippines | 27.5 | 24.4 | 26.9 | (3.1) | 2.5 |

Source: NSCB

Considering other provinces in Davao Region, poverty incidence among families in 2006 in Davao del Norte ranked third from highest and second from the lowest levels. Davao del Sur has the lowest poverty incidence having only 23 families considered as poor out of 100 families. (Figure No. 3-24).

**Figure No. 3-24 : Poverty Incidence Among Families
Region XI, 2006**



Source: NSCB

Based on the municipal level small area estimates made by the National Statistical Coordination Board in 2005, the municipality of Talaingod has the highest number of poverty of poverty incidence at 69 per 100 families. Table no. 3-162.

**Table No. 3-162 : Poverty Incidence by City/Municipality
Province of Davao del Norte, 2005**

| CITY/ MUNICIPALITY | POVERTY INCIDENCE Per 100 |
|--|---------------------------|
| | Families |
| Asuncion | 50.72 |
| Braulio E. Dujali | 31.98 |
| Carmen | 41.59 |
| Kapalong | 50.23 |
| New Corella | 50.59 |
| Sto. Tomas | 32.67 |
| San Isidro (part of Asuncion/Kapalong) | |
| Talaingod | 69.35 |

Source: NSCB, Estimation of Local Poverty in the Philippines

Poverty incidence in Davao del Norte has been increasing for the last two (2) reporting periods and has been demonstrating higher occurrences than the regional and national data. Increasing poverty incidence cuts across all sectors in development and must be afforded necessary and appropriate action.

7.0 LAND USE AND PHYSICAL FRAMEWORK

7.1 Existing land use, trends and potential expansion

7.1.1 Existing land Use

Existing land use is defined as the way in which an area of land is actually being put to use, e.g. to grow rice, to build houses on, to put up industry; this is the impact of people and structure upon the land.

Existing land use in the province is categorized into the following:

- a. Production areas
- b. Protection areas
- c. Built-up/settlement areas
- d. Infrastructure and Utilities

a. Production Areas

1. Agriculture

Agriculture lands as defined are those lands that are extensively used for crop production. They are intended for the production of cash crops, sustenance crops, medium term and long term crops.

The Province is basically an agriculture province endowed with rich and fertile soil, and favorable climate suited for agriculture production. About 48.04 percent or 166,505.63 hectares are devoted to agriculture and aquaculture production. Major crops planted in the province are the following:

- Rice is produced in all cities and municipalities. Major production areas are the municipalities of Asuncion, New Corella, Carmen, B.E Dujali and Sto. Tomas. Total area devoted for rice production, irrigated and non-irrigated, is placed at 20,836 hectares.
- Coconut trees cover an extensive area of the Island Garden City of Samal, Tagum City and Panabo City. Land devoted to coconut production is about 38,938 hectares.
- Cavendish banana is planted in approximately 38,545 hectares. Cavendish is produced mainly in the municipalities Kapalong, Sto. Tomas, Carmen, B.E Dujali, and the cities of Panabo and Tagum. On the other hand, local varieties of banana such as lakatan and cardaba are planted in 12,258 hectares. Cardaba bananas are processed into chips and sold in local and export markets.
- Mono-crop cultivation of corn is around 6,766 hectares which are usually planted with the white variety. There are also areas grown with corn and being intercropped with other commodities such as banana or under coconut.
- Cacao is produced in an area of 4,030 hectares. The municipality of San Isidro has the biggest area planted with cacao having 89 percent of the total production area in the province.
- Mango is produced in 7,725 hectares with the Island Garden City of Samal contributing the biggest production area at 4,433 hectares.

- 2,572.69 hectares used for aquaculture/fishpond development. Large fishpond is found in the municipalities of Carmen and B.E Dujali and the City of Tagum.

2. Production Forest

Forestlands are lands on which the vegetation is characterized by more or less dense and extensive tree cover. It includes those lands from which trees have been harvested and the intent is to maintain the land for tree production or land with tree cover set aside for the protection of other resource values. In Davao del Norte areas classified as forestland is approximately 160,833 hectares.

Davao del Norte has an approximate production forestland area of 132,115.93 hectares. Out of the total area classified for production forest, approximately 24,658.63 hectares or 18.6 percent are residual forest or those that have been logged-over. These areas are found in the municipalities of Kapalong and Talaingod. Tree plantation is about 9,035.57 hectares or 9.3 percent of the total production forest. These areas were covered under the Integrated Social Forestry Program which were devolved to the LGU, and the Community-Based Forest Management Program of the DENR. Production forest are those areas where harvesting is allowed

Grassland and open areas comprise about 59,323.03 hectares or 45 percent, while brushland is about 32,340.07 hectares or 9.3 percent. These areas are available for plantation development. Cultivated or areas utilized for crop production comprise 6,798.43 hectares or 2 percent of the total production forest areas. These areas are mostly planted with agro-forestry products.

Brush and grasses dominate the landscape of the production forest areas in the municipalities of Kapalong and Talaingod. Open access areas are also found in the mountain ridges of New Corella, Asuncion, Sto. Tomas, and Island Garden City of Samal. Forestland in these areas is partly encroached upon by upland dwellers/communities. Table No. 3-164 shows the intervention of the DENR and the provincial government in the development and rehabilitation of production forest.

Table No. 3-164 : Forest Plantation Development, By Program, By City/Municipality Province of Davao del Norte, as of 2007 (in hectares)

| City/Municipality | Integrated Social Forestry Program (devolved) | Community-Based Forest Management Program |
|------------------------|---|---|
| Asuncion | 47.0 | 1,592.00 |
| Carmen | 33.0 | 0 |
| Kapalong | 113.0 | 1,090.00 |
| New Corella | 40.0 | 2,707.68 |
| San Isidro | 147.3 | 181.00 |
| Sto. Tomas | 121.0 | 1,266.89 |
| Talaingod | 206.5 | 1,671.00 |
| Panabo City | 0 | 0 |
| <i>Davao del Norte</i> | <i>677.80</i> | <i>8,357.77</i> |

Source: DENR, PENRO-LGU, Davao del Norte

3. Mining Areas

Davao del Norte have rich deposits of non-metallic minerals like limestone, sand and gravel and others. It has a total reserve of 44,845,283 M.T of non-metallic minerals. Of these non-metallic minerals, sand and gravel of high quality grade, a major component material in construction is

extracted in the province. Major producers of sand and gravel are the cities of Panabo and Tagum (Table No. 3-35).

4. Industrial Development Areas

In the pursuit of transforming the Province from merely a source of raw materials into becoming a producer of high quality manufactured and processed products, the creation of Tagum City and Panabo City as Provincial Agro-Industrial Centers is expected to boost prospects in the local economy.

The Panabo PAIC, a 540 hectare industrial site is expected to benefit other municipalities in the second district of the province as its influence areas. While the 635 industrial estate, that includes areas for residential and eco-tourism development, allocated in Tagum City is expected to propel growth not only in Tagum but in other municipalities of the province as well. These areas are found feasible for the location of industrial establishments, such as manufacturing/processing firms, and support facilities. An industrial estate of 25 hectares is located in Madaum, Tagum City.

5. Tourism Areas

Areas with potential for tourism development are found in the Island Garden City of Samal as well as in the mainland. Samal boast of its white sand beaches and islets that is excellent for scuba diving and snorkeling, while springs, caves and other inland resorts are some of the attractions found in the mainland. An area of 670.56 is devoted for tourism. Also, a mariculture park in the Island Garden City of Samal and Panabo City is being promoted as one of the agri-tourism sites in the province.

b. Protection Areas

Protection land is a portion of land and water set aside for its unique physical and biological diversity and protected against destructive human influences or impacts.

Protection refers to the rehabilitation, conservation and sustainable development and management of certain categories of land and water resources known as protection lands.

Protection land use involves a concept of protection that enhances not only those that have to be protected from human occupation because of the destructive effect such occupation will have on the resource, but also due to the hazard posed by the area to the human occupants. Hence, dual objective of maintaining protection land is to protect sensitive and critical ecosystem from human intrusion so as to preserve their integrity, and at the same time allow degraded areas to regenerate as well as to protect human population from environmental hazards.

Davao del Norte's protection lands include the Mangrove Swamp Forest Reserve in Babak, Non-NIPAS, network of Protected Areas for Agricultural Development/Strategic Agriculture and Fisheries Development Zone (NPAAD/SAFDZ), Flood Prone areas and areas affected by severe erosion.

1. NIPAS Areas

The national Integrated Protected Areas System (NIPAS) was established under Republic Act No. 7586. Protected areas categorized under NIPAs are: 1) strict nature reserve, 2) national park, 3) natural monument, 4) wildlife sanctuary, 5) protected landscape and seascape, 6) resource reserve,

7) natural biotic, and other categories established by law, conventions or international agreements which the Philippine Government is a signatory.

NIPAS areas in Davao del Norte is the 7,656 hectares Samal Island Protected Landscape/Seascape which was proclaimed under Proclamation No. 2152.

2. Non-NIPAS Areas

Non-NIPAS areas are composed of second growth forest (PD 705), mangrove and fish sanctuaries (RA 8435 & RA 8550), buffer strips and easements (PD 705 & PD 1067), salvage zones along foreshore lands (PP 2146), freshwater swamps and marshes (PP 2146), environmentally critical areas (PD 2146), protected agricultural areas (RA 8435 & RA 8048) and other protected areas.

In Davao del Norte, Non-NIPAS areas cover second growth forest above 1000 m. elevation or more than 50% slope, mangrove forest and buffer strips along rivers and escarpments. Approximately, 47,758.83 hectares are under this category of protection lands.

3. SAFDZ/NPAAD Areas

SAFDZ area in the province is accounted at 132,382 hectares. Of the total SAFDZ area, 125,847 has. or 95.1 % are identified as Strategic Crop Sub-Development Zone, 3,861 has. or 2.9 % as Strategic Fishery Sub-Development Zone, 2,120 has. or 1.6 % as Integrated Strategic Crop/Livestock Sub-Development Zone, while Integrated Strategic Crop/Fishery Sub-Development Zone is approximately 554 has. or 0.4 %. Total SAFDZ area of the province is 21.6 percent of the region.

Under NPAAD/SAFDZ, some agricultural lands are “protected” against any irreversible conversion such as urban use. The main purpose of such protection is to keep and preserve the highly suitable agricultural lands for long-term food security of the nation. In addition, these lands are usually supported by large investment in infrastructure. Remaining NPAAD in Davao del Norte covers agricultural lands that are ecologically fragile and those lands that are covered with grasses. A detail of SAFDZ areas in the province is presented below.

Table No. 3-164 : Areas of Strategic Agriculture and Fisheries Development Zone (SAFDZ) By City/Municipality, Davao del Norte, 2007 (in hectares)

| City/Municipality | Strategic Crop Sub-Development Zone | Strategic Fishery Sub-Development Zone | Integrated Strategic Crop/Livestock Sub-Development Zone | Integrated Strategic Crop/Fishery Sub-Development Zone | Total |
|-------------------|-------------------------------------|--|--|--|--------|
| Asuncion* | 8,277 | 0 | 48 | 12 | 8,337 |
| B.E Dujali | 6,052 | 2,660 | 0 | 0 | 8,712 |
| Carmen | 16,484 | 51 | 225 | 150 | 16,910 |
| Kapalong* | 11,629 | 0 | 32 | 0 | 11,661 |
| New Corella | 15,978 | 34 | 365 | 0 | 16,377 |
| Sto. Tomas | 18,750 | 0 | 0 | 0 | 18,750 |
| Talaingod | 1,475 | 0 | 0 | 0 | 1,475 |
| IGC of Samal | 23,371 | 0 | 0 | 0 | 23,371 |
| Panabo City | 13,231 | 138 | 31 | 0 | 13,400 |

| | | | | | |
|------------------------|----------------|--------------|--------------|------------|----------------|
| Tagum City | 10,600 | 978 | 1,419 | 392 | 13,389 |
| Davao del Norte | 125,847 | 3,861 | 2,120 | 554 | 132,382 |
| % Share | 95.1 | 2.9 | 1.6 | 0.4 | 100 |

Source: BSWM-XI

* including data for San Isidro

4. Primary Growth Forest

Primary growth forest of 27,722.84 hectares is found in the municipalities of Kapalong and Talaingod. These areas have to be protected through implementation of efficient and sustainable forest management scheme. Primary growth forest which consist of old growth and mossy forest are located in areas with slope of above 50% and elevation of 1000 masl or more.

5. Mangroves and Fish Sanctuaries

The province has a total mangrove area of 208.56 hectares. Among the coastal areas of the province, Panabo City has the largest area planted with mangrove with 82 hectares. Table No. 3-166 indicates the areas of mangrove, seagrass and coral reefs in the province.

*Table No. 3-165 : Areas of Mangrove, Seagrass and Coral Reef in Davao del Norte
 By City/Municipality, As of October 2005 (in hectares)*

| City/Municipality | Mangrove | Sea-grass | Coral Reef |
|-------------------|----------|-----------|------------|
| IGC of Samal | 63.56 | 7.50 | 95.00 |
| Panabo City | 82.00 | 15.00 | 10.00 |
| Tagum City | 3.00 | 1.00 | 1.00 |
| Carmen | 60.00 | 5.00 | 6.00 |
| Davao del Norte | 208.56 | 28.50 | 112.00 |

Source: RPPF, Region XI, 2003-2030

6. Agrarian Reform Areas

The acquisition and distribution of agricultural land is undertaken through PD 27 and RA 6657 of the Comprehensive Agrarian Reform Program (CARP).

Davao del Norte has areas earmarked for agrarian reform of 63,290 hectares or 18 percent of its total land area. As of 2007, 59,118 hectares or 17 percent were already awarded to farmer-beneficiaries and a total of 4,172 hectares are yet to be distributed as presented in Table No. 3-167.

**Table No. 3-166 : Cumulative Accomplishment on Land Acquisition and Distribution
By City/Municipality, Davao del Norte, as of 2007 (in hectares)**

| City/Municipality | Lands for Distribution | Lands Distributed | Balance | Percentage of Accomplishment |
|-------------------|------------------------|-------------------|---------|------------------------------|
| Asuncion* | 12,300 | 11,275 | 1,025 | 91.6 |
| Carmen | 5,125 | 4,982 | 143 | 97.2 |
| Kapalong** | 9,891 | 8,593 | 1,298 | 86.9 |
| New Corella | 4,313 | 4,042 | 271 | 93.7 |
| Sto. Tomas*** | 15,160 | 14,980 | 180 | 98.8 |
| IGC of Samal | 5,895 | 5,074 | 821 | 86.1 |
| Panabo City | 6,358 | 6,158 | 200 | 96.8 |
| Tagum City | 4,248 | 4,014 | 234 | 94.5 |
| Davao del Norte | 63,290 | 59,118 | 4,172 | 93.4 |

Source: DAR Davao del Norte

Note: covering only lands issued with CLOA and its corresponding ARBs

* includes data for San Isidro

** includes data for Talaingod

*** includes data for B.E Dujali

To empower the agrarian reform beneficiaries and increase farm productivity and household income, the strategy of developing agrarian reform communities was followed. There are 25 ARC's organized in the province as of year 2007. Among the municipalities in the province, Panabo City has the most number of ARCs at 5 while the municipality of B.E Dujali and Talaingod have the least number of ARCs with only one.

**Table No. 3-167 : Distribution of Agrarian Reform Communities, By City/Municipality
Province of Davao del Norte, 2007**

| City/Municipality | No. of ARCs | No. of Beneficiaries | No. of Barangays Covered | Area Coverage (in hectares) |
|---------------------|-------------|----------------------|--------------------------|-----------------------------|
| Asuncion/San Isidro | 3 | 2,789 | 17 | 7,845.3451 |
| B.E Dujali | 1 | 845 | 4 | 2,277.1420 |
| Carmen | 2 | 2,318 | 5 | 3,065.0180 |
| Kapalong | 2 | 3,819 | 7 | 6,750.2759 |
| New Corella | 2 | 1,990 | 11 | 3,006.3764 |
| Sto. Tomas | 2 | 5,470 | 17 | 8,272.9981 |
| Talaingod | 1 | 310 | 3 | 648.0086 |
| IGC of Samal | 4 | 1,887 | 16 | 3,173.9637 |
| Panabo City | 5 | 3,671 | 16 | 5,631.3845 |
| Tagum City | 3 | 2,334 | 6 | 2,771.8310 |
| Davao del Norte | 25 | 25,433 | 102 | 43,442.3433 |

Source: DAR Davao del Norte

7. Military and Civil Reservation Areas

Davao Penal Colony (Dapecol) with an area of 28,816 hectares is the only military and civil reservation in the province. The area was declared as such through Proclamation No. 414 on October 7, 1931. Most of these areas, however, are now utilized for agricultural purposes,

particularly banana plantation and only about 8,880 hectares are actually used by the penal colony.

8. Ancestral Domain Areas

In a manner of recognizing, respecting and protecting the rights of the IPs in preserving and developing their cultures, traditions and institutions, RA 8371, known as the Indigenous People's Rights Act (IPRA) was enacted on October 27, 1997. The enactment of IPRA Law has established the IPs rights and ownership of ancestral domain claims through the awarding of Certificate of Ancestral Domain Title (CADT) and the Certificate of Ancestral Land Title (CALT).

A Certificate of Ancestral Domain Claim (CADC) was issued to the municipality of Talaingod covering an area of 65,583 hectares with the Ata-Manobo tribe as the beneficiaries.

9. Environmentally Critical Areas

Environmentally critical areas include flood prone areas, areas susceptible to soil erosion and areas traversed by geologic fault lines.

- *Flood Prone Areas*

Eight of the eleven cities/municipalities of Davao del Norte are prone to flooding. The most frequently affected by this phenomenon are those areas along the Tagum-Libuganon river. These are the municipalities of Carmen, Asuncion and New Corella and the City of Tagum. (Table No. 3-18)

Flooding problems need both the short term and long term control measures. Construction of protection dikes, cut-off channels, cross drainage along highways and desiltation of rivers are among the immediate solutions. Since denudation of the vegetative cover has been identified as the main cause of floods, reforestation and watershed rehabilitation programs can be undertaken as long term activities.

- *Soil Erosion*

Soil erosion is caused by different factors which include vegetative cover, topography, drainage, amount and frequency of rainfall and inappropriate farm practices. Areas susceptible to severe erosion need to be protected from further deterioration. These areas are observable mostly in the mountainous part of Kapalong, Talaingod and Sto. Tomas and along the steep slopes of the eastern portion of the Island Garden City of Samal. Areas susceptible to severe erosion is approximately 147,477.50 hectares. Erosion Map is presented on page 47.

- *Geologic Fault Lines*

Two major active fault lines traverse Davao del Norte. The first extends from the municipalities of Mati, Davao Oriental to New Corella, Davao del Norte. The second major fault line is located between the City of Tagum, Davao del Norte and Laak, Compostela Valley.

Fault line is one natural hazard where lateral or vertical displacement (movement) is likely to occur. Episodic movements along this "active" fault lines cause earthquakes with accompanying destruction of property and may be loss of life.

The geohazard mapping conducted by the Mines and Geosciences Bureau-XI revealed that several barangays in Davao del Norte are susceptible to mass movements. The areas that are prone to hazard includes 7 barangays in Asuncion, 12 barangays in New Corella, 7 barangays in Sto. Tomas, 3 barangays in Talaingod, 4 barangays in San Isidro and 5 barangays in the Island Garden City of Samal.

Since earthquakes are natural phenomena, the people of Davao del Norte, especially those living in high risk areas need to be always prepared in case of its occurrence. There is a need to strengthen disaster and risk management programs and activities by strengthening IEC initiatives and formulation of disaster risk management plan.

Local building officials must ensure that all existing building and those to be constructed should strictly conform to building standards particularly in high risk areas.

c. Built-up/Settlement Areas

Built-up area and urban settlements are concentrated in the poblacion or town/city center, while rural settlements are concentrated within the barangay site. About 13,970.07 hectares are considered built-up areas in the province. Large concentrations are mainly in the urban centers of Tagum City and Panabo City where most of the service facilities, employment opportunities and amenities are located. Other emerging centers are: Sto. Tomas, Kapalong and the Island Garden City of Samal.

d. Infrastructure and Utilities

The total area used for infrastructure and utilities, particularly of roads and bridges and drainage system in Davao del Norte is 4,978.76 hectares. Of the total area allotted for infrastructure and utilities, provincial roads cover the largest at 1,382.28 hectares or 27.8 percent of the total area, while municipal roads have the least area at 204.54 hectares or 4.1 percent. Tagum City has the largest area devoted for infrastructure and utilities at 812.96 hectares, while the Municipality of B.E Dujali has the least at 100.76 hectares.

*Table No. 3-168 : Areas Devoted to Infrastructure/Other Utilities, By Category
By City/Municipality, Davao del Norte, 2007 (in hectares)*

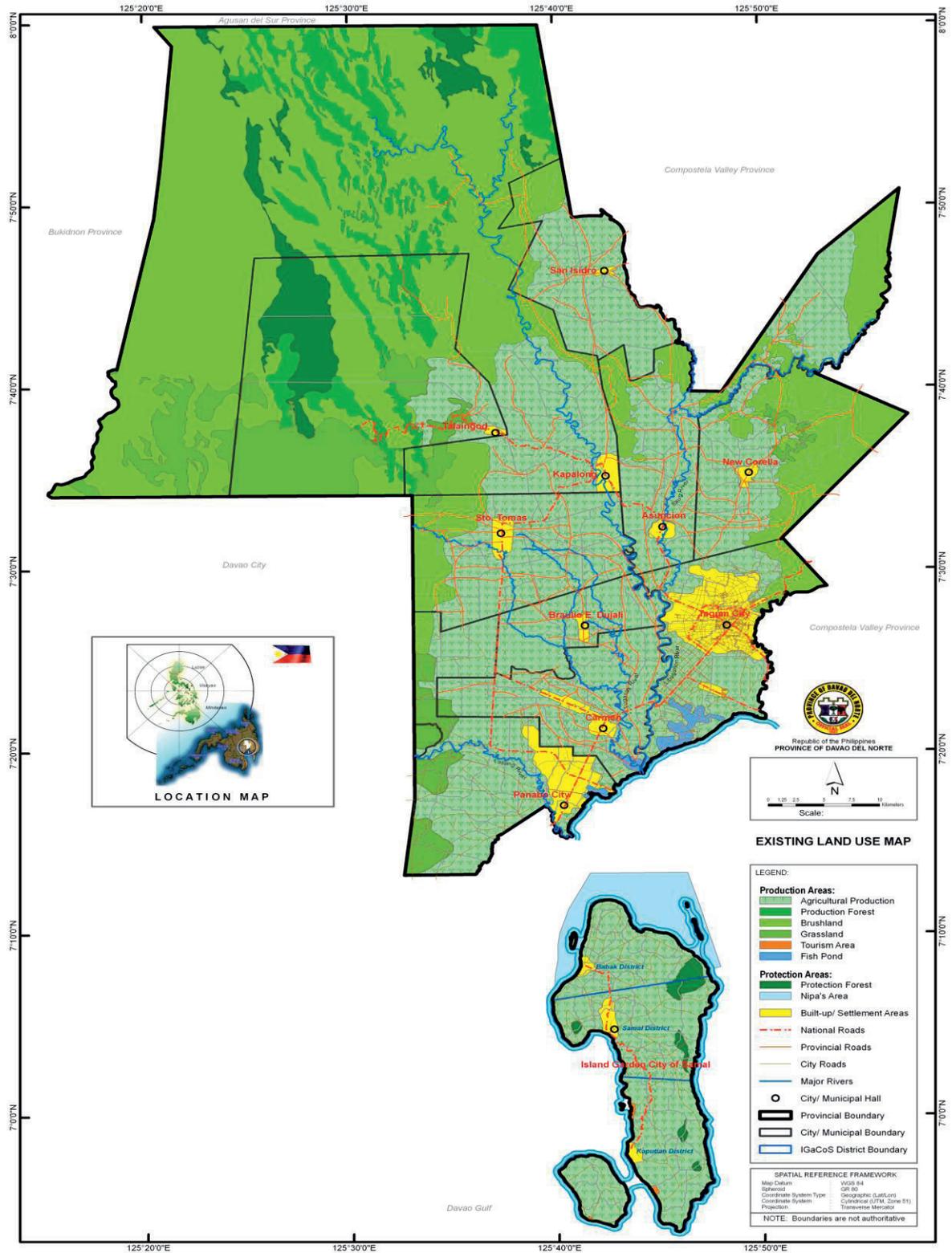
| City/Municipality | National Road | Provincial Road | City Road | Municipal Road | Barangay Road | Total |
|-------------------|---------------|-----------------|-----------|----------------|---------------|----------|
| Asuncion | 52.92 | 163.18 | 0 | 13.38 | 143.63 | 373.11 |
| B.E Dujali | 0 | 77.74 | 0 | 1.01 | 22.01 | 100.76 |
| Carmen | 114.28 | 209.44 | 0 | 24.42 | 112.77 | 372.40 |
| Kapalong | 122.82 | 155.21 | 0 | 13.78 | 144.46 | 436.27 |
| New Corella | 0 | 265.27 | 0 | 32.96 | 111.28 | 409.47 |
| San Isidro | 0 | 96.23 | 0 | 44.87 | 27.02 | 168.12 |
| Sto. Tomas | 83.58 | 273.96 | 0 | 17.00 | 168.68 | 543.22 |
| Talaingod | 88.15 | 39.98 | 0 | 57.12 | 6.80 | 192.05 |
| IGC of Samal | 154.29 | 0 | 412.25 | 0 | 132.99 | 699.53 |
| Panabo City | 201.22 | 0 | 250.00 | 0 | 172.00 | 623.22 |
| Tagum City | 303.04 | 0 | 247.33 | 0 | 262.35 | 812.96 |
| Davao del Norte | 1,120.30 | 1,382.28 | 909.58 | 204.54 | 1,362.06 | 4,978.76 |
| % Share | 22.5 | 27.7 | 18.3 | 4.1 | 27.4 | 100 |

Source: DPWH, PEO, LGUs, Davao del Norte.

Table No. 3-169 : Existing General Land Use by City, Municipality
Province of Davao del Norte, 2007 (in hectares)

| City/ Municipality | Production Land Use | | | | | | | | | | | Protection Land Use | | | Built-up Areas | Infra & Utilities | Total |
|-----------------------|---------------------|----------|-----------------|-------------------|-----------|-----------------|----------|------------------|------------------|---------------|-----------|---------------------|-----------|----------|----------------|-------------------|-------|
| | Agriculture | Fishpond | Residual Forest | Production Forest | | | | Cultivated Areas | Industrial Areas | Tourism Areas | NIPAS | Primary Forest | | | | | |
| | | | | Brushland | Grassland | Tree Plantation | | | | | | | | | | | |
| Asuncion | 17,177.53 | 0 | 0 | 4,330.00 | 5,446.00 | 1,639.00 | 0 | 0 | 0 | 0 | 0 | 0 | 381.36 | 373.11 | 29,347 | | |
| B.E Dujali | 8,621.08 | 364.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 374.16 | 100.76 | 9,100 | | |
| Carmen | 15,731.37 | 158.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 363.23 | 372.40 | 16,625 | | |
| Kapalong | 21,044.73 | 0 | 17,565.00 | 5,596.00 | 29,437.30 | 1,203.00 | 1,686.77 | 0 | 16.00 | 0 | 17,153.93 | 0 | 447.00 | 436.27 | 94,586 | | |
| New Corella | 19,833.08 | 0 | 0 | 5,727.41 | 2,491.71 | 2,747.68 | 567.20 | 0 | 23.25 | 0 | 0 | 0 | 348.20 | 409.47 | 32,148 | | |
| San Isidro | 6,997.11 | 0 | 887.67 | 975.00 | 1,970.84 | 181.00 | 3,797.49 | 0 | 59.70 | 0 | 0 | 0 | 212.07 | 168.12 | 15,249 | | |
| Sto. Tomas | 14,738.00 | 31.39 | 0 | 6,245.00 | 3,603.20 | 1,387.89 | 747.17 | 2.00 | 11.12 | 0 | 1,068.91 | 0 | 3,483.00 | 543.22 | 32,041 | | |
| Talaingod | 3,259.54 | 0 | 6,205.96 | 10,261.66 | 13,759.38 | 1,877.00 | 0 | 0 | 0 | 0 | 9,500.00 | 0 | 192.05 | 192.05 | 45,496 | | |
| IGC of Samal | 25,113.06 | 72.00 | 0 | 0 | 1,099.60 | 0 | 0 | 0 | 560.39 | 0 | 7,656 | 0 | 526.42 | 699.53 | 28,071 | | |
| Panabo City | 21,356.03 | 437.50 | 0 | 0 | 540.00 | 0 | 0 | 58.66 | 0 | 0 | 0 | 0 | 2,347.59 | 623.22 | 25,363 | | |
| Tagum City | 10,472.12 | 1,509.80 | 0 | 0 | 0 | 0 | 0 | 164.84 | 0 | 0 | 0 | 0 | 5,295.62 | 812.96 | 18,254 | | |
| Davao del Norte | 163,983.65 | 2,572.69 | 24,658.63 | 32,340.07 | 59,323.03 | 9,035.57 | 6,798.43 | 225.50 | 670.56 | 7,656 | 27,722.84 | 0 | 13,970.07 | 4,978.76 | 346,280 | | |
| % Distribution | 47.3 | 0.74 | 7.1 | 9.3 | 17.1 | 2.6 | 2.0 | 0.06 | 0.2 | (2.2) | 8.0 | 0 | 4.0 | 1.6 | 100 | | |

Map 19: EXISTING LAND USE MAP



7.1.2 Trends

a. Built-up areas

Built-up area of the Province increased from 8,186.75 has. in 2000 to 13,970.07 hectares in 2007. This is because of the increasing population coupled with increased economic activities not only in major centers of Tagum City and Panabo City but also in urban centers of Kapalong, Sto. Tomas and the Island Garden City of Samal. Economic activities in these areas have dramatically increased in the past seven years, especially Tagum City. Davao del Norte's population is growing at an average rate of 1.81 % annually. Tagum City has the most number of population followed by Panabo City and Sto. Tomas. Population in year 2007 has increased by 13.93 percent when compared to the population in year 2000.

Increased economic activities in major growth centers like Tagum City and Panabo City as well as the massive expansion of banana plantations in Sto. Tomas, Kapalong, New Corella, Carmen, B.E Dujali and Asuncion have triggered population increase (in-migration) due to employment opportunities, hence the demand for basic services increased. All of the municipalities and cities have recorded an increase in population based on the 2007 census.

b. Agriculture Production

Crop shifting has resulted to a substantial decrease of areas devoted to rice production and have increased the area devoted for banana plantation. Although there is no law that prohibits crop shifting, but the decrease in rice areas for the past seven years is very alarming, considering the rice crisis and the shortage of supply of rice that the nation and the province in particular are experiencing right now. The increasing trend of crop shifting must be given due consideration by our law makers both in the national and at the local level. Rice areas were reduced to 17,413 hectares in 2007, from 29,390 hectares in 2000; while areas for banana (Cavendish) plantation increased to 34,571.00 hectares in 2007 from 21,346.70 hectares in 2000.

Despite the decline in areas for rice production, agriculture production in general has substantially increased because of the utilization of grassland and shrubland into agro-forestry and the production of other staple crops.

c. Forestland

The remaining forest areas are continuously devastated by indiscriminate cutting of trees and unsustainable farming practices of communities living and encroaching within the areas classified as forestlands. There were efforts of the government and the private sector to rehabilitate the forest to bring back the desired forest cover in the province. The proposed utilization of areas classified as forestland but dominated by grass and shrubs, into agro-forestry and forest plantation will hopefully bring back the desired state of the forestland in Davao del Norte. Strict implementation of forestry laws and regulations and rationalization of existing land use in the uplands are just some of the initiatives that should be given priority.

Protection forest of 27,722.84 hectares will be maintained and protected for human intrusion and indiscriminate activities.

d. Tourism

There is an increase in areas set aside for tourism activities with the effort of developing potential areas in the mainland in the concept of eco-tourism. Areas

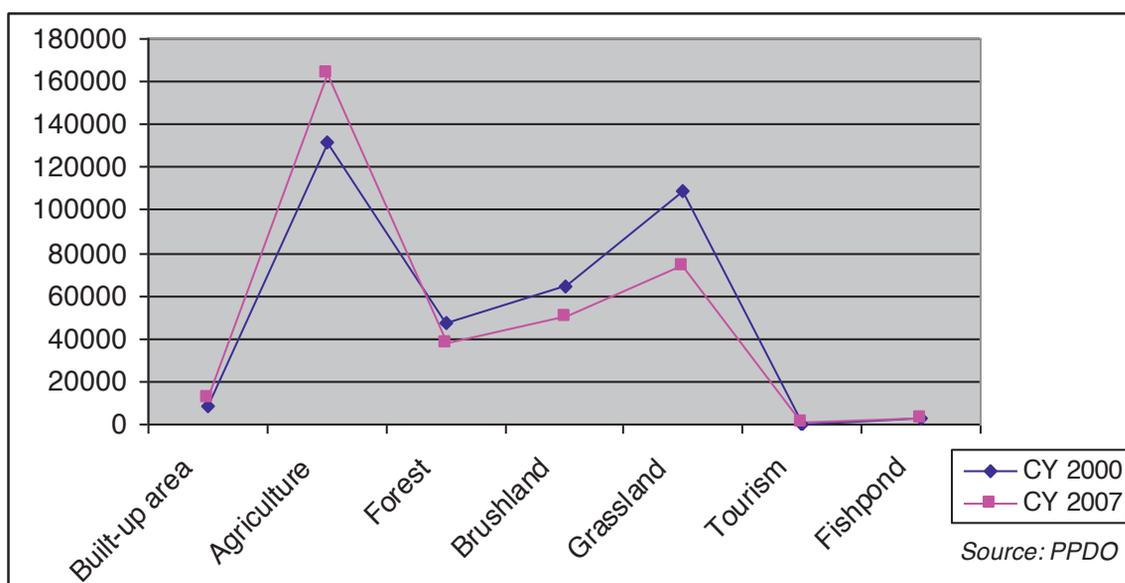
devoted for tourism development will increase to 1,175.96 hectares. The proposed development of 1,002.64 hectares as tourism area in the Island Garden City of Samal will boost its position as one of the major tourist destinations in the region and in the country as well.

*Table No. 3-170 : General Land Use Trend (in hectares)
Province of Davao del Norte, 2007*

| Land Use | 2000 | % Total | 2007 | % Total |
|-----------------------------------|------------|---------|------------|---------|
| Built-up area | 8,186.75 | 2.25 | 14,195.57 | 4.10 |
| Agriculture | 131,827.58 | 36.21 | 163,932.94 | 47.30 |
| Residual Forest | 47,532.10 | 13.16 | 33,694.20 | 9.73 |
| Protection Forest | | | 27,722.84 | 8.00 |
| Brushland | 64,818.83 | 17.80 | 32,340.07 | 9.33 |
| Grassland | 108,841.37 | 29.90 | 59,323.03 | 17.13 |
| Tourism | 92.87 | 0.02 | 670.56 | 0.19 |
| Fishpond | 2,756.50 | 0.76 | 2,572.69 | 0.74 |
| Cultivated area (w/in forestland) | | | 6,798.43 | 1.96 |
| Infra & Utilities | | | 4,978.76 | 1.44 |
| Total | 364,056.00 | 100 | 346,280.00 | 100 |

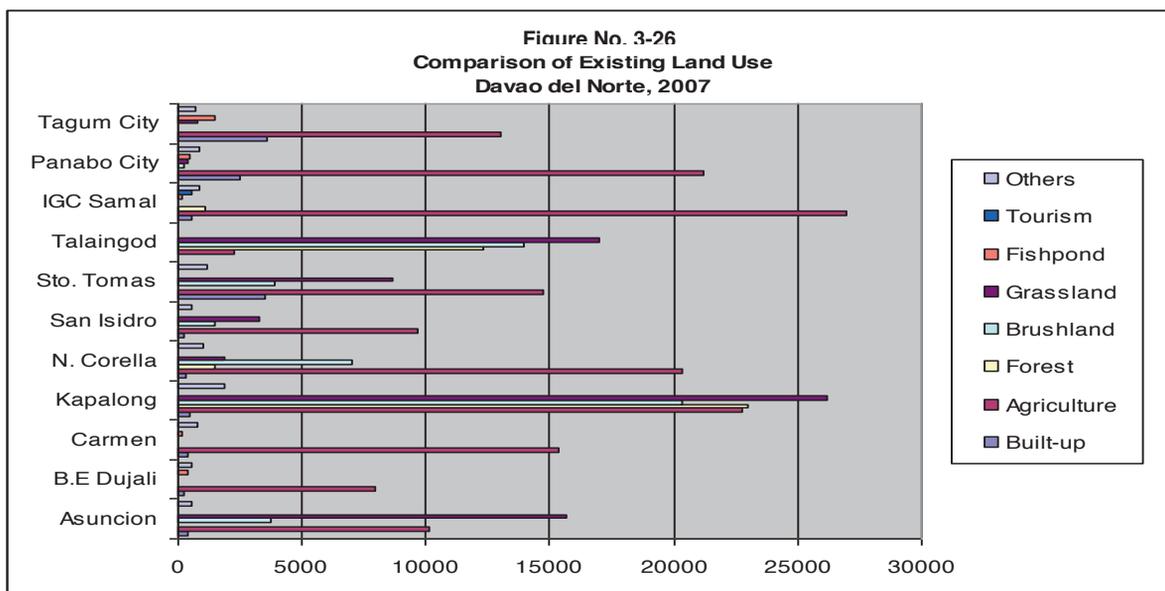
Source: PPDO

*Figure No. 3-25 : General Land Use Trend (2000, 2007)
Province of Davao del Norte*



Source: PPDO

Comparison of Existing land Use

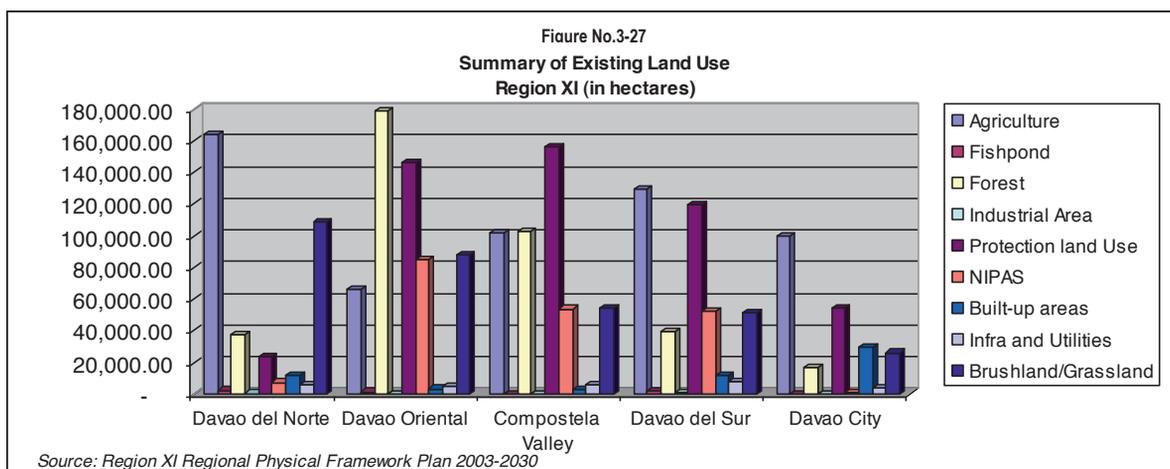


Based on the data presented in Table No. 3-170, Island Garden City of Samal has the biggest agricultural area among the cities and municipalities in the province. The Island City is also endowed with natural tourist attractions such as white and pristine beaches ideal for recreation and water sport activities such as diving, snorkeling and the like; waterfalls, caves and other natural attractions. Tourism area of 560.39 hectares is found in Samal Island.

The Municipality of Kapalong has the largest area for production forest at 17,565 hectares. Although it has the biggest area for forest production, it is also in this municipality that grassland and shrublands dominate the landscape of 35,033.30 hectares.

Tagum City being the capital and the major growth center in the province has the largest area for built-up and settlement at 5,295.62 hectares. In terms of fishpond development, Tagum City has a sizeable area of 1,509.50 hectares.

In the regional context, Davao del Norte has the biggest area used for agriculture at 163,932.94 hectares. While it ranks third after Davao City and Davao del Sur, in terms of Built-up area and ranks fourth in terms of areas used for forest production. Figure 3-25 shows the comparison of existing land use among the provinces and Davao City in Region XI.



7.1.3 Land Use Opportunity/Potentials

Land use opportunity refers to lands that are composite with lands actively utilized for various activities and have properties favorable for economic development and investment. The socio-economic and physical limitations inherent in these lands can be manipulated and corrected through proper and sustainable management and favorable policies and incentives.

Land use opportunity is classified into six (6) sub-categories, namely: agricultural areas, expansion areas, areas needing rehabilitation, areas for preservation, wetland areas and miscellaneous areas. Map 30 shows the land use opportunity of the province.

The land use opportunity in Table 3-171 indicates that 126,390.78 hectares or 36.5 percent of the total provincial land area are best suited for agricultural activities.

Expansion areas or lands with potential for the expansion of both agriculture and urban areas cover about 95,859.98 hectares or 27.7 percent of the total land area of the province. These consist of grasslands or shrublands with potential for built-up areas or agro-forestry development.

A total of 66,149.78 hectares or 19.1 percent of the total area of the province is considered rehabilitation areas. These include denuded areas within forestlands and critical watersheds; and those areas in the uplands that are used for crop cultivation that employs unsustainable farming practices.

Preservation areas are those which are to be permanently retained with forest cover. These are NIPAS areas and watersheds which should be protected from any intrusion or other economic activities. The province's preservation area covers about 54,477 hectares or 15.7 percent of its total area.

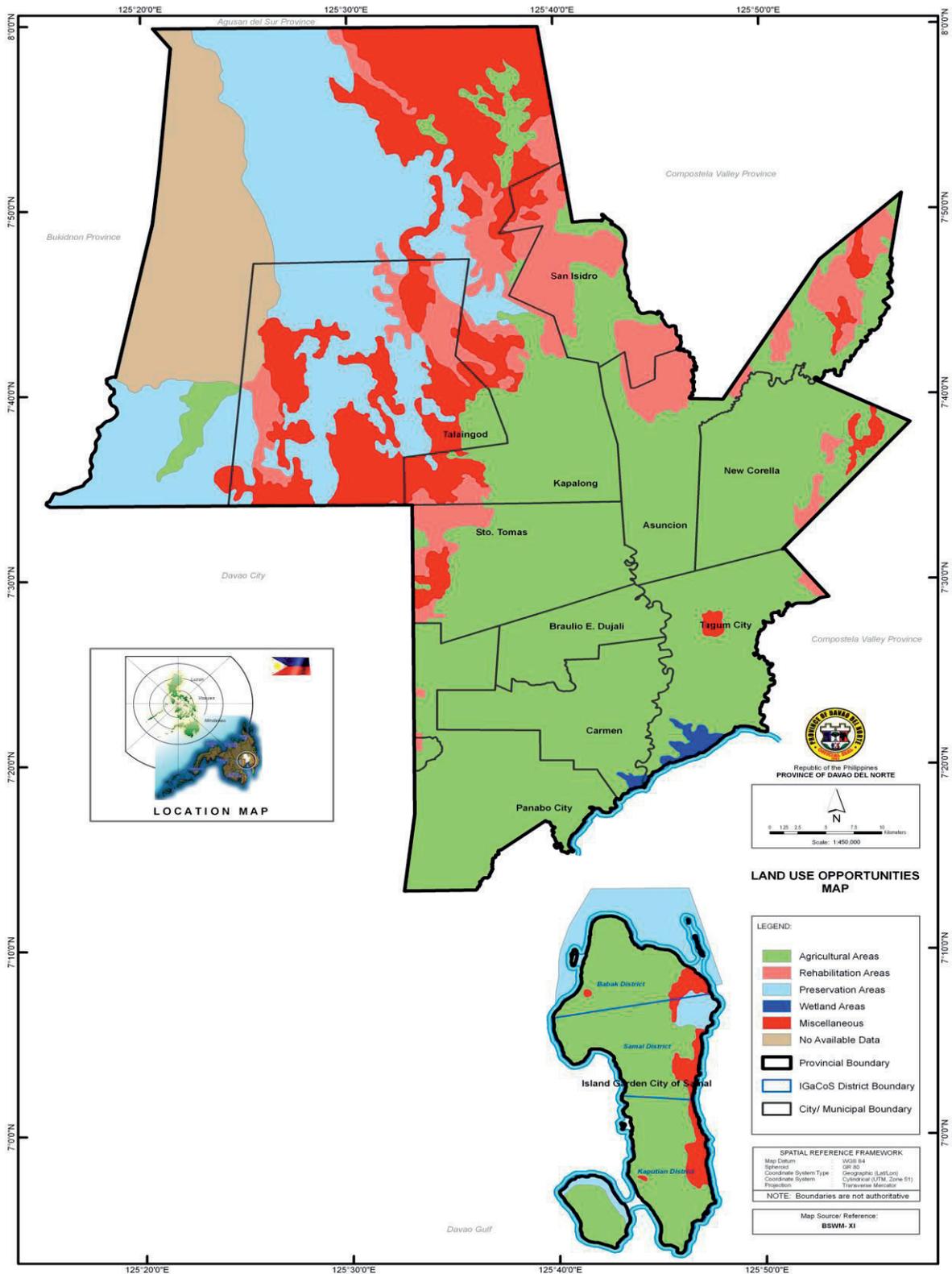
The remaining 3,237.18 hectares or 1.0 percent of the province's total land area are best suited for aquaculture and for miscellaneous activities.

Table No. 3-171 : Distribution of Land Area by Land Use Opportunity Classification, Davao del Norte, 2007

| Land Use Opportunity Classification | Area (in hectares) | % Distribution |
|--|---------------------------|-----------------------|
| Agricultural | 126,390.78 | 36.5 |
| Expansion | 95,859.98 | 27.7 |
| Rehabilitation | 66,149.78 | 19.1 |
| Preservation | 54,642.28 | 15.7 |
| Wetlands | 1,332.50 | 0.4 |
| Miscellaneous | 1,904.68 | 0.6 |
| Davao del Norte | 346,280.00 | 100 |

Source: BSWM-XI/RFPF

Map 20: LAND USE OPPORTUNITIES MAP



7.2 Physical Framework

7.2.1 Demand

a. Settlements/Built-up Areas

Existing urban settlements/built-up areas are concentrated in the poblacion or city/town center, while rural settlements are concentrated within the barangay site. With the increasing population and the growing economic activities in the province, built-up areas will expand to 17,894.04 hectares. This is about four percent of the total land area of the province. The increase will be due to urban expansion which includes consideration for basic social services and social infrastructure needs. Tagum City has the largest area proposed for urban expansion being the capital of the province and the center for commerce, trade, services and other economic activities. Other LGU's with substantial increase in built-up area are Panabo City and Sto. Tomas.

In Davao del Norte, Tagum City will have the highest population density at 1,617 persons per square kilometer land area in 2022. Talaingod has the lowest at 61 persons per square kilometer land area. The provincial average density is projected at 305 persons per square kilometer land area. Aside from Tagum City, other areas with population densities substantially higher than that of the province are Panabo City with population density of 810, Carmen with 468, Sto. Tomas with 406 and the Island Garden City of Samal with 360 persons per square kilometer land area.

Outside the province, Tagum and Panabo cities' population density are comparable to that of Davao City (557).

b. Agricultural/Production Land

The total area devoted for agricultural/production land will reduce by about 3 percent of the existing area by the end of the plan period. At the municipal/city level, Carmen, New Corella, Island Garden City of Samal, and Panabo City have reduced the land area intended for agricultural production.

Although there is a decline in areas intended for agriculture production in the lowland, the development of 33,056.91 hectares for agro-forestry will boost the production area of the province.

In terms of specific crop production there is also a decline in areas used for rice due to crop shifting from rice to cavendish banana. The decision of some farmers to shift from staple crop to banana is a threat to the food security of the province. The shift may be lucrative at the moment but in the long run the impact would not only be in the aspect of food security, but on health issues as well. Moreover, the process of shifting crop production from basic staples to commercial products would reverse the economic direction from basic sustenance toward sustainable development.

c. Forestland

Areas devoted to production forest will increase 69,383.50 hectares within the planning period. Existing brushland/grassland will be converted into forest tree plantation and production forest, while an area of 55,705 hectares will be devoted for agro-forestry development.

d. Tourism

Beautiful beaches and diving sites are found in the Island Garden City of Samal. Tropical rainforests and other natural attractions like caves, waterfalls and springs, vast tracks of banana plantations are just some of the tourism potentials found in the mainland. Ethnic and community-based tourism is also one of the comparative advantages of the province. Land use intended for tourism is projected at 1,175.96 hectares.

e. Protection land use

Davao del Norte's protection lands include the Mangrove Swamp Forest Reserve and the Samal Island Protected Seascape/Landscape with an area of 7,656.00 hectares in the Island Garden City of Samal; Non-NIPAS, and severely eroded areas. Non-NIPAS are lands classified as forestlands but mostly have no forest cover at all and need rehabilitation and proper management. Severely eroded areas are part of the production land that needs to be protected from further deterioration. These areas are observable mostly in the mountainous part of Kapalong, Talaingod and Sto. Tomas and along the steep slopes of the eastern part of IGaCos.

Included in the Non-NIPAS category of protection lands are the 37,722.84 hectares of forestlands which has an elevation of more than 1000 masl and with a slope of 50 percent and above within the municipalities of Kapalong and Talaingod.

7.2.2 Integration of demand with supply

a. Population and settlements

The increasing population coupled with the increasing economic activity in major growth and emerging growth centers requires an additional area for basic social services and infrastructure facilities. Major growth centers like Tagum City and Panabo City and emerging centers like the Island Garden City of Samal, Sto. Tomas and Kapalong have substantial area allocated for urban expansion as indicated in their respective comprehensive development plans. Davao del Norte's population is growing at an average growth rate of 1.81% annually. This growth rate is higher than the regional growth rate of 1.71%. In Region XI it ranks second after Davao City which has an average growth rate of 2.41%. With this growth, Davao del Norte will have a projected population of 1,109,963 by 2022.

Major growth centers will have substantial contribution in the increase of population at the end of the planning period. Tagum City has a projected population of 316,532; Panabo City 206,871; Sto. Tomas 130,326 and Island Garden City of Samal 108,528.

In view of these projected condition in Davao del Norte for the next 15 years, the land use plan has to address population pressure challenges particularly in the urban centers. Thus, provision of proper infrastructure facilities in the rural areas has to be laid down in advance to minimize pressure of the urban areas.

The increase in population will also require additional area for residential purposes. Other types of demand will likewise affect and require allocation for the commercial and institutional areas to absorb the expected growth of the business sector associated to the increasing market for products and services.

The proposed areas intended to accommodate the demand or future needs are within the allowable limit established by law and are outside of those areas identified as protection or restricted under NPAAD/SAFDZ. The proposed built-up area is 17,894.04 hectares.

Population encroached in forestland areas. This is common in rural areas wherein settlements are concentrated in areas that are classified as forestland. The economic activities made by the upland settlers further degrade the fragile upland resources. Sustainable use and proper management of upland resources has to be strengthened by properly educating the communities on the importance of protecting our natural resources. Approximately 50,754 populations are living in areas within forestland. These people are cultivating the areas intended for forestry into agriculture production in unsustainable manner thus giving more pressure upon the land. Although these settlements are not within the identified areas for protection, but the presence of population in the uplands further contributes to the erosion problem in these areas because of unsustainable and improper land cultivation.

Land use in upland areas have to be regulated and the people should have increased awareness, knowledge and skills on sustainable management of upland resources.

7.2.3 Integration with other land use requirements

a. Infrastructure/Utilities Areas

Areas devoted to infrastructure development will increase by about 12.9 percent from the existing level of 4,978.76 hectares to 5,623.16 hectares. A 1.0 kilometer road length per square kilometer of land area (national standard road density) is necessary to enhance development in the municipalities of Kapalong, Talaingod and B.E Dujali. Kapalong and Talaingod have the lowest road densities because these municipalities have an extensive forestland area. To meet the national standard for road density, Kapalong needs an additional road length of 638.686 kms.; Talaingod requires 245.692 kms; while 16.92 kms. is needed for B.E Dujali. Better accessibility within these areas increases the chance of attracting developers and investors for forestry development aside from providing better services to the populace.

The road density of Davao del Norte is 0.977 kilometer per square kilometer land area. An additional road length of 82.893 kilometers is required to at least meet the national standard of 1.0 km road length per square kilometer land area.

The opening of Kapalong-Talaingod-Bukidnon Road would require an area of 250 hectares within production forest. This particular road section will provide better access and linkage between Davao del Norte and the province of Bukidnon. Asuncion-Laak provincial road with an area of 126 has. is already approved at third reading at Congress for conversion from provincial to national road. The improvement of this road section will increase the economic activities of the neighboring provinces of Compostela Valley and Agusan del Sur with Davao del Norte as the gateway.

b. Production land use

Davao del Norte is primarily an agriculture province. About 161,705.21 hectares are devoted for agricultural production. Majority of its population are engaged in agriculture. Services and employment likewise contribute to provide sources of income for the populace.

The presence of banana industry, manufacturing and agri-based industries contribute significant employment opportunities for propelling economic growth in the province. Trading, commerce

and social services are found mostly in urban centers or poblacion, though satellite centers related to the provision of basic services are also located in the rural areas.

This existing condition requires the development of agriculture sector within the province to propel and sustain agro-industrialization. The development of the infrastructure and utilities, maintenance of peace and order, and good political leadership is indeed a competitive advantage of Davao del Norte to become a strategic location for investment in Region XI and Mindanao.

There are four major categories of irrigation systems operating in the Province. These irrigation systems cover an effective service area of 20,410.08 hectares of agricultural land, of which 13,872.12 hectares are planted with rice and 6, 537.96 are planted with banana.

In terms of pre and post harvest facilities, there is a shortage of storage facilities in 2007 in all cities and municipalities. Around 150 units of additional storage facilities are required and 50 units milling facilities to suffice the requirements in storing and milling of palay.

Fish production is usually undertaken and sourced from aquaculture and municipal waters. Aquaculture production in the province is around 2,654.19 hectares.

The province has an existing production forest and forest tree plantations of 33,694.20 hectares. These areas can be a good source of the production requirement of the booming wood industry in the province.

c. Social and utility/infrastructure services

➤ Health, Education and Protective Services

There are 23 hospitals in Davao del Norte, 4 of which are government operated and the rest are privately-owned. There are three district hospitals operated by the provincial government located in Kapalong, Carmen and the Island Garden City of Samal, while the DOH-operated tertiary hospital (Davao Regional Hospital) is situated in Tagum City. Most of the private hospitals are located in Tagum City and Panabo City. Health care services in other areas with no hospitals are augmented by 13 Health centers and 170 Barangay Health Stations.

Elementary schools in the province have a total of 334, of which 291 are public schools and 53 are private schools. For the secondary level, there are 61 public schools and 35 private institutions, while at the tertiary level, 17 schools are located in the province. These schools are categorized as university, colleges, technical and vocational schools.

The number of housing units in the province in year 2007 has reached 147,989 units, giving an increase of 34.80 percent from the number of dwelling units in 1990. The growth indicates the increasing affordability and capacity of the people to acquire decent shelter. Access to low cost housing is intensified in the province thru the initiatives of the government. Relocation and resettlements are also provided to squatters or informal settlers.

There are fifteen (15) police stations in the province located in every city and municipality with Tagum City having the most number of stations having 4; and Island Garden City of Samal with 3. The rest of the LGUs maintain 1 police station. On the other hand, only seven (7) LGU's have fire stations. Talaingod, B.E Dujali, New Corella and San Isidro have no fire stations.

➤ *Social Welfare*

425 Day Care Centers cater to the developmental needs of the pre-schoolers in Davao del Norte. Tagum City has the most number of day care centers with 82, while San Isidro has the least with 16. There are also 24 elderly centers established in 7 localities with Kapalong having the most number of senior citizens center at 10. The municipalities of New Corella, Talaingod, B.E Dujali and San Isidro have yet to establish an elderly center.

➤ *Utility/Infrastructure Services*

90% of the total households in the province have access to potable water. While the percentage is quite high, 10 % of this comes from doubtful sources. Level II and Level III water sources supply 42 % of the household populations. There are six (6) water districts operating in Davao del Norte, with Tagum Water District serving the most number of households at 80 % of the total household coverage. Also, 100 % of Tagum City's household populations have access to potable water.

At present, sources of water (deepwell) in urban areas are becoming scarce and depleting. There is a need for an integrated water system development tapping available sources such as surface water, to accommodate the growing demands for this utility in the future.

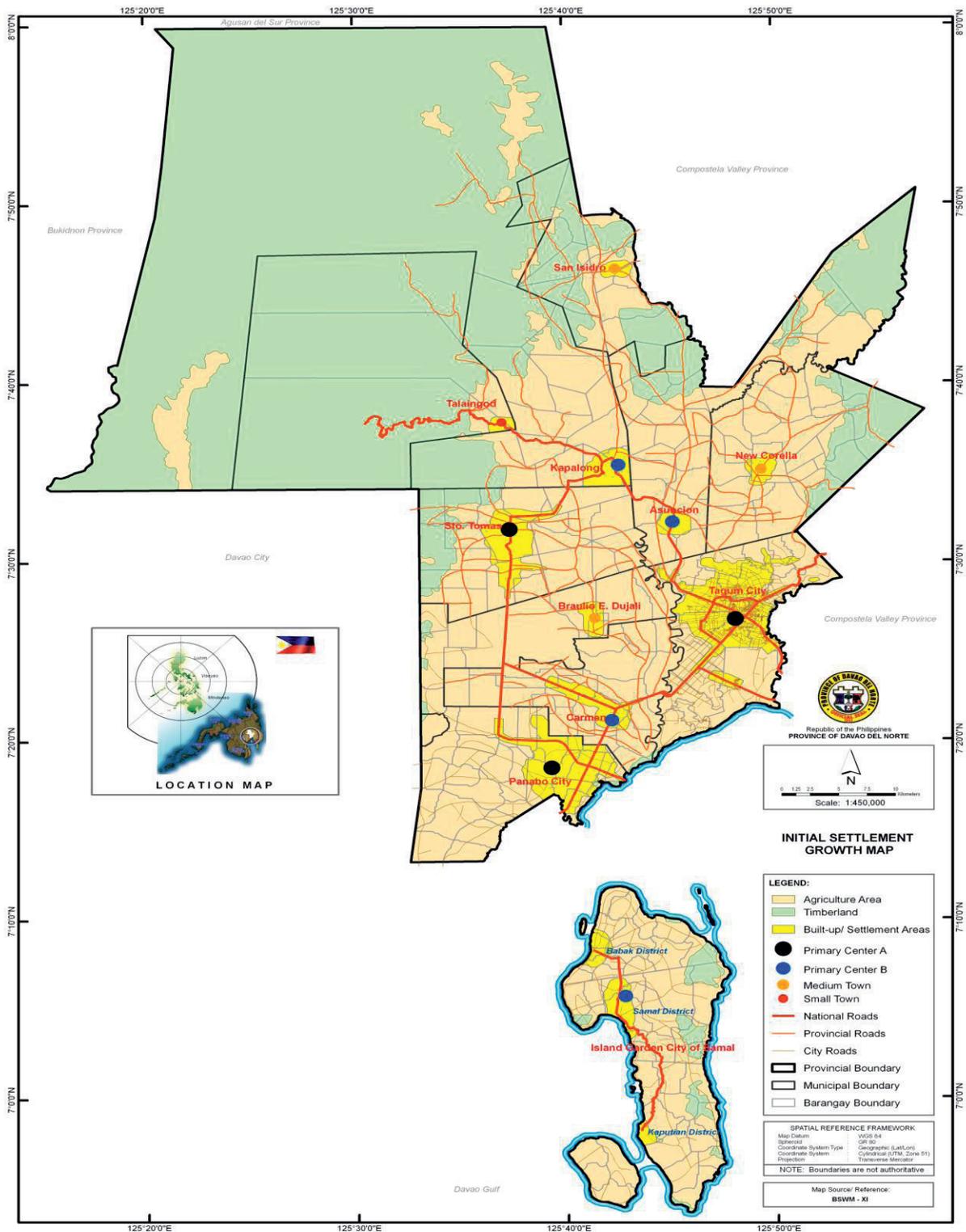
Energization rate of the barangay in the province is placed at 100%. In terms of household connections, only 78.32% were achieved as of 2007. Talaingod has the least number of household served at 15 percent.

Major flood control projects were constructed by the Department of Public Works and Highways. These are: (a) Libuganon Flood Control, (b) Carmen Flood Control, (c) Tuganay Flood Control, (d) Lasang Flood Control and (e) Tagum Drainage.

Improvement of drainage facilities, re-channeling and desilting of rivers and creeks, and small watershed rehabilitation and management are some of the measures undertaken to minimize the occurrence of floods and other environmental hazards.

In Davao del Norte a total of 39,565 hectares are identified as flood prone areas, with the municipality of Carmen having the most number of areas affected at 10,093 hectares.

Map 21: INITIAL SETTLEMENT GROWTH



Map 22: INITIAL SETTLEMENT GROWTH AND PROTECTION MAP

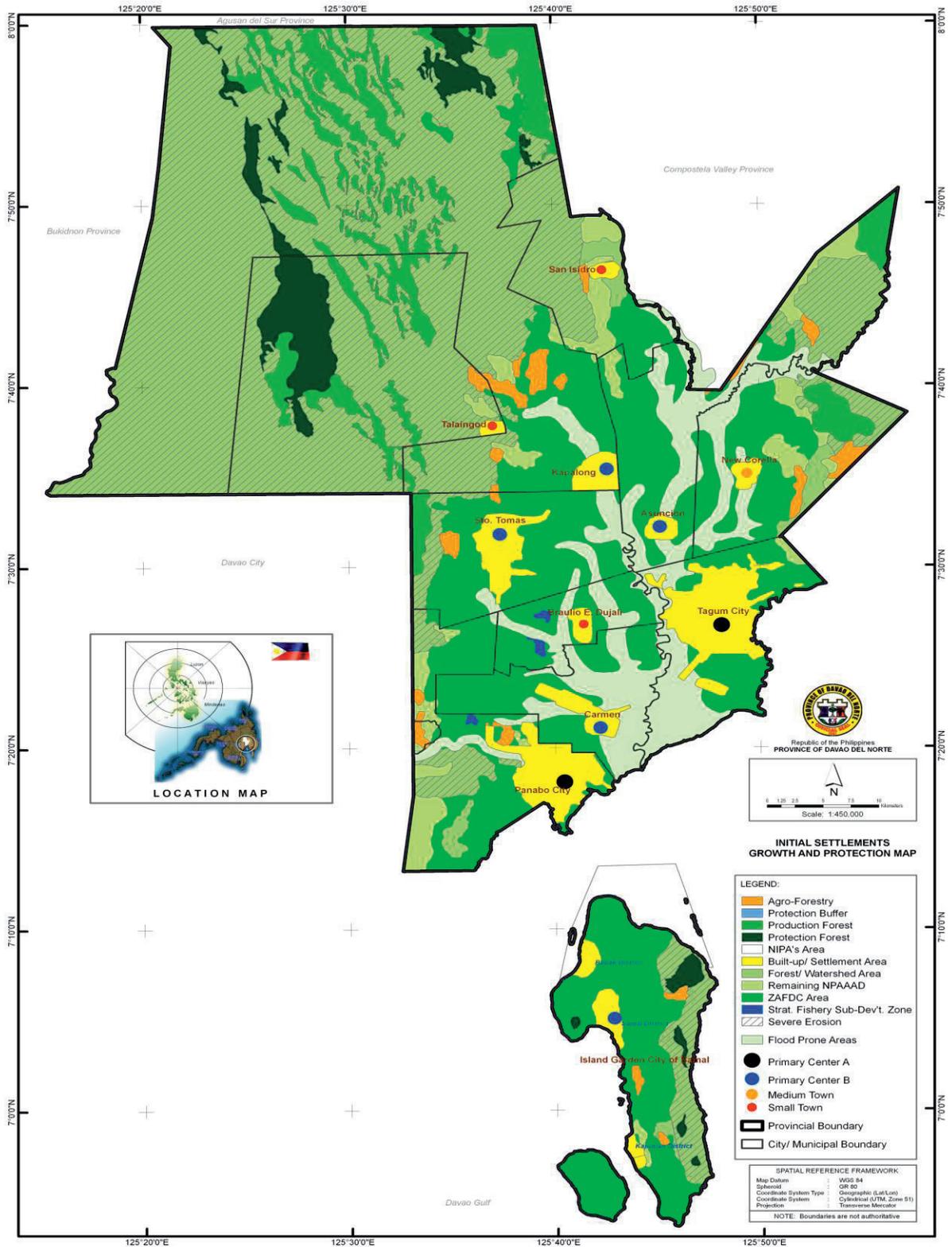


Table No. 3-173 : Summary of Existing and Proposed Land Use (in hectares)
Province of Davao del Norte, 2007

| Category | Asuncion | B.E Dujali | Carmen | Kapalong | New Corella | San Isidro | Sto. Tomas | Talaingod | IGACOS | Panabo City | Tagum City | Davao del Norte | % to Total |
|-------------------------------|-----------------|------------|---------------|-----------------|-------------|-------------------|-------------|------------------|---------------|---------------|--------------|------------------|-------------|
| A. PRODUCTION LAND USE | | | | | | | | | | | | | |
| Existing | 28,592.53 | 8,625.08 | 15,889.37 | 76,548.80 | 31,390.33 | 14,868.81 | 26,945.87 | 35,363.54 | 26,845.05 | 22,392.19 | 12,146.76 | 299,608.33 | 86.5 |
| Proposed | 28,403.07 | 8,550.01 | 15,539.27 | 76,254.46 | 31,124.37 | 14,840.30 | 26,505.76 | 25,257.76 | 25,822.95 | 21,857.10 | 10,693.23 | 285,045.28 | 82.3 |
| Additional/(Deviation) | -189.46 | -75.07 | -350.10 | -294.34 | -265.96 | -28.51 | -440.11 | -10,015.78 | -1,022.10 | -535.09 | -1,453.23 | -14,563.05 | |
| 1. Agriculture | | | | | | | | | | | | | |
| Existing | 17,177.53 | 8,261.08 | 15,731.37 | 21,044.73 | 19,833.08 | 6,997.11 | 14,738.00 | 3,259.54 | 25,113.06 | 21,356.03 | 10,472.12 | 163,983.65 | 47.3 |
| Proposed | 16,938.07 | 8,186.01 | 15,309.27 | 20,750.39 | 19,567.12 | 6,955.45 | 14,957.06 | 3,243.76 | 24,101.39 | 20,334.66 | 8,547.64 | 158,990.82 | 45.9 |
| Additional/(Deviation) | -239.46 | -75.07 | -422.10 | -294.34 | -265.96 | -41.66 | 219.06 | -15.78 | -1,011.67 | -1,021.37 | -1,924.48 | -4942.12 | |
| 2. Fishpond | | | | | | | | | | | | | |
| Existing | 0 | 364.00 | 158.00 | 0 | 0 | 0 | 31.39 | 0 | 72.00 | 437.50 | 1,509.80 | 2,572.69 | 0.74 |
| Proposed | 0 | 364.00 | 237.00 | 0 | 0 | 0 | 31.39 | 0 | 135.00 | 437.50 | 1,509.80 | 2,714.39 | 0.78 |
| Additional/(Deviation) | 0 | 0 | 79.00 | 0 | 0 | 0 | 0 | 0 | 63.00 | 0 | 0 | 141.70 | |
| 3. Production Forest | | | | | | | | | | | | | |
| Existing | 11,415.00 | 0 | 0 | 55,488.07 | 11,534.00 | 7,812.00 | 12,163.26 | 32,104.00 | 1,099.60 | 540.00 | 0 | 132,155.93 | 38.2 |
| - Residual Forest | 0 | 0 | 0 | 17,565.00 | 0 | 887.67 | 0 | 6,205.96 | 0 | 0 | 0 | 24,658.63 | |
| - Brushland | 4,330.00 | 0 | 0 | 5,596.00 | 5,727.41 | 975.00 | 6,425.00 | 10,261.66 | 0 | 0 | 0 | 32,340.07 | |
| - Grassland/Open | 5,446.00 | 0 | 0 | 29,437.30 | 2,491.71 | 1,970.84 | 3,603.20 | 13,759.38 | 1,099.60 | 540.00 | 0 | 59,323.03 | |
| - Tree Plantation | 1,639.00 | 0 | 0 | 1,203.00 | 2,747.68 | 181.00 | 1,387.89 | 1,877.00 | 0 | 0 | 0 | 9,035.57 | |
| - Cultivated area | 0 | 0 | 0 | 1,686.77 | 567.20 | 3,797.49 | 747.17 | 0 | 0 | 0 | 0 | 6,798.43 | |
| Proposed | 11,415.00 | 0 | 0 | 55,488.07 | 11,534.00 | 7,812.00 | 11,416.09 | 22,104.00 | 583.92 | 540.00 | 0 | 120,893.08 | 34.9 |
| - Residual Forest | 0 | 0 | 0 | 17,567.00 | 0 | 887.67 | 0 | 0 | 0 | 0 | 0 | 18,452.67 | |
| - Forest Plantation | 9,003.00 | 0 | 0 | 20,755.07 | 10,217.00 | 2,546.74 | 7,492.69 | 19,369.00 | 0 | 0 | 0 | 69,383.50 | |
| - Agro-forestry | 2,412.00 | 0 | 0 | 17,168.00 | 1,317.00 | 4,377.59 | 3,923.40 | 2,735.00 | 583.92 | 540.00 | 0 | 33,056.91 | |
| Additional/(Deviation) | 0 | 0 | 0 | 0 | 0 | 0 | -747.17 | -10,000.00 | -515.68 | 0 | 0 | -11,262.85 | |
| Category | Asuncion | B.E | Carmen | Kapalong | New | San Isidro | Sto. | Talaingod | IGACOS | Panabo | Tagum | Davao del | % to |

| | Dujali | | Corella | Tomas | City | Clty | Norte | Total |
|-------------------------------------|--------|--------|-----------|----------|--------|----------|-----------|-------|
| 4. Industrial Areas | | | | | | | | |
| Existing | 0 | 0 | 0 | 2.00 | 0 | 58.66 | 225.50 | 0.06 |
| - Industrial Estates | 0 | 0 | 0 | 0 | 0 | 0 | 25.00 | |
| - Industrial Areas | 0 | 0 | 0 | 2.00 | 0 | 58.66 | 200.50 | |
| Proposed | 0 | 0 | 0 | 90.00 | 0 | 544.94 | 1,271.03 | 0.36 |
| - Industrial Estates | 0 | 0 | 0 | 0 | 0 | 0 | 25.00 | |
| - Industrial Areas | 0 | 0 | 0 | 90.00 | 0 | 544.94 | 1,246.03 | |
| Additional/(Deviation) | 0 | 0 | 0 | 88.00 | 0 | 486.28 | 705.37 | |
| 5. Tourism Areas | | | | | | | | |
| Existing | 0 | 0 | 16.00 | 59.70 | 0 | 560.39 | 670.56 | 0.19 |
| Proposed | 50.00 | 0 | 16.00 | 72.85 | 0 | 1,002.64 | 1,175.96 | 0.34 |
| Additional/(Deviation) | 50.00 | 0 | 0 | 13.15 | 0 | 442.25 | 505.40 | |
| B. PROTECTION LAND USE | | | | | | | | |
| Existing | 0 | 0 | 17,153.93 | 1,068.91 | 0 | 0 | 27,722.84 | 8.0 |
| Proposed | 0 | 0 | 17,153.93 | 1,068.91 | 0 | 0 | 37,722.84 | 10.9 |
| Additional/(Deviation) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NIPAS (RA 7886) | | | | | | | | |
| Existing | 0 | 0 | 0 | 0 | 0 | 7,656.00 | 7,656.00 | 2.2 |
| Proposed | 0 | 0 | 0 | 0 | 0 | 7,656.00 | 7,656.00 | 2.2 |
| Additional/(Deviation) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C. SETTLEMENT/BUILT-UP AREAS | | | | | | | | |
| Existing | 381.36 | 374.16 | 447.00 | 348.20 | 212.07 | 3483.00 | 13,970.07 | 3.6 |
| Proposed | 533.51 | 434.54 | 697.61 | 351.63 | 235.71 | 3790.28 | 17,894.04 | 5.2 |
| Additional/(Deviation) | 152.12 | 60.38 | 250.61 | 3.43 | 23.64 | 307.28 | 3,923.97 | |

| Category | Asuncion | B.E Dujali | Carmen | Kapalong | New Corella | San Isidro | Sto. Tomas | Talaingod | IGACOS | Panabo City | Tagum City | Davao del Norte | % to Total |
|--|-----------|------------|-----------|-----------|-------------|------------|------------|-----------|-----------|-------------|------------|-----------------|------------|
| D. INFRASTRUCTURE AND UTILITIES | | | | | | | | | | | | | |
| Existing | 373.11 | 100.76 | 372.40 | 436.27 | 409.47 | 168.12 | 543.22 | 192.05 | 699.53 | 623.22 | 812.96 | 4,978.76 | 1.4 |
| Proposed | 410.42 | 115.45 | 382.00 | 480.00 | 672.00 | 172.99 | 676.05 | 391.47 | 894.32 | 648.22 | 870.74 | 5,623.16 | 1.6 |
| Additional/ (Deviation) | 37.31 | 14.69 | 9.60 | 43.73 | 262.53 | 4.87 | 132.83 | 199.42 | 194.79 | 25.00 | 57.78 | 593.69 | |
| Total Existing | 29,347.00 | 9,100.00 | 16,625.00 | 94,586.00 | 32,148.00 | 15,249.00 | 32,041.00 | 45,496.00 | 28,071.00 | 25,363.00 | 18,254.00 | 346,280.00 | 100 |
| Total Proposed | 29,347.00 | 9,100.00 | 16,625.00 | 94,586.00 | 32,148.00 | 15,249.00 | 32,041.00 | 45,496.00 | 28,071.00 | 25,363.00 | 18,254.00 | 346,280.00 | 100 |

Source: C/MCDP, Davao del Norte. Computations by PPDO
Note: Land area is not authoritative for any other purposes.

8.0 Overall Physical Framework

The spatial development of the province is affected by various factors such as resource endowments, existing infrastructure facilities, existing distribution of population and economic wealth, and other physical and socio-cultural factors as well as policy interventions. Three most dominant factors that are more directly subject to planned development are:

- a. Distribution of settlements
- b. Transportation network
- c. Land use and potential

A spatial framework for Davao del Norte is prescribed with respect to these factors.

The increasing demand for land and its natural resources necessitates proper spatial classification that will accommodate physical development and promote sustainable land and environment management. Appropriate choices in the efficient land use trade-offs should develop sustainable use and management of land resources linking growing demand for food, social and economic habitation and development; and environmental protection and enhancement.

The land use plan aims to promote the appropriate and efficient ways of using the land and its natural resources in a manner that it will be sustained in the future. It aims to direct the socio-economic development in terms of rational allocation and delineation of various land uses. It is imperative for the LGU to come up with a development framework to ensure the sustainable growth in its economy through the judicious and rational use of its resources in order to serve the growing needs of its constituents.

Davao del Norte will continue to adopt the cluster development approach or the nodal or the growth center concept of development utilizing the integrated area development approach. This concept achieves a certain hierarchy of functions in the sense that the central point of activity is lodged in major center or area. Tagum City, Panabo City, and Sto. Tomas are the major growth centers while the Island Garden City of Samal, Kapalong and Carmen are considered emerging growth centers. The other municipalities which will serve as the nodes will support the major growth centers as its captive market while at the same time providing neighborhood support facilities and services to its area of influence.

The big brother-small brother concept shall be followed under the cluster development approach—that the success of the more affluent cities or municipalities be rubbed on or shared with the less privileged one. There are four clusters identified in the province, where in each cluster, there is a big brother, which is to take the lead for the others. These four clusters are the following:

- Cluster 1: Tagum City, Asuncion, San Isidro and New Corella
- Cluster 2: Sto. Tomas, Kapalong and Talaingod
- Cluster 3: Panabo City, Carmen and B.E Dujali
- Cluster 4: Island Garden City of Samal

For the first cluster, Tagum City will be the big brother. Since Asuncion, New Corella and San Isidro are mainly agricultural zones these municipalities can help provide the food requirements of Tagum being the natural food basket. Productivity level in these areas should be maximized by enhancing the existing infrastructure facilities and providing new ones like irrigation, water system, pre and post harvest facilities and appropriate technologies that would enhance production without necessarily increasing the land area. Tagum can be the basin where the produce from New Corella, Asuncion and San Isidro are brought. Tagum City therefore, will have

the additional function as the outlet, the marketing arm and distributor of agricultural products from New Corella, San Isidro, Asuncion and even other municipalities.

Flooding and senseless wastage of resources in this cluster shall be controlled by instituting appropriate mitigating measures like reforestation activities, rehabilitation of existing drainage system and construction of new ones, in the upland and lowland areas.

To meet the demand of increased business activity, infrastructure support facilities in the form of improved drainage, sewerage, water, power, irrigation and telecommunication facilities must compliment the road network enhancement.

In this kind of development approach, Tagum City will become the prime business and service center, Panabo City as the industrial center, Sto. Tomas as agro-industrial zone and the Island Garden City of Samal as the agri-tourism area. Other municipalities in the province should play a vital role by providing raw materials and workforce, among others.

For the second cluster Sto. Tomas is the big brother who shall jumpstart the other two (Kapalong and Talaingod) to progress. For this cluster, roads and access within and connecting to these municipalities shall be improved. The two municipalities with the least number of road densities are in this cluster. The lack of road network has hindered the development in some areas of these municipalities. Talaingod, which is considered as the last frontier of the Lumads, has lagged behind its neighbors and remains to be a depressed area. This municipality along with Kapalong and Sto. Tomas could be developed as agro-tourism area and agro-industrial zone. This cluster will be made as the gateway of Davao del Norte to Region X more particularly the province of Bukidnon. With the completion of Tagum-Kapalong-Talaingod-Bukidnon road, accessibility between these areas will be greatly improved. Opening of this road will result to better economic opportunities and trade-offs between the two provinces. Opening more road network within the vicinity would hopefully have a domino effect on the neighboring municipalities of Kapalong and Sto. Tomas.

Since the major watershed of the province is within this cluster, reforestation activities shall be intensified in this area. Approximately, 85 percent of the forestland in the province is found in this cluster. Environmental protection and rehabilitation shall go along side with the enhancement of economic and human resources in the province.

For the Panabo City-Carmen-B.E. Dujali cluster, Panabo City shall hold the distinction and the responsibility of being the big brother to the other two municipalities. Because of its proximity to Davao City and its accessibility to the international airport and sea port, Panabo City has long been touted as the alternate site for industrial development because of its strategic geographic location. It can easily become a melting pot and the hub of business activity.

The municipalities of Carmen and Dujali shall provide agricultural support (crops and fisheries) for the cluster. At the same time these areas can provide an alternate route or gateway to Davao City, opening up new business opportunities. This cluster along with the Tagum cluster can likewise be made beneficiaries of a mass housing project.

The fourth cluster consisting of the entire Island Garden City of Samal is already identified as tourism area by the national government. With its declaration as a special economic zone, its conversion into a free port in the future is foreseen.

Given the opportunity to develop its well-endowed natural resources, this island city can easily attract vacationers and investors alike. In order to achieve this objective, better accessibility of

going to and within the island city, telecommunications, power, water supply and other infrastructure utilities and services should be in placed in the years to come.

The Integrated Area Development Approach to planning recognizes the need to increase the access of rural population to basic services and facilities, and the need to specifically locate investments to create an integrated settlement system.

Specifically it aims to:

- a. accelerate growth in rural and lagging areas;
- b. distribute equitably the developmental gains among people and areas;
- c. strengthen market for agricultural goods and other rural resources;
- d. decrease the rate and alter the pattern of rural to urban migration;
- e. widely distribute services such as health, education, agricultural extension and other socio-economic amenities.

8.1 Protection Land Use Plan

Scenario by 2022. By the end of the planning period, Davao del Norte shall have rehabilitated at least 50 percent of its forest cover. This can be done by intensifying the existing forest management and rehabilitation programs and projects e.g. CBFM, ISF, Small Watershed Rehabilitation and the implementation of the Barangay Forest Protection and Management Scheme (BFPMS) in the entire province. Rehabilitating the forest would protect the province from the effects of drought, flood, erosion and landslide. Further, its forest cover shall have served as a source of clean water for domestic and industrial consumption.

Environmental Impact Assessment of all proposed road sections traversing classified forestland shall have been fully imposed by the DENR as a pre-requisite for the approval of such projects. Existing roads and other infrastructure facilities and utilities within classified forestlands shall have also been assessed as to their environmental impact.

Mining operations in the forestlands shall have been strictly regulated and conducted with due regard to protection, development and utilization of other surface resources. Mining laws, rules and regulations of the DENR shall have governed the location, prospecting, exploration, utilization or exploitation of mineral resources in forest reservations.

Watershed shall have been well managed and protected. Denuded areas of existing proclaimed watersheds shall have been immediately reforested.

Challenges

1. Environmental Degradation

- Non-demarkation of boundaries of protection areas

There is a need to establish and identify the boundaries on the ground of the identified protection areas in the province. The identification and demarcation of NIPAS areas, Non-NIPAS areas and the geo-hazard prone areas on the ground play a big role in the resolution of conflicts and in regulating the activities within these areas.

- Absence of forest land use and management plan

There should be a forest land use plan that will serve as guide or blue print for the proper management and utilization of the forest resources. Management schemes outlined in the plan should be given priority.

- Settlements within the identified forestlands

This is common in rural areas wherein there are settlements or barangays within areas classified as forestland. The economic activities made by settlers further degrade the fragile upland resources. Although, settlements are not really within the identified protection areas, but the unsustainable farming practices and cultivation made by these upland dwellers may threaten the upland resources as a whole including those identified as protection.

- Information, Education and Communication (IEC) Campaign.

The unsustainable farming practice in the uplands is somehow a product of poor information, education and communication campaign on the proper management of upland resources. Proper education on appropriate farming technologies coupled with strengthened extension services should be made in coordination with other institutions and stakeholders.

Objective

- To strengthen the implementation of sustainable upland development program and increasing forest cover by 25 percent within the planning period.

General Policies and Strategies

Polices and strategies shall be supportive of the following areas of concern:

- Forest and biodiversity resources management
 - Coastal and marine resources management
 - Environmental management
 - Water resources management
1. Classified forestlands with slopes 50 percent above and areas with elevation of above 1,000 masl shall be considered as permanent forest permanently covered with forest vegetation. Denuded areas falling under this category shall be subjected to immediate reforestation.
 2. Denuded areas classified as forestlands which are presently utilized for agricultural purposes shall be subjected to a detailed inventory and assessment by the DENR in coordination with DA and other concerned LGUs. All areas found to be suitable for agricultural use shall be subjected to agro-forestry, while those found not suitable for agriculture will be subjected for reforestation.
 3. Mining operation in the forestlands shall be strictly regulated and conducted with due regard to protection, development and utilization of other surface resources.
 4. Environmental Impact Assessments of all proposed road sections, road right of way and telecommunication facilities traversing classified forestland shall be submitted to the DENR for review and approval as a prerequisite for approving the projects.

5. Environmental protection and rehabilitation shall go along side with the enhancement of economic and human resources in the province.

Strategies

1. Implementation of massive information, education and communication (IEC) campaign on the protection and rehabilitation of biodiversity in the province through coordination and networking with stakeholders such as the academe, NGO's/POs, religious groups, media, private sectors and other government institutions.
2. Certificate of Ancestral Domain Title (CADT) for identified CADC in the province shall be issued to ensure protection of the area from settlements encroachment.
3. Initiatives for the rehabilitation and management of the coastal ecosystem shall be strengthen in order to sustain and eventually improve the benefits that we all derive from coastal resources.
4. Integrated Land and Water Resource Management shall be adopted in watershed areas to improve the water supply, quality and forest cover of watersheds. A river basin management approach shall be adopted.
5. Rehabilitation and protection of forestland and conservation of watershed to minimize occurrence of flood, restore soil fertility to increase forest and agricultural production, promote water yield characteristics and conserve forest ecosystem.

8.2 Production Land Use Plan

Scenario by year 2022. The primary concern of the production land use plan is to provide adequate and accessible space for sustainable food crops production, industrial crops production for agri-processing, forest production and agri-tourism.

Agricultural lands for all uses will have totaled 158,990.80 hectares by the end of the planning period. This will represent 46 percent of the total provincial area, and 11.65 percent of the total regional area. Rice will have been grown within 22,182 hectares of fully irrigated and flood protected lands. Cavendish, local banana and coconut as an industrial crop will have been grown in 34,571, 12,377 and 39,650 hectares of lands, respectively. Agroforestry area with fruit trees and other industrial crops will have occupied 33,056.91 hectares within areas classified as forestland. Development of 1,175.96 hectares for tourism in the mainland and Island Garden City of Samal will be intensified.

Challenges

1. Staple crop sufficiency

- Presence of over-used/unsustainable land use

Large track of over-used lands are found in the municipalities of New Corella and Asuncion. If the existing land use will not be altered, this will contribute further to the degradation of the area, causing low farm productivity and unfavorable economic returns. Appropriate farming system

and technology should be implemented to arrest the problem of over utilization of the existing resources.

- **Unsustainable Cultural Farming Practices**

This is one of the factors that affect land degradation. The acceleration of the rate of land degradation caused by unsustainable farming practices is brought about by poor information dissemination on the importance of protecting the environment, improper use of modern technologies and even poverty and lack of livelihood opportunities. The insufficient means of alternative livelihood forces people to encroach on protection lands and marginal or not sustainable production lands.

- **Conversion of agricultural lands to other uses and crop shifting**

The irreversible conversion of agricultural lands into other uses is due to the increasing demand for settlements and other facilities brought about by urbanization. Increasing demand for housing, commercial establishment, industry and other social services and facilities in urban areas are just some of the reasons of conversion.

Crop shifting from staple crop (rice) to export banana (Cavendish) also has affected the agricultural land and its utilization in Davao del Norte in the recent years. Lands devoted for rice production have reduced by 11,977 hectares from the 2000 data. The decision of the farmers to shift from rice to banana production is a threat to food security.

2. Flooding

Flooding affects mostly agricultural areas in the lowland. Flood mitigation measures have to be implemented. Rice areas affected by flooding that cannot be controlled in a cost-efficient way should be converted into inland/fishpond development.

Objectives

- To limit crop shifting from staple crop to commercial and industrial crops..
- To increase farm productivity of 22,182 hectares of rice area through the use of appropriate technologies and farming systems.
- To provide general land use policies that will help control and manage physical development in order to promote social equity and encourage environment friendly and more sustainable development endeavors.
- Protect 39,565 hectares of production area from flooding within the next 15 years.

General Policies and Strategies

1. Those areas with slope of 18-30 percent and presently vegetated with grasses, shrubs and brushes have to be maintained as agro-forest areas. New cropping system and crop combination will be introduced in those areas. Fast growing hardwood and fruit bearing trees are recommended for agro-forestry areas.

2. In areas with 8 to 18 percent slope, crops requiring minimal cultivation will be encouraged. Diversified field crops are recommended for intercropping soil control measures like terracing, buffer strip cropping, contour tillage and other variation of the sloping agricultural land technology as well as other techniques on soil and water conservation measures will be introduced.
3. For production lands with slopes of 0 to 8 percent, intensive crop production will be sustained. Those areas are mostly planted to rice, coconut and Cavendish banana. Intensive farming systems will require the development and introduction of new farming systems that will preserve land fertility and maintain productivity.
4. Local land suitability analysis should be pursued to identify lands suited for specific industrial requirements, including required expansion areas. Marginal agricultural lands should be prime candidates for industrial expansion.
5. Industrial activities must be restricted in SAFDZ, NIPAS areas and other similarly protected areas, and hazard prone areas that have been identified to be risky for industrial activities to take place (e.g fault lines, erosion-prone areas, flood-prone areas).
6. Regulation on crop shifting especially from staple crop to commercial and industrial crop. Crop shifting has resulted to substantial decrease of areas devoted to rice production and has increased the areas devoted for Cavendish banana. This massive conversion of land due to crop shifting must be given due attention by the lawmakers both in the national and local level.

Strategies

1. Rice Intensification Program. This aims to increase the production of the staple crop even with the reduction of the area devoted for rice production. This strategy has several components namely: rice seed system/subsidy, irrigation and water management, post harvest facility assistance, extension services and training, and technical support. Rice intensification programs also aims to: a) sustain food security, b) reduce poverty incidence among rice farmers, c) increase net farm income to avoid crop shifting, and d) to ensure sustainability of the resource base.
2. Integrated farming system in the form of intercropping, multiple cropping and relay cropping will be strengthened. Promotion of multiple cropping technologies within monocropped areas will be vigorously pursued. Integration of livestock raising in every farming activity will be pursued using improved grasses and legumes
3. Application of SALT technology in upland farming shall be strengthened. Identified crops within this slope category will include banana, citrus and other fruit trees and improved grasses and legumes for cut and carry livestock growing.
4. Rehabilitation and improvement of existing irrigation systems while rainfed and potential areas will be provided with irrigation facilities.
5. Coconut areas within the slope category beyond 18 percent will be recommended for intercropping with permanent fruit bearing trees and plantation forest species.

8.3 Settlements Development Plan

Scenario by 2022. A network of settlements shall be developed with Tagum City, Panabo City and Sto. Tomas as the primary growth centers, Island Garden City of Samal, Kapalong and Carmen as the secondary growth centers and the rest of the municipalities as the tertiary growth centers.

The various services required of an expanding population in the less urbanized and rural municipalities will be catered by the most urbanized centers and secondary growth centers. The Island Garden City of Samal will continue to strive to be self-sufficient in basic social services while maximizing the use of their agriculture and tourism bases. Other social and economic services that cannot be provided in the Island are catered by Davao City because of its proximity to the island.

Challenges

a. Rapid urbanization of major growth centers

The rapid urbanization in Tagum City and Panabo City and the municipality of Sto. Tomas is due to the increased economic activities and population growth in these areas. Panabo City due to its proximity to Davao City has become the catchments site for spill-over economic activities. Tagum City as the capital of the province continues to provide tertiary level services not only to the people of Davao del Norte but also of the neighboring provinces of Compostela Valley and Davao Oriental in Southern Mindanao Region and even part of Agusan del Sur in Caraga Region.

Rapid urbanization also affects the land use in major growth centers. The irreversible conversion of prime agricultural lands to urban use is due to the proliferation of housing projects especially in major growth centers. Commercial and industrial establishments also sprout with them on these lands. Unfavorable economic returns in farming ventures is also a factor that contributes to irrational conversion of agricultural lands.

Tagum City, Sto. Tomas and Panabo City urbanization rate based on 2007 population is placed at 70 percent, 45 percent and 23 percent, respectively.

b. Inadequate basic services and facilities in rural areas

Basic services and facilities remain inadequate especially in rural areas. Foremost of these are potable water supply, power supply facilities, road network and other social infrastructure facilities. Inadequacy of these facilities likewise limits the expansion of settlements in these areas.

Mobility between rural areas is still a problem because of inadequate road network that would provide better access to the commuting public. Limited motor vehicles ply the routes to many rural areas in the province because many of the roads are either poorly maintained or have not been upgraded or rehabilitated. Motorcycles or “habal-habal” are the common mode of transportation in rural areas. The capacity of “habal-habal” to transport passengers and cargo is very limited, thus affecting travel time and efficiency in the flow of people, goods and services within the rural areas and limiting the ability of settlements to provide support to other settlements.

c. Emergence of Social and Environmental Problems Associated with Settlements Growth

Synonymous to urban growth is the increase in social and environmental maladies brought about by such development. Presence of informal settlers contributes to congestion in urban areas and the problems on right of way acquisition, since most of these settlers are locating their residence in areas allocated for road right-of-way. Unsanitary practice and disposal of human and industrial wastes is also one of the ill effects of urbanization. Strict implementation of RA 9003 especially in urban centers have somehow lessens the problem on waste disposal.

Presence of settlement in areas identified as forestland adds more pressure to the already fragile ecosystem in the uplands. The result is the degradation of the forestland due to man's unsustainable practices and activities, which caused the forest cover to degenerate. As a result, natural disturbances occur such as severe soil erosion with sediments clogging the waterways and water bodies, destruction of mangrove, marine and coastal resources; flooding, reduction of biological diversity and wild life habitat, degradation of watershed, which threaten water supply condition and quality; and affecting climatic patterns.

Although Davao del Norte is located in a typhoon-free zone, the province's lowland area where settlements are mostly concentrated is frequently affected by flooding. Forest denudation and narrow watershed are among the factors that contribute to flooding.

Frequent flooding affects productive agricultural lands and urban areas along the mid-to-lower reaches of major rivers. Implementation of flood mitigating measures and other activities to reduce the effect of disaster in the future should be given priority and due consideration.

Objectives

- Rationalize land conversion in urban centers and major growth areas.
- Provide adequate social services and facilities in rural areas.
- Restrict settlements in areas lying within the coastal zone, river banks, flood prone and other environmentally constrained areas.

General Policies and Strategies

1. To effect a rational distribution of population, provision of services and economic facilities especially in identified growth areas should be strengthened so as to encourage and spur the movement of people in still less-habited areas.
2. Urban centers whose further growth may be encouraged include all the identified secondary and tertiary growth centers. These centers will be given priority considering their designated functions. Functions still not present within these centers will be provided to maximize their functionality.
3. Urban centers whose growth must be restrained/restricted include:
 - All settlements within the production forest. These settlements are in the municipalities of Kapalong, Talaingod, San Isidro, Asuncion, New Corella and the rural settlements of Sto. Tomas.
 - Settlements lying within the coastal zone. Although, Davao del Norte has no history for tsunami, but areas within the coastal zones are prone to this hazard. These

settlements are in Island Garden City of Samal, and the coastal barangays of Tagum City, Panabo City and Carmen.

- All urban centers which are surrounded by prime agricultural rice lands. These are the poblaciones of B.E. Dujali, Carmen, New Corella, Asuncion and Sto. Tomas. Some barangays of these municipalities can have urban expansion as indicated in the proposed settlements map.
 - Settlements in areas highly prone to flooding because of the potential risks to lives and properties.
4. In identifying future industrial sites, some specific considerations will include the following: (a) the relationship of industrial site with adjoining and other relevant land uses; (b) availability of appropriate skilled labor; (c) capacity of the community to provide housing and other service requirements; and (c) potential market for the outputs to be produced from the site.
 5. Industrial ecology should be promoted. This requires the clustering of industries that have backward linkages wherein the wastes or by-products of one industry can be utilized by another industry. Clustering would also allow cost-sharing scheme in the construction and operation of waste-water treatment plants.
 6. There should be sufficient infrastructure support facilities (farm to market roads, power, water, flood control and drainage, and waste disposal) especially in rural areas or tertiary urban centers.
 7. There is a need to strengthen disaster and risk management programs and activities to enhance the preparedness of the populace in case of the occurrence of disaster. Preparatory activities should be conducted to minimize the impact of disaster. Prevention of loss of lives or heavy damage to properties must be the prime concern.

Among the mitigating measures to be undertaken are:

- a). Relocation of residents occupying the riverbanks to a safe settlement site;
- b). Establishment of buffer strips by planting trees along the riverbanks; and
- c). Implementation of all erosion control measures.

8.4 Infrastructure Development Plan

Basically, the infrastructure plan is based on the development challenges, issues and concerns confronting the development of the province. These could be achieved through spatial development strategies and supporting policies and with corresponding programs and projects.

The order of priority of physical development shall be:

- Maintenance and upgrading of existing infrastructure facilities to extend the life span of the project and thereby generate more productive use of assets
- Construction of additional and/or new infrastructures.

Challenges

1. Poor access to basic infrastructure services and social facilities

- Limited and Poor Road Condition in Rural Areas

There is a need for the opening of new farm-to-market roads and the improvement of existing road network especially in rural areas to provide better access and linkage within and outside the province. Priority should be provided in municipalities which road densities are below the national standard.

- Inadequate Flood Control and Drainage Facilities

The province lowland area is frequently affected by flooding. It affects productive agricultural lands and along mid-to-lower reaches of major rivers. Protection dikes have to be constructed in areas along the major rivers of the province to minimize if not totally prevent the destructive effects of flooding. Flood control facilities as part of the short to medium term plan, should be implemented vis-a-vis with the rehabilitation, protection and conservation of the uplands.

- Limited Access to Power/Energy

While 100 percent or all of the barangays in Davao del Norte have electricity, there is still a need to energized 21.68 percent of the total households in the province. These households are mostly located in rural areas.

- Limited access to potable water

Low access to potable water is still a major concern especially in rural areas. While majority of the households in the urban centers have access to potable water, insufficiency or lack of it remains a major concern of the rural communities. The province has substantial sources of potable water that remains to be developed or tapped.

- Limited access to social and other infrastructure facilities

The inadequacy of education, health and housing facilities affects the quality of education, health condition and welfare of the people in the province. Tertiary facilities and services are concentrated in the major urban centers. Classroom requirement for the secondary education has to be upgraded in order to at least meet the standard requirements of the education department.

Objectives

- Increase inter and intra-provincial linkages within the next 15 years.
- Increase household power connection by 100 percent within 5 years.
- Reduce classroom deficiency by 50 percent within 10 years.
- Upgrade hospital services and facilities in the three districts within 3 years.
- Enhance basic social services and facilities in all barangays within 15 years.
- Provide sufficient potable water supply in major centers within 10 years.

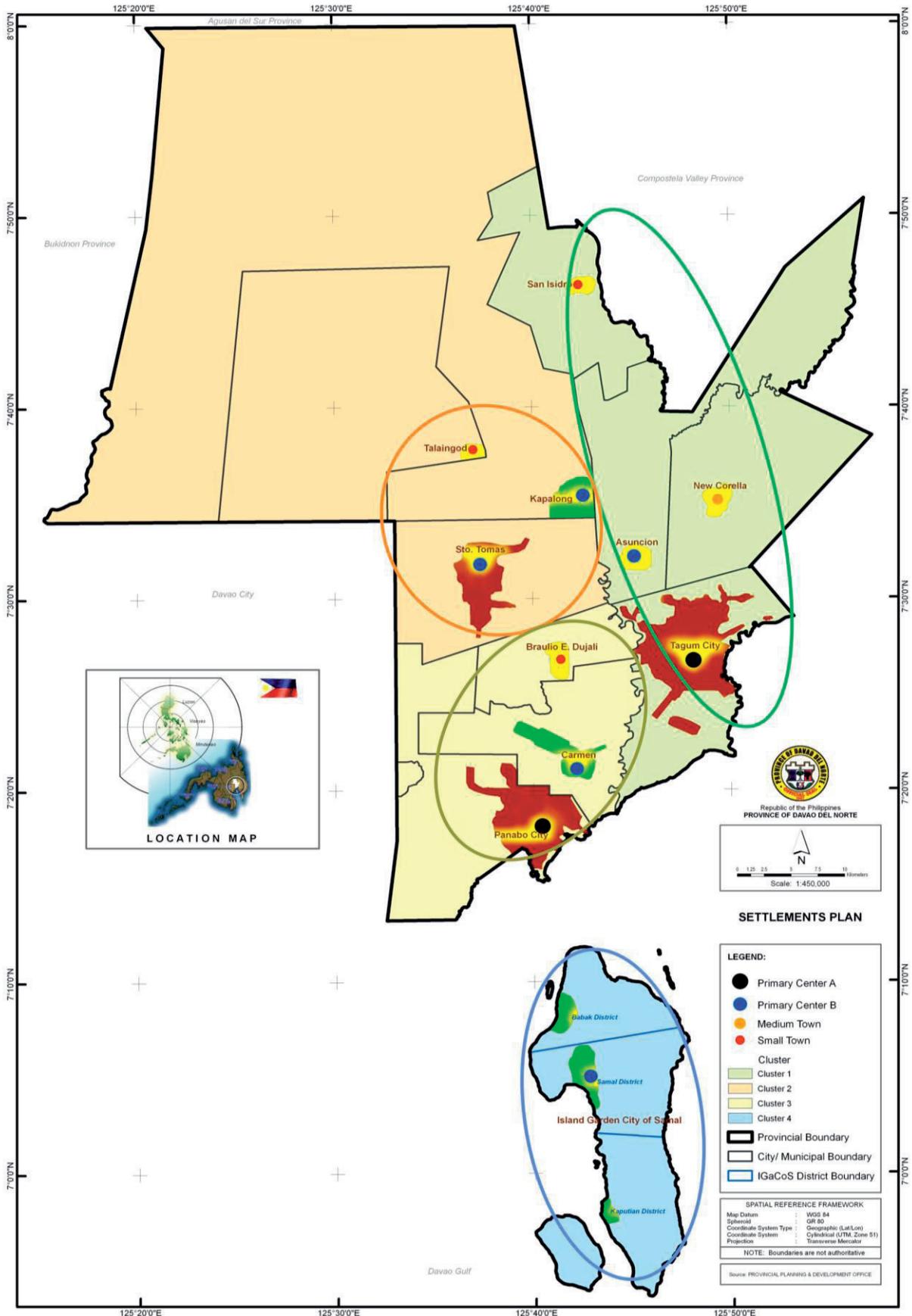
General Policies and Strategies

1. The overall strategy of the plan is geared towards enhancing the infrastructure requirements of the province. The required inter-provincial linkages, particularly those among urban centers shall be maintained in order to increase access to alternative product sources and markets, allowing for increased competition and greater economic integration.
2. The type and scale of new infrastructure facilities shall be consistent with or in support of the desired spatial pattern for a specific plan period. Likewise, infrastructure shall be used to induce or effect the realization of the desired spatial pattern.
3. The transportation network of the province shall be so designed to link the growth poles, production areas and other strategic development areas.
4. The location of new infrastructure shall as much as possible, avoid disturbing critical ecosystems. In cases where this does not apply, appropriate mitigation measures shall be incorporated in the project design.
5. Local officials must ensure that all existing building and those to be constructed should conform to building standards particularly in areas that is high risks to earthquakes.
6. To meet the demand of increased business activity in the major growth centers, infrastructure support facilities in the form of improved drainage, sewerage, water, irrigation and telecommunication facilities would have to compliment the road network enhancement.

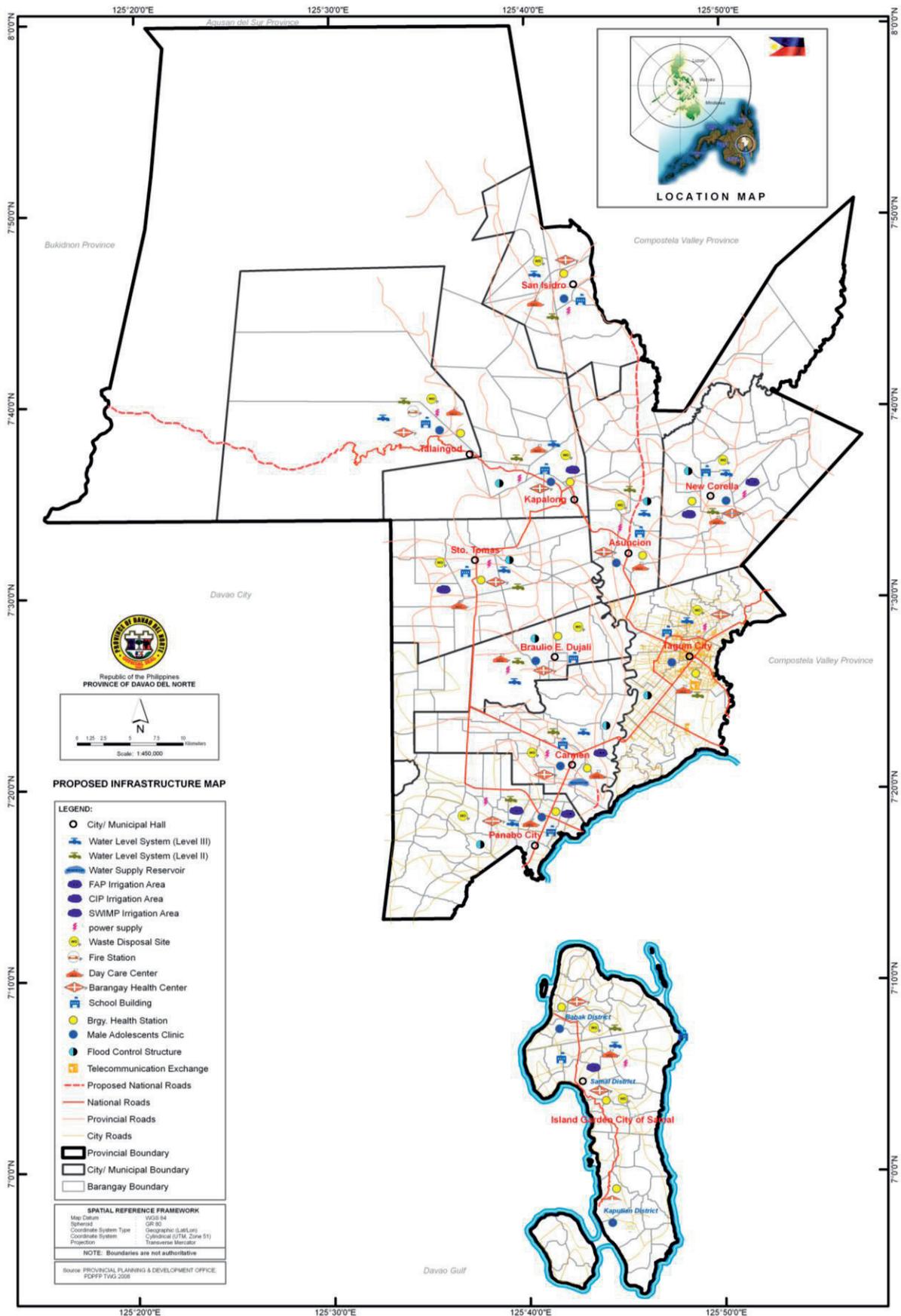
Strategies

1. Maintain and/or provide new infrastructure facilities (e.g. access and social infrastructure) in production and settlement areas to facilitate socio-economic activities.
2. Upgrade and /or provide new infrastructure facilities in rural areas to facilitate development and encourage investment outside of the major growth centers.
3. Enhance inter-provincial and intra-provincial linkage by upgrading the existing transport facilities.
4. Construction of appropriate infrastructure that would prevent flooding in high risk areas. Flood mitigation structures are important to safeguard the population, settlement and agricultural areas.
5. Develop an integrated provincial water supply system tapping available and viable sources of surface water from the major rivers in the province. The provision of safe, potable and sufficient water supply for domestic, commercial, recreation and industrial use shall be one of the prime considerations within the planning period.
6. Land banking for housing and other social services and facilities.
7. To enhance development of tourism industry in the Island Garden City of Samal. Improvement of accessibility of going to and within the island should be given priority. Improved telecommunication and infrastructure facilities and utilities should be in place within the planning period. As a Freeport, this city would be the link and the jumping board of Davao del Norte into other areas of the country and even to other areas in the world.

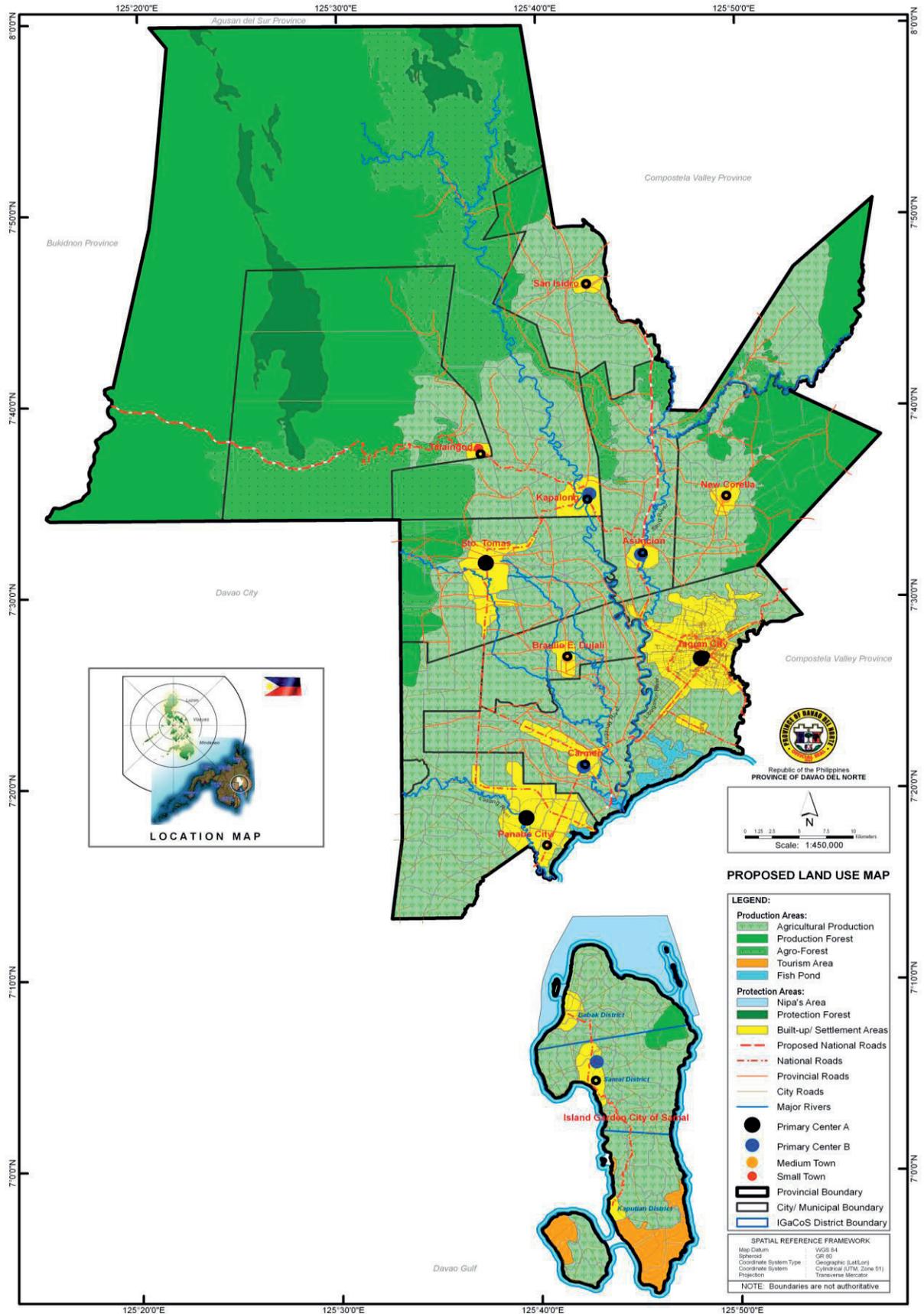
Map 23 : PROPOSED SETTLEMENTS MAP



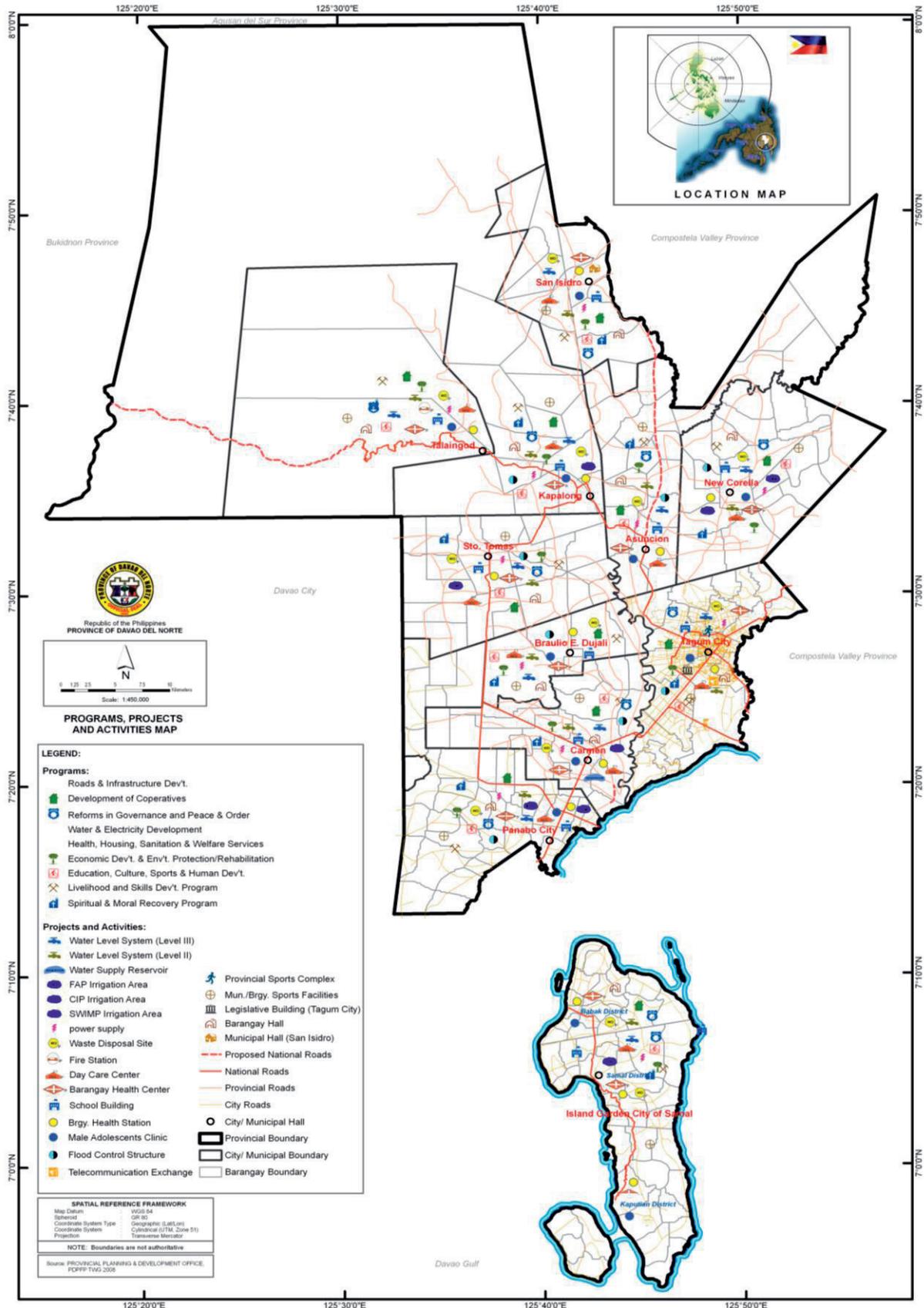
Map 24 : PROPOSED INFRASTRUCTURE MAP



Map 25 : PROPOSED GENERAL LAND USE MAP



Map 26 : PROGRAMS, PROJECTS AND ACTIVITIES



Planning Strategies and Plan Phases

Medium Term Planning Strategy (Phase I: 2008-2013)

Protection Land

- a. Conduct massive information, education and communication (IEC) on the protection and sustainable management of the environment through coordination and networking with stakeholders such as the academe, NGOs/Pos, religious group, media, civil society and other government institutions.
- b. Ensure preservation and protection of identified CADC areas in the province. Because CADC's are located in the forestland, occupying an extensive land area, management of CADC in an environmentally sound manner is critically important. Issues and concerns affecting claimants and beneficiaries should be properly addressed.
- c. Undertake strict regulation of mining operations with due regard to protection, development and utilization of other surface resources.
- d. Implement strictly Environmental Impact Assessment for all proposed road sections, road right of way and telecommunication facilities traversing areas classified as forestlands.
- e. Strict implementation of the Environmental Code of Davao del Norte.

Production Land

- a. Rice intensification program to enhance production of staple crop.
- b. Promote integrated farming system in the form of intercropping, multiple cropping and relay cropping. Integration of livestock raisings in every farming activity will be pursued using improved grasses and legumes.
- c. Strengthen the implementation of Sustainable Upland Development (SUD) technologies in upland farming.
- d. Improve coconut production through intercropping and fertilization.
- e. Support the implementation of Aquaculture Promotion Program in the following areas identified by the RFPF: B.E Dujali, New Corella, Carmen, Island Garden City of Samal and Panabo City.
- f. Strengthen the implementation of coastal rehabilitation programs and projects like mangrove reforestation and coral reef rehabilitation, and strengthen fisher-folks for fisheries and coastal resource management.

Settlements

- a. Enhance infrastructure utilities and facilities and social services projects in rural areas.
- b. Strengthen disaster and risks management programs and activities to enhance preparedness of the populace in case of the occurrence of disasters.
- c. Enhance public and private collaboration and coordination in settlements planning with special considerations for the environment.
- d. Restrict expansion of settlements in environmentally critical areas and in areas surrounded by prime agricultural lands.
- e. Ensure implementation of environmental laws and regulations to achieve ecologically-balanced and pollution free environment in all settlements.

Infrastructure Development

- a. Maintain and/or provide new infrastructure facilities (access and social infrastructure) in production and settlement areas to facilitate socio-economic growth.
- b. Upgrade and/or provide new infrastructure facilities in rural areas to facilitate development and encourage investment outside the major growth centers.
- c. Enhance inter-provincial and intra-provincial linkage by upgrading the existing transport facilities and constructing new ones.
- d. Improve other infrastructure services and utilities such as power, telecommunications and water supply to enhance economic development in the province.
- e. Rehabilitation of existing flood control projects.

Medium to Long-Term Planning Strategy (Phase II: 2008-2018)

Protection Land

- a. Conduct detailed inventory and assessment by the DENR in coordination with DA and other concerned LGUs, of denuded areas classified as forestlands which are presently utilized for agriculture. All areas found to be suitable for agriculture will be subjected to agro-forestry, while those found not suitable for agriculture will be subjected for reforestation.
- b. Initiatives for the rehabilitation and management of the coastal ecosystem shall be strengthened in order to sustain and eventually improve the benefits derived from coastal resources.

- c. Adoption of an Integrated Land and Water Resource Management. Local capacities for land and water resource management should be enhanced, involving all stakeholders in the process of sustainable management.
- d. Conduct intensive assessment and mapping of all environmentally constrained areas and formulate a disaster mitigating preparedness plan at the barangay and municipal level.

Production Land

- a. Strengthen Research and Development (R&D) for crops and fishery products in collaboration with other research institutions and academe.
- b. Rehabilitation and improvement of existing infrastructure facilities and utilities to support agriculture production.
- c. Improvement and maintenance of infrastructure facilities and services that will enhance tourism development in the mainland and Island Garden City of Samal.
- d. Promote banana industry in the province by strengthening its position as top producer of export quality banana products in the country.
- e. Promote banana chips industry in the province for local and export market.
- f. Development of areas appropriate for agriculture and livestock production. This will require the development of new farming systems that will preserve land fertility and maintain productivity.

Settlements

- a. Development of secondary and tertiary growth centers capitalizing in the strengths and opportunities inherent in the areas to spur economic growth and encourage the movement of people in less-inhabited areas. Major growth centers should be developed hand in hand with their satellite areas so as to avoid excessive concentration of settlement in the urban centers.
- b. Development of the nodal growth center into specialized areas with consideration of their potential:
 - Tagum City – prime business and service center
 - Panabo City – industrial center
 - Sto. Tomas – trading and agro-industrial center
 - Island Garden City of Samal – tourism area
- c. Maintenance and modernization of existing infrastructure facilities for maximum efficiency and cost effectiveness in urban and rural areas.
- d. Promotion of industrial ecology thru clustering of industries that have backward linkages.

- e. Allocation of appropriate areas for urban settlement and rural development. In view of the limited land resource base, action plan and investment program relative to land use have to be responsive to the requirements of sustainable development.

Infrastructure Development

- a. Construction of appropriate infrastructure such as dikes, canals and drainage to prevent flooding. Flood mitigation structures are important to safeguard the population, settlement and agricultural areas.
- b. Develop an integrated provincial water supply system tapping available and viable sources of surface waters from the major rivers in the province. The provision of safe, potable and sufficient water supply for domestic, commercial and industrial use shall be one of the prime considerations within the planning period.
- c. Land banking for housing and other social services facilities.
- d. Improvement of accessibility of going to and within the Island Garden City of Samal in support of the tourism industry.

Long □ Term Planning Strategy (Phase III: 2008-2022)

Protection Land Use

- a. Rehabilitate and protect forestland and conserve critical watershed to minimize occurrence of flood, restore soil fertility to increase forest and agriculture production, promote water yield characteristics and conserve forest ecosystem.
- b. Delineate and manage ancestral domain areas as stipulated in the IPRA Law or RA 8371.
- c. Relocate settlements and prevent encroachment in identified high risks areas to prevent damage to people and properties.
- d. Intensify IEC on proper and sustainable management of the environment and provision of appropriate farming technology and livelihood opportunities to upland communities.
- e. Declare areas with slopes 50 percent above and areas with elevation of above 1000 masl as protection forest permanently covered with forest vegetation. Denuded areas falling under this category shall be subjected to immediate reforestation.
- f. Conduct massive IEC on the value of disaster-preparedness.

Production Land

- a. Introduce new cropping system in areas with slopes of 18-30 percent and presently vegetated with grasses/shrubs. These areas will be maintained as agro-forest areas planted with fast growing hard wood and fruit bearing trees.

- b. Protect and rehabilitate watershed areas, river banks and coastal areas.
- c. Strengthen implementation of protective infrastructures like dikes, drainage and other flood mitigating projects.
- d. Push for the mechanization of rice and corn farms in the province (pre and post harvest facilities).
- e. Improve Research and Development (R&D) for cacao production and diversification of cacao products from tablea to chocolate, cocoa powder and other related products.
- f. Promote clustering of industries that have backward linkages wherein the wastes or by-products of one industry can be utilized by another industry.

Clustering would allow cost-sharing scheme in the construction and operation of wastewater treatment plant.

- g. Develop and promote areas with potential for tourism in the mainland and the Island Garden City of Samal with special consideration to human and environmental protection.

Settlements

- a. Ensure rational distribution of population, provision of services and economic facilities in all settlement areas.
- b. Implement a sustainable management of urban and rural environmental problems associated with settlements growth.
- c. Enhance agricultural production to discourage conversion and limit crop shifting.

Infrastructure Development

- a. Develop the Island Garden City of Samal as a Freeport to serve as the link and jumping board of Davao del Norte into other areas of the country and even the world.
- b. Establish fast craft ferry services that would provide better access between Samal Island and the mainland Davao del Norte via Panabo City wharf. Panabo City with its strategic location and proximity to Davao City can be a good alternate site for sea transport development.
- c. Conduct study on the establishment of the Light Rail Transit along Tagum City-Panabo City-Davao City-Digos City route.
- d. Undertake continuous upgrading and maintenance of road networks urban centers and rural areas.
- e. Upgrade existing government-operated ports in Samal Island to better accommodate the people and the products being transported to and from the island.

9.0 LOCAL GOVERNMENT ADMINISTRATION

Local Administration includes the analysis of the organizational, fiscal management, regulatory and legal controls of the provincial government. With the Local Government Code of 1991 (RA 7160), it should not only be treated as one of the planning sectors but as an integrating system for the prioritization and eventual implementation of all identified development programs, projects and activities within the province.

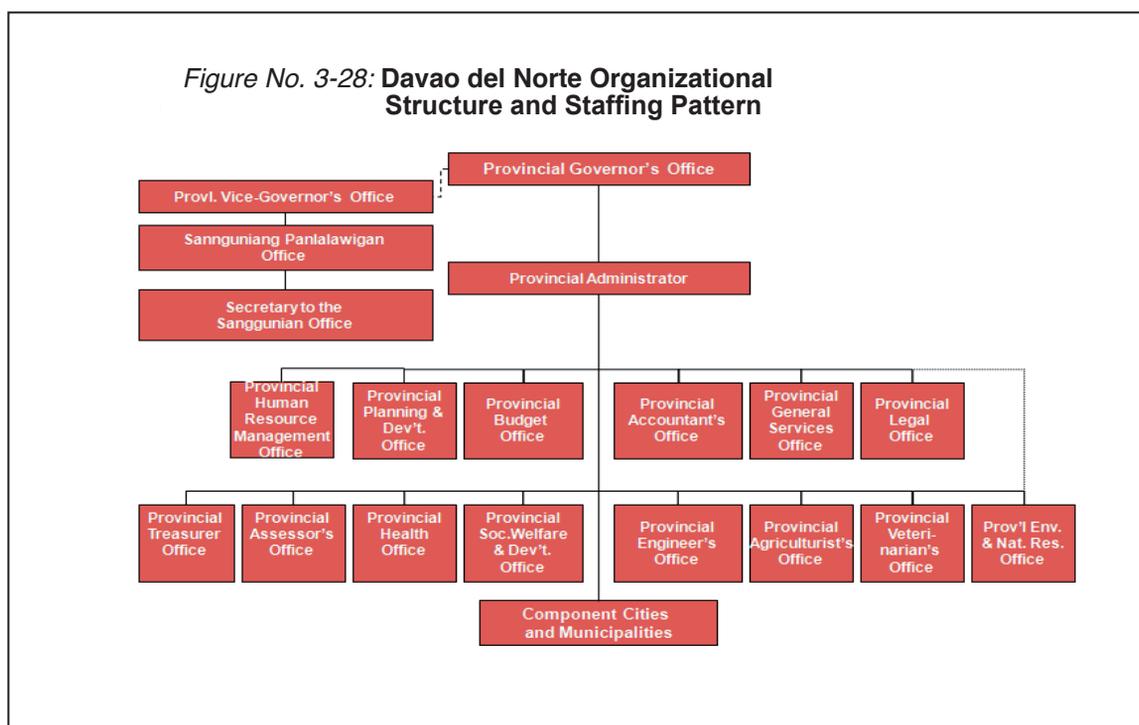
The Local Government Code also provides that each LGU shall submit an Annual Report or State of Local Governance Report encompasses the overall administrative capacity, service delivery and state of development of the province. The report includes information on the following areas of performance: governance, administration, social services, economic development and environmental management.

9.1 Organization and Management

Organizational Structure

The Provincial Government of Davao del Norte at present has a total of eighteen (18) offices, of which 16 are mandatory pursuant to Section 463 of Republic Act No. 7160. In addition, based on subsection (b) of the same section, the province had created the Provincial Environment and Natural Resources Office as an optional office. And pursuant to subsection (c) the Human Resource Management Office was created by virtue of Provincial Ordinance # 2005-062 as deemed necessary by the Sangguniang Panlalawigan to carry out the purposes of the provincial government.

Shown in Figure No. 3-28 is the flow chart of Davao del Norte Organizational Structure and Staffing Pattern. It shows a hierarchy of the different offices in Prov'l. Government of Davao del Norte.



Below is Table No. 3-173 shows the role and functions of the different offices in the delivery of services to the constituents of Davao del Norte.

Table No.3-173: Summary Table on the General Role & Functions of the Provincial Government Offices of Davao del Norte

| <u>OFFICE</u> | <u>ROLE/FUNCTION</u> |
|--|---|
| <u>PROVINCIAL GOVERNOR'S OFFICE</u> | |
| 1. Personal Staff | Facilitates and acts on decisions of the governor including confidential matters. Effects travels of the governor and ensures his safety and security. |
| 2. Information Division | Strengthens the network of communication and information system through broadcast and the weekly news bulletin of the Provincial Governor's Office, the Executive Report. |
| I. ADMINISTRATION | |
| A. Administrative Division | Performs administrative and coordination functions in the operations of the Provincial Governor's Office and other departments. |
| 1. Management Services | Controls and reviews all purchases and Section expenditures of the different offices. Monitors and evaluates implemented programs and properties of specified offices. |
| 2. Records Management | Maintains records management system Operations Section and facilitate official transactions. |
| 3. Administrative Services Section | Performs administrative and coordinative functions in the operations of the Provincial Governor's Office and other Departments. |
| II. OPERATIONS | |
| A. Civil Security Services | Secures and protects the safety of the officials and employees and the properties of the Provincial Government |
| B. Communication Development Services | Transmits and receives messages to and from the concerned. |

C. Provincial Rehabilitation Center
 Ensures the safety of the inmates in their respective cells; secures prisoners for court hearing and transfer, provides rehabilitation and gainful activities to redirect their attitudes for wholesome return and integration in the society in the society upon release and ensures that food and health needs of prisoners are attended to.

D. Economic Enterprise Division
 Formulates, implements and evaluates long range and short-range economic development programs and projects.
 Identifies feasible livelihood projects that are adaptable to the locality and identifies qualified beneficiaries.

E. Cooperative Development Division
 - Establishes linkages with government agencies and non-government organizations involved in the promotion and integration concept of the cooperatives in the livelihood of the people and other community activities

PROVINCIAL VICE-GOVERNOR'S OFFICE

Acts as the Head of the Legislative Department. Acts on matters related to Legislation and all other administrative concerns within the jurisdiction of the SP.

SANGGUNIANG PANLALAWIGAN OFFICE

Enacts ordinances, approves resolutions and appropriates funds for the general welfare of the province and its inhabitants. Formulates policies and adopts measures beneficial to the province and in consonance with existing laws.

OFFICE OF THE SECRETARY TO THE SP

Acts as the legislative department secretariat and technical support group which is responsible in documenting and safe-keeping of the legislations of the SP.

PROVINCIAL HUMAN RESOURCE MANAGEMENT OFFICE

Implements policies, rules and regulates, guidelines and Issuances relative to personning matters particularly on appoint-ments, personnel records, career development, compensations, benefits/welfare, awards and incentives, discipline, organization and separation of employees.

PROVINCIAL PLANNING AND DEVELOPMENT OFFICE

Formulates an integrated economic, social, physical and other development plans, policies for consideration of the local development council.

Maintains the management information system for the effective technology operation.

PROVINCIAL BUDGET OFFICE

-Reviews and consolidates the Budget proposals of the different Departments and offices of the LGU and assists the governor in the preparation of budget and prepare orders and circulars, which embody instructions on budgetary and appropriation matters.

PROVINCIAL TREASURER'S OFFICE

Takes custody and exercises proper management of the funds of the province; advises the governor and other officials regarding the disposition of local government funds and other matters relative to public finance.

PROVINCIAL ACCOUNTANT'S OFFICE

Maintains the accounting and internal audit system in the LGU; submits financial statement to the governor and appraises the local government officials on the financial conditions and operation of the LGU and certifies the availability of budgetary allotment.

PROVINCIAL ASSESSOR'S OFFICE

Ensures that all laws and policies governing the appraisal and assessment of real properties for taxation purposes are executed; recommends change in policies and objectives, plans and programs, techniques, procedures and practices in the valuation and assessment of real properties for taxation purposes.

PROVINCIAL AGRICULTURIST'S OFFICE

Formulates measures for the approval of the Sanggunian and provides technical assistance and support to the Governor to ensure the delivery of basic services and provision of adequate facilities relative to agricultural services.

PROVINCIAL GENERAL SERVICES OFFICE

Develops and implements plans and strategies on general services supportive to the welfare of employees.

Takes custody of and be accountable for all properties, real or personal, owned by the LGU.

Assigns with approval of the Governor land and space to local officials entitled to same.

PROVINCIAL SOCIAL WELFARE AND DEVELOPMENT OFFICE

Ensures the delivery of basic services and provision of adequate facilities relative to social welfare and development services.

Develops and implements plans and strategies on social welfare programs and projects.

Ensures the promotion and protection of all the needy, disadvantaged, under privileged or impoverished groups or individual.

Implements the Minimum Basic Needs Program particularly the Barangay Development Plan, organizes sectors in the community, refers clients to agencies concerned, facilitates the request of barangays and municipalities for assistance and monitors implementation of provincial projects.

PROVINCIAL HEALTH OFFICE

Takes charge of the office on health services, supervises the personnel and staff of said office; formulates programs and guidelines, rules and regulations for effective, efficient and economical implementation of health services programs, health related projects and activities.

Executes and enforces all laws, ordinances and regulations relating to public health;

Recommends the prosecution of any violation of sanitary laws, ordinances and regulations.

Exercises general supervision over District Hospitals.

PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE

Develops and implements plans and strategies on environment and natural resources programs and projects.

Establishes, maintains, protects and preserves commercial forests, watershed, tree parks, mangroves, greenbelts and similar forest projects and commercial forests.

PROVINCIAL LEGAL OFFICE-

Develops and implements plans and strategies on programs and projects related to legal service;

Represents the LGU in all civil actions and special proceedings wherein the LGU or any official thereof in his official capacity, is a party

Drafts ordinances, contracts, bonds, leases and other instruments involving any interest of the LGU, provides comments and recommendations and render opinion in writing on any question of law as required by the Governor or Sanggunian.

Investigate officials/employees for mis-conduct in office and any person, firms or corporation for violation or failure to comply grants and/or privileges.

PROVINCIAL VETERINARY OFFICE

Develops and implements plans and strategies on veterinary-related programs, projects and activities; advises the governor on all matters pertaining to the slaughter of animals for human consumption and the regulation slaughter houses.

PROVINCIAL ENGINEER'S OFFICE

Prepares detailed engineering plans and implements infrastructure projects.

Initiates, reviews and recommends changes in policies and objectives, plans and programs, techniques, procedures and practices in infrastructure development and public works in general of the LGU.

Advises the Governor on infrastructure, public works and other engineering matters.

Provides engineering services to the LGU

For efficient, effective and economical governance, the Provincial Governor, as the chief executive of the provincial government, exercises general supervision and control over all programs, projects, services and activities being implemented or undertaken by the eighteen (18) local government offices of the provincial government

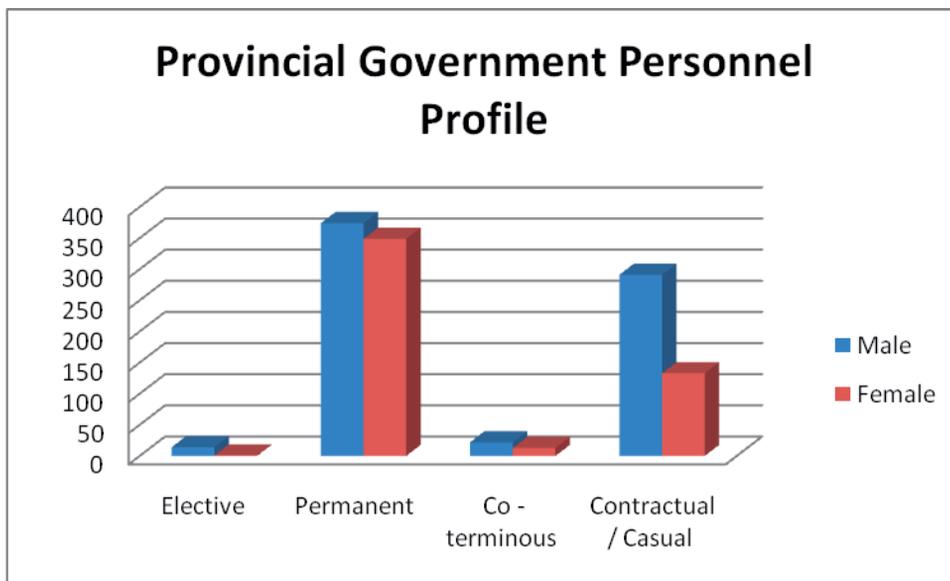
The province of Davao del Norte has a total work force of 1,197 in 2007 composed of 15 elective officials; 723 permanent employees; 424 contractual/casual employees and 35 co-terminus. Of the 723 permanent employees, 349 are female and 374 are male.

Table No. 3-174 : Classification of Provincial Government Personnel, 2007

| Position | CLASSIFICATION | | | | | | | | | | | | TOTAL | | | |
|--------------------------|----------------|----|-------|------------|-----|-------|--------------|----|-------|--------------------|-----|-------|-------|-----|-------|-----|
| | Elective | | | Appointive | | | | | | | | | | | | |
| | | | | Permanent | | | Co-Terminous | | | Contractual/Casual | | | | | | |
| | F | M | Total | F | M | Total | F | M | Total | F | M | Total | F | M | % | |
| Governor | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | .08 |
| Vice-Governor | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | .08 | |
| SP Members | 1 | 12 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 | 1.08 | |
| Department Heads | 0 | 0 | 0 | 7 | 6 | 13 | 1 | 1 | 2 | 0 | 0 | 0 | 8 | 7 | 1.25 | |
| Asst. Dept. Heads | 0 | 0 | 0 | 9 | 6 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 6 | 1.25 | |
| Division Chiefs | 0 | 0 | 0 | 24 | 13 | 37 | 0 | 1 | 1 | 0 | 0 | 0 | 24 | 14 | 3.18 | |
| Section Chiefs | 0 | 0 | 0 | 31 | 25 | 56 | 0 | 1 | 1 | 0 | 0 | 0 | 31 | 26 | 4.77 | |
| Rank and File | 0 | 0 | 0 | 278 | 324 | 602 | 12 | 19 | 31 | 133 | 291 | 424 | 423 | 634 | 88.34 | |
| Total | 1 | 14 | 15 | 349 | 374 | 723 | 13 | 22 | 35 | 133 | 291 | 424 | 496 | 701 | 100 | |

Source: P HRMO, Davao del Norte

Figure No. 3-29: Provincial Government Personnel Profile



**Table No.3-175: Civil Services Eligibilities of Personnel
Provincial Government of Davao del Norte**

| | Nature of Eligibility | | | | | | | | | | | | | | Total | | | | | |
|--------------------------|-----------------------|---|------------|----|----------------------|----|--------------------------|----|-------------|---|--------------|---|--------|-----|--------|-------|------|-------|------------|-------|
| | Bar Exam | | Board Exam | | Career Service Prof. | | Career Service Sub-Prof. | | First Grade | | Second Grade | | Others | | Female | | Male | | Both Sexes | |
| | F | M | F | M | F | M | F | M | F | M | F | M | F | M | No. | % | No. | % | No. | % |
| Governor | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vice-Governor | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SP Member | 0 | 1 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | .85 | 6 | .85 | |
| Department Heads | 1 | | 5 | 2 | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 8 | 1.14 | 7 | .99 | 15 | 2.13 |
| Asst. Dept. Heads | 0 | | 5 | 3 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 1.28 | 6 | .85 | 15 | 2.13 |
| Division Chiefs | 0 | | 9 | 6 | 12 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 24 | 3.41 | 14 | 1.99 | 38 | 5.40 |
| Section Chiefs | 0 | | 17 | 14 | 14 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 31 | 4.40 | 25 | 3.55 | 56 | 7.95 |
| Rank and File | 0 | | 75 | 33 | 127 | 76 | 39 | 28 | 0 | 1 | 0 | 1 | 28 | 166 | 269 | 38.21 | 305 | 43.32 | 574 | 81.53 |
| Total | 1 | | 111 | 60 | 158 | 98 | 39 | 28 | 0 | 2 | 0 | 1 | 32 | 170 | 341 | 48.44 | 363 | 51.55 | 704 | 100 |

Source: P HRMO, Davao del Norte

In terms of civil service eligibility, 341 or 48.44% of the female personnel are civil service eligible, whereas 363 or 51.56% are civil service eligible male personnel, two of which passed the Bar Examination.

9.1.2 Legislative Services

The Sangguniang Panlalawigan, as the legislative body of the province, enacts ordinances, approves resolutions and appropriates funds for the general welfare of the province and its inhabitants pursuant to Section 16 of the 1991 Local Government Code, and in the proper exercise of the corporate powers of the province as provided for under Section 22 of the same Code. As such it is clothed with a different role, functions and responsibilities from that of the executive branch yet supportive to the said branch in carrying out good governance.

The local legislative body Sangguniang Panlalawigan has 14 elective members. Among the members are the Provincial Vice-Governor and 10 Provincial Sangguniang Panlalawigan members. There is one (1) sectoral representative from each of the three important government sectors, namely: Philippine Councilor's League, Federation of Association of Barangay Captain (FABC) and Sangguniang Kabataan Provincial Federation President (SKPFP).

**Table No. 3-176: Summary of Ordinance and Resolutions Enacted
By the Sangguniang Panlalawigan, Davao del Norte, 2000**

| | 2003 | 2004 | 2005 | 2006 | 2007 | TOTAL | |
|------------------------|------|------|------|------|------|-------|------|
| | No. | No. | No. | No. | No. | No. | % |
| Ordinances: | | | | | | | |
| Governance | - | - | - | - | - | 0 | 0 |
| Administration | - | - | - | 61 | 56 | 117 | 3.59 |
| Social | 4 | 4 | 9 | 5 | 2 | 24 | .74 |
| Economic | - | - | 3 | - | 1 | 4 | .12 |
| Environment | - | - | - | - | - | 0 | 0 |
| General Administration | 57 | 44 | 55 | - | - | 156 | 4.79 |
| Miscellaneous | - | - | 1 | - | - | 1 | .03 |
| Sub- total | 61 | 48 | 68 | 66 | 59 | 302 | 9.28 |

| Resolutions: | | | | | | | |
|------------------------|------------|------------|------------|------------|------------|--------------|--------------|
| Governance | - | - | - | 211 | 205 | 416 | 12.78 |
| Administration | - | - | - | 472 | 421 | 893 | 27.43 |
| Social | 63 | 28 | 97 | 68 | 39 | 295 | 9.06 |
| Economic | 15 | 52 | 51 | 10 | 16 | 144 | 4.42 |
| Environment | - | - | - | 10 | 5 | 15 | .46 |
| General Administration | 173 | 156 | 211 | - | - | 540 | 16.58 |
| Miscellaneous | - | 317 | 334 | - | - | 651 | 19.99 |
| Sub- total | 251 | 553 | 693 | 771 | 686 | 2,954 | 90.72 |
| GRAND TOTAL | 312 | 601 | 761 | 837 | 745 | 3,256 | 100% |

Source: Office of the Secretary to the Sangguniang Panlalawigan, Davao del Norte

It can be noted that resolutions and ordinances for the year 2003-2005 lumped under the general administration and miscellaneous concerns legislations on governance, administration, social economic and environment.

During the period 2003-2007 the Sanggunian Panlalawigan passed and enacted 3,256 resolutions and ordinances distributed in the areas of governance with 416 or 12.78%, administration with 1,010 or 31.02%, social services with 319 or 9.80%, economic development with 148 or 4.54%, environmental; management with 15 or .46%, general administration with 696 or 21.37, and miscellaneous with 652 or 20.02%

9.1.3 Local Development Planning

a. Local Planning Machinery and Policy

The center of the local planning system is the Provincial Planning Office (PPDO). This office works together with the Provincial Development Council which is a local special body mandated under RA 7160. The PPDO concentrates on the planning of programs, projects, and activities for the entire province.

The planning process adopts a “bottom-up approach” where the plans are consolidated from the city and the municipal development plans. This new approach is a complete innovation from the classic “top-down approach” of the former system where the leaders decide on the planning instead of the communities planning for themselves. This is a very efficient and effective strategy into achieving more responsive concepts from the common masses. The real problems and questions related to the issues at hand in politics and governance is best resolved with the communities as the forerunners.

The PPDO guarantees that the plans from the component cities and municipalities are thoroughly reviewed at the provincial level so that they can be supported adequately by appropriate funds. This is possible because of the merging of local planning and the budgeting system. With this concept, the financing of the plans will be less complicated and more prompt. This will give way to a faster and simpler way of assessing the different plans and putting them to action.

The planning process at the level of the barangay starts with the identification of programs, projects and activities. In the city or municipal level, the prioritization and fund programming is done while the plan integration and fund allocation are done in the provincial levels in the case of projects sought for funding from the province.

b. Local Plan Documents and Planning Capability

Two long term plans had been formulated by PPDO for the province, namely: a) the Provincial Development and Physical Framework Plan and b) the Gender Responsive Provincial Comprehensive Development Plan, which was made possible through the assistance of the Office of the National Commission on the Role of Filipino Women (NCRFW). The province was the first to come up with a Gender-Responsive Comprehensive Development Plan in the entire Philippines.

Considered a medium-term plan, is the 5-year Provincial Development Investment Plan (PDIP), which carries the list of programs, projects and activities prioritized for implementation within the given plan period.

The short-term plan considered as the implementing tool of all plans is the Annual Investment Plan (AIP). This plan is prepared in a yearly basis and contains selected programs, projects and activities that can be funded for implementation.

9.1.4 Local Fiscal Management

The Province of Davao del Norte is classified as a First Class Province according to Department Order No. 20-05 dated July 29, 2005 of the Department of Finance.

a. Revenue Generation

Revenue Profile of the Province

The table below presents data on the income generated by the province from CYs 2003 to 2007.

*Table No.3-177: Comparative Annual Income from All Sources
Province of Davao del Norte (2003-2007)*

| YEAR | AMOUNT | INCREASE (DECREASE) % to Total |
|------|----------------|-----------------------------------|
| 2003 | 444,717,13.31 | - |
| 2004 | 480,169,414.00 | 7.97 |
| 2005 | 510,327,872.23 | 6.26 |
| 2006 | 510,208,793.39 | -.002 |
| 2007 | 559,949,983.88 | 9.75 |

Sources: Year-End Reports of Revenues and Receipts, DDN, PTO file

b. Source of Revenues

The sources of revenue of the local government unit are generally classified into two, namely: a) outside or external sources, and b) local or internal sources

1. External Sources

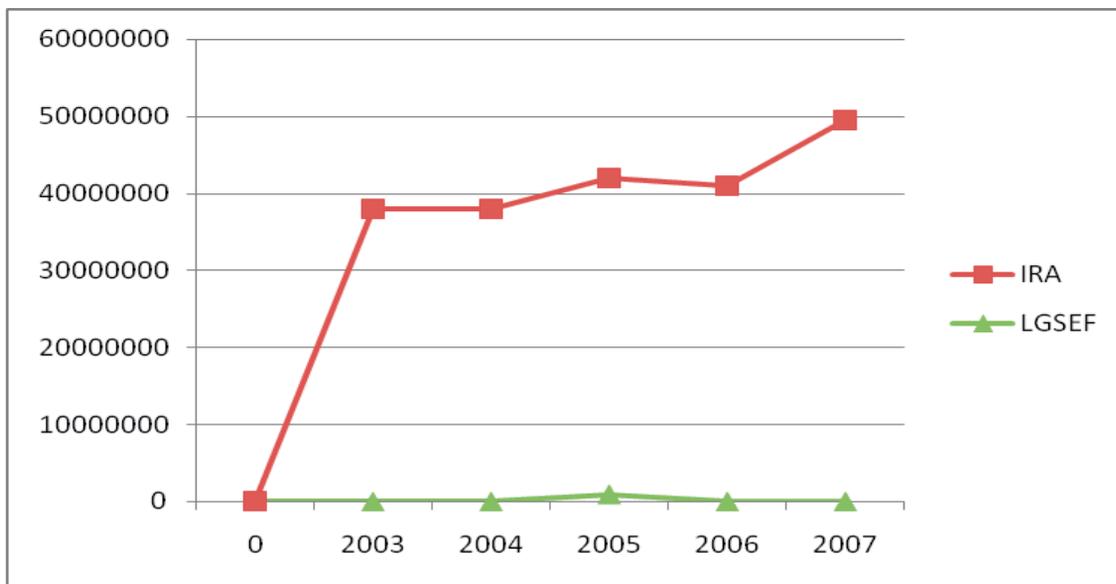
The table below shows the shares in Internal Revenue Allotment (IRA) received by the province of Davao del Norte from CYs 2003 – 2007. The trend indicates a yearly increase of 02% in 2004; 8.05% in 2005 and 20.80% in 2007. In 2005, the province received an amount of Php 9,634,267.09 representing share from Local Government Service Equalization Fund (LGSEF), which made possible an increase by 10.59% from 2004. There was a slight decrease in IRA share of 2.30% in 2006.

Table No. 3-178: Comparative Annual Income from External Sources
 Province of Davao del Norte (CY 2003-2007)

| Sources | 2003 | % | 2004 | % | 2005 | % | 2006 | % | 2007 | % |
|--|----------------|---|----------------|-------|----------------|-------|----------------|------|----------------|--------|
| Internal Revenue Allotment | 378,984,308.00 | - | 379,042,293.00 | 0.02% | 409,551,286.00 | 8.05% | 409,551,286.00 | - | 494,734,236.00 | 20.80% |
| Local Gov't. Service Equalization Fund | 0 | | 0 | | 9,634,267.09 | | 0 | | 0 | |
| Total External Sources | 378,984,308.00 | | 379,042,293.00 | 0.02 | 419,185,553.09 | 10.59 | 409,551,286.00 | -230 | 494,734,236.00 | 20.80 |

Sources: Statement of Income and Expenditure (Cash Basis), PTO file

Figure No. 3-30: Comparative Annual Income from External Sources



2. Internal Sources

Local revenues are derived from either the general fund or the SEF. The general fund covers real property taxes, business taxes, fees and charges, income from economic enterprise, and other taxes and receipts.

Increases in revenues were realized by 53.85% in 2004, 10.57% in 2006 and 35.21% in 2007. A slight decrease was seen in 2005 with by 9.98%.

The decrease was due to the exclusion of income from the rental of heavy equipments which are used on projects undertaken by the Province except those under the Trust Fund account as per the advice of the Commission on Audit not to take up as.

**Table No. 3-179: Comparative Annual Income from Local Sources
Province of Davao del Norte (CY 2003-2007)**

| I. GENERAL FUND | 2003 | % | 2004 | % | 2005 | % | 2006 | % | 2007 | % |
|-------------------------------|----------------------|----------|-----------------------|----------|----------------------|----------|-----------------------|----------|----------------------|----------|
| Real Property Taxes | 8,444,968.83 | 12.85 | 9,424,835.15 | 9.32 | 10,454,429.97 | 11.48 | 11,773,070.43 | 11.40 | 14,105,086.29 | 21.63 |
| Business Taxes | 2,809,495.63 | 4.27 | 2,991,187.81 | 2.96 | 3,382,356.16 | 3.71 | 3,763,707.79 | 3.69 | 3,592,170.79 | 5.51 |
| I. GENERAL FUND | 2003 | % | 2004 | % | 2005 | % | 2006 | % | 2007 | % |
| Fees and charges | 7,868,673.29 | 11.97 | 11,937,496.93 | 11.80 | 12,103,438.82 | 13.40 | 12,242,501.94 | 13.08 | 14,504,725.58 | 22.24 |
| Economic Enterprise | 26,709,053.70 | 40.63 | 55,988,898.07 | 55.36 | 42,631,292.51 | 46.83 | 48,019,431.72 | 47.56 | 5,134,604.51 | 7.87 |
| Other taxes and Receipts | 8,057,896.09 | 12.26 | 7,666,974.50 | 7.58 | 7,997,097.90 | 8.68 | 8,149,379.31 | 8.06 | 7,770,457.74 | 11.91 |
| Sub-Total | 53,890,087.54 | | 88,009,392.46 | | 76,568,615.36 | | 83,948,091.19 | | 45,107,044.91 | |
| II. SEF | | | | | | | | | | |
| Realty Taxes | 11,793,760.71 | 17.94 | 13,062,971.94 | 12.92 | 14,375,891.45 | 15.79 | 16,639,905.70 | 16.14 | 20,050,634.09 | 30.74 |
| Others | 48,975.06 | -0- | 54,756.60 | -0- | 87,812.33 | -0- | 69,510.50 | -0- | 58,068.88 | -0- |
| Sub-Total | 11,842,735.77 | | 13,117,728.54 | | 14,463,703.78 | | 16,709,416.20 | | 20,108,702.97 | |
| Total Internal Sources | 65,732,823.31 | | 101,127,121.00 | | 91,032,319.14 | | 100,657,507.39 | | 65,215,747.88 | |

Sources: Year-End Reports of Revenues and Receipts, DDN, PTO file

Figure No. 3-31: Comparative Annual Income from Local Sources

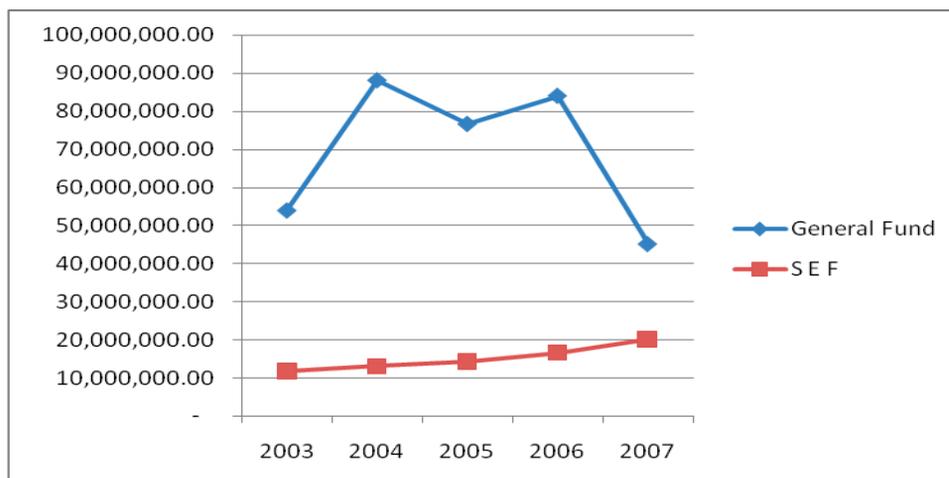


Table No 3-180: Ratio between Income from Local Source Viz: IRA Share by Municipality, Davao del Norte, CY 2003 – 2007

| Province/City | Total Income From Local Source (Php) | Total Income from IRA Share (Php) | Total Income CYs 2003-2007 (Php) | Annual Average Income (Php) | Percentage of Local Source | Percentage of IRA Share |
|---------------|--------------------------------------|-----------------------------------|----------------------------------|-----------------------------|----------------------------|-------------------------|
| Asuncion | 36,107,689.03 | 259,130,251.55 | 295,237,940.58 | 59,047,588.12 | 12.23 | 87.77 |
| B.E. Dujali | 29,692,531.85 | 109,924,171.46 | 139,616,703.31 | 27,923,340.66 | 21.27 | 78.73 |
| Carmen | 71,832,540.32 | 235,810,392.62 | 307,642,932.94 | 61,528,586.59 | 23.35 | 76.65 |
| Kapalong | 83,158,480.20 | 399,212,367.70 | 482,370,847.90 | 96,474,169.58 | 17.24 | 82.76 |
| New Corella | 45,764,752.78 | 206,629,892.57 | 252,394,645.35 | 50,478,929.07 | 18.13 | 81.87 |
| Santo Tomas | 166,137,642.74 | 321,596,139.69 | 487,733,782.43 | 97,546,756.49 | 34.06 | 65.94 |
| Talaingod | 4,184,808.36 | 225,571,669.63 | 229,756,477.99 | 45,951,295.60 | 11.82 | 98.18 |
| Total | 436,878,445.28 | 1,757,874,885.22 | 2,194,753,330.50 | 438,950,666.10 | 19.91 | 80.09 |

Source : Statement of Income & Expenditure (Cash Basis) reports of Municipalities.
 - Municipality of San Isidro is excluded since the creation is only on March 2004.
 - Income from Local Source is composed of General Fund and SEF income, excludes proceeds from Borrowings, Extraordinary Receipts and Transfers.

It can be gleaned from the table that most of the municipalities of Davao del Norte depend heavily on share from Internal Revenue Allotment (IRA) or the external source. Among the municipalities, Talaingod registered the highest IRA dependence with 98.18% Sto. Tomas got the lowest dependence with 65.94% IRA share and 34.06% from local source.

Table No. 3-181 : **Income for the last five years of the 4 Provinces and Five Cities of Region XI and Ratio between Income from Local Sources versus IRA Share**

| Province/City | Total Income From Local Source | Total Income from IRA Share | Total Income CYs 2003-2007 | Annual Average Income | Percent age of Local Source | Percentage of IRA Share |
|-----------------------------|--------------------------------|-----------------------------|----------------------------|-------------------------|-----------------------------|-------------------------|
| Davao del Norte | 423,762,518.72 | 2,071,863,409.00 | 2,495,625,927.72 | 499,125,185.54 | 16.98 | 83.02 |
| Davao del Sur | 163,957,125.17 | 2,255,727,458.26 | 2,419,684,583.43 | 483,936,916.69 | 6.78 | 93.22 |
| Davao Oriental | 172,189,318.19 | 2,107,311,017.47 | 2,279,500,335.66 | 455,900,067.13 | 7.55 | 92.45 |
| Compostela Valley | 306,117,193.79 | 2,020,439,039.87 | 2,326,556,233.66 | 465,311,246.73 | 13.16 | 86.84 |
| Total | 1,066,026,155.80 | 8,455,340,924.60 | 30,461,367,080.40 | 1,904,273,416.00 | | |
| Davao City | 5,022,974,482.97 | 7,719,99,258.00 | 12,742,773,740.97 | 2,548,554,748.19 | 39.42 | 60.58 |
| Digos City | 399,069,658.42 | 1,226,399,612.16 | 1,625,469,270.58 | 325,093,854.12 | 24.55 | 75.45 |
| Tagum City | 828,364,129.64 | 1,281,709,772.23 | 2,110,073,901.87 | 422,014,780.37 | 39.26 | 60.74 |
| Island Garden City of Samal | 107,279,509.06 | 1,084,598,774.00 | 1,191,878,283.06 | 238,375,656.61 | 9.00 | 91.00 |
| Panabo City | 410,929,463.10 | 1,181,445,735.40 | 1,592,375,198.50 | 318,475,039.70 | 25.81 | 74.19 |
| Total | 6,768,617,243.19 | 5,546,153,151.70 | 19,262,570,394.90 | 3,852,514,078.90 | | |

Source : *Statement of Income & Expenditures (Cash Basis) Report of Provinces and Cities of Region XI complied by BLGF Office R-XI,*

- *Income from Local source is composed of General Fund and SEF Income, excludes proceeds from Borrowings, Extraordinary Receipts and Transfers.*

The data above also reveals that provinces and cities of Region XI are very much dependent on the shares derived from Internal Revenue Allotment (IRA). Among the Provinces, Davao del Sur registered the highest IRA dependence with 93.22%. Davao del Norte got the lowest dependence with 83.02%. Among the Cities of Region XI, the Island Garden City of Samal registered the highest dependence with 91.00%, followed by Digos City with 75.45%, Panabo City with 74.19%, Tagum City, 60.74% and Davao City with 60.58%.

Table No. 3-182: Comparative Gross Real Property Tax (Basic) Collection Performance, Davao del Norte (2003-2007)

| YEAR | BASIC TAX COLLECTIBLE | BASIC TAX ACTUAL COLLECTION | COLLECTION PERCENTAGE |
|-------------|------------------------------|------------------------------------|------------------------------|
| 2003 | 25,146,471.40 | 25,576,328.92 | 101.71% |
| 2004 | 34,514,152.90 | 28,525,609.03 | 82.65% |
| 2005 | 34,016,899.50 | 29,136,071.32 | 85.65% |
| 2006 | 34,328,206.60 | 35,668,803.00 | 103.91% |
| 2007 | 43,431,400.60 | 42,784,582.84 | 98.51% |

Sources: Year-End Reports of Revenues and Receipts, DDN, PTO file

The above table shows that basic tax actual collection against the target collection is consistently high in spite of the fact that there are years that it decreases. The trend also applies to the gross real property tax collection for SEF over CYs 2003-2007.

Table No. 3-183: Comparative Gross Real Property Tax (SEF) Collection Performance Davao del Norte (2003-2007)

| YEAR | SEF TAX COLLECTIBLE | SEF TAX ACTUAL COLLECTION | COLLECTION PERCENTAGE |
|-------------|----------------------------|----------------------------------|------------------------------|
| 2003 | 25,146,471.40 | 25,576,328.92 | 101.71% |
| 2004 | 34,514,152.90 | 28,505,694.26 | 82.59% |
| 2005 | 34,016,899.50 | 29,136,276.53 | 85.65% |
| 2006 | 34,328,206.60 | 35,686,154.64 | 103.96% |
| 2007 | 43,431,400.60 | 42,772,556.89 | 98.48% |

Sources: Year-End Reports of Revenues and Receipts, DDN, PTO file

Table No. 3-184: Projected Income CY 2008-2013

| PROVINCE : DAVAO DEL NORTE FUND : GENERAL | | | | | | |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| PARTICULARS | ESTIMATE CY 2008 | ESTIMATE CY 2009 | ESTIMATE CY 2010 | ESTIMATE CY 2011 | ESTIMATE CY 2012 | ESTIMATE CY 2013 |
| LOCAL REVENUES | | | | | | |
| Real Property Taxes | P 14,000,000.00 | P 15,000,000.00 | P 15,600,000.00 | P 16,224,000.00 | P 16,467,360.00 | P 17,290,728.00 |
| Business Taxes | 3,920,000.00 | 3,775,000.00 | 3,830,100.00 | 3,906,702.00 | 3,984,836.00 | 4,064,533.00 |
| Fees and Charges | 13,868,000.00 | 16,227,000.00 | 17,038,350.00 | 17,890,267.00 | 18,784,780.00 | 19,724,019.00 |
| Income from Econ. Ent. | 10,385,000.00 | 12,085,000.00 | 13,293,500.00 | 14,622,850.00 | 16,085,135.00 | 17,693,648.00 |
| Other Taxes and Fees | 2,675,764.00 | 3,626,000.00 | 7,805,000.00 | 3,995,250.00 | 4,195,012.00 | 4,404,763.00 |
| Interest Income | 5,000,000.00 | 5,500,000.00 | 5,610,000.00 | 5,722,200.00 | 5,836,644.00 | 5,953,377.00 |
| Proceeds from Borrowings | - | - | - | - | - | - |
| TOTAL LOCAL REVENUES | 49,848,764.00 | 56,193,000.00 | 59,176,950.00 | 62,361,269.00 | 65,353,767.00 | 69,131,068.00 |
| EXTERNAL REVENUES -IRA GRANTS, AIDS | | | | | | |
| TOTAL EXTERNAL REVENUES | 597,230,051.78 | 568,311,612.00 | 568,311,612.00 | 568,311,612.00 | 568,311,612.00 | 568,311,612.00 |
| TOTAL REVENUES □ | 597,230,051.78 | 568,311,612.00 | 568,311,612.00 | 568,311,612.00 | 568,311,512.00 | 568,311,612.00 |
| GEN. FUND | P647,078,815.78 | P624,504,612.00 | P627,488,562.00 | P630,672,881.00 | P633,665,379.00 | P637,442,680.00 |
| FUND: S E F | | | | | | |
| Real Property Taxes | P 18,000,000.00 | P 20,700,000.00 | P 21,528,000.00 | P 22,389,000.00 | P 23,508,000.00 | P 24,684,000.00 |
| TOTAL REVENUES SEF | P 18,000,000.00 | P 20,700,000.00 | P 21,528,000.00 | P 22,389,000.00 | P 23,508,000.00 | P 24,684,000.00 |
| TOTAL REVENUES GF&SEF | P665,078,815.78 | P645,204,612.00 | P649,016,562.00 | P653,061,881.00 | P657,173,379.00 | P662,126,680.00 |

1. *Real Property Taxes – CY 2009 is the effectivity of CY 2008 General Revision and forecasted to have an increased of 20% over CY 2005 General Revision.*

For CYs 2010 – 2011, share of the Province is forecasted to have an increase of 4% per year.

CY 2012 is the effectivity of CY 2011 General Revision and forecasted to have an increase of 20% over CY 2008 General Revision.

For CYs 2012 – 2013, share of the Province is forecasted to have an increased of 5% per year.

2. *Business taxes and Interest Income is forecasted to have an increase of 2% per year based on CY 2009 level.*

3. *Fees and Charges and Other Taxes and Fees is forecasted to have an increase of 5% per year based on CY 2009 level.*

4. *Income from Economic Enterprise is forecasted to have an increase of 10% per year based on CY 2009 level.*

5. *Internal Revenue Allotment – effective July 2008 actual IRA received has reduced hence the reduction for CY 2009 estimate. CY 2010 – 2013 is maintained at CY 2009 level.*

c. *Real Property Taxation*

Real Property Taxes are considered as regular source of revenue among local government units.

The general revision on realty tax assessment is done every three years. The general revision year 2005 effective 2006 – 2008 brought about an increase in the assessment value of taxable properties by 28.5% from P 3,432,820,660 to P 4,413,632,029. The general revision year 2008 effective year 2009 – 2011 is expected to have an increase of 20% from P 4,413,632,029 to P 5,296,358,434. For revision year 2008, the assessment also registered an increase in taxable real property units (RPU's) by 11.6% from 96,747 to 108,000. For revision year 2011 effective 2012 – 2014 there will be an increase of 20% on taxable assess valuation from P 5,296,358,434 to P 6,355,630,128 and on taxable real property units (RPU's) by 10% increase from 108,000 to 118,800.

**Table No. 3-185 : Real Property Valuation
 Province of Davao del Norte**

| | Taxable | | Percentage Increase | Exempt | |
|--|---------|------------------|---------------------|---------|----------------|
| | Parcels | Valuation | | Parcels | Valuation |
| 1. General Revision 2002 Effective 2003 – 2005 | 88,824 | 3,432,820,660.00 | 13.9 | 6,504 | 706,330,310.00 |
| 2. General Revision 2005 Effective 2006 – 2008 | 96,747 | 4,413,632,029.00 | 28.5 | 6,892 | 896,170,490.00 |
| 3. General Revision 2008 Effective 2009 – 2011 | 108,000 | 5,296,358,434.00 | 20 | 6,915 | 907,478,744.00 |
| 4. General Revision 2011 Effective 2012 – 2014 | 118,000 | 6,355,630,128.00 | 20 | 6,935 | 915,786,998.00 |

Source : PASSO, Davao del Norte

*Table No. 3-186: Statement of Income and Expenditures
Province of Davao del Norte
CYs 2003-2007*

| | JANUARY TO DECEMBER | | | | |
|--|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| | 2003 | 2004 | 2005 | 2006 | 2007 |
| INCOME | | | | | |
| LOCAL SOURCES | 65,732,823.31 | 101,124,121.00 | 91,032,319.14 | 100,657,507.39 | 65,215,747.88 |
| TAX REVENUES | 25,121,363.27 | 27,877,187.51 | 30,215,069.22 | 33,656,876.04 | 39,429,870.02 |
| NON – TAX REVENUES | 40,611,460.04 | 73,246,933.49 | 60,817,249.92 | 67,000,631.35 | 25,785,877.86 |
| SHARES FROM NATIONAL TAX COLL | 378,984,308.00 | 379,042,239.00 | 409,551,286.00 | 409,551,286.00 | 494,734,236.00 |
| EXTRAORDINARY RECEIPTS/GRANTS/AIDS | - | - | 9,634,267.09 | - | - |
| LOAN AND BORROWINGS | - | - | - | - | - |
| INTER-LOCAL TRANSFERES | - | - | - | - | - |
| TOTAL INCOME/RECEIPTS | 444,717,131.31 | 480,166,414.00 | 510,217,872.23 | 510,208,793.39 | 559,949,983.88 |
| | | | | | |
| EXPENDITURES | | | | | |
| GENERAL PUBLIC SERVICES | 159,770,364.18 | 172,495,322.22 | 150,536,755.12 | 190,245,505.51 | 207,942,247.91 |
| DEPARTMENT OF EDUCATION | 12,505,446.33 | 13,277,396.07 | 13,825,590.80 | 16,633,162.56 | 11,656,705.44 |
| HEALTH, NUTRITION & POPULATION CONTROL | 42,920,812.80 | 45,839,999.77 | 47,583,716.72 | 46,442,290.66 | 56,359,462.60 |
| LABOR AND EMPLOYMENT | - | - | - | - | - |
| HOUSING & COMMUNITY DEVELOPMENT | - | - | - | 3,479,787.00 | - |
| SOCIAL SECURITY/SOCIAL SERVICES & WELFARE | 6,293,818.77 | 7,958,411.53 | 7,823,829.60 | 7,613,723.16 | 16,385,897.60 |
| ECONOMIC SERVICES | 61,799,687.38 | 62,507,278.93 | 70,728,689.10 | 81,913,827.81 | 80,898,408.03 |
| BEDT SERVICE | 34,421,687.27 | 29,044,063.49 | 26,700,072.78 | 3,746,501.96 | 3,423,607.57 |
| OTHER PURPOSES | 75,351,101.12 | 94,105,388.24 | 117,055,863.58 | 116,711,883.92 | 104,434,118.81 |
| TOTAL EXPENDITURES | 393,062,917.85 | 425,227,860.25 | 434,254,517.70 | 466,786,682.58 | 481,100,447.96 |
| EXCESS(DEFICIT) OF INCOME/RECEIPTS OVER EXP. | 51,654,213.46 | 54,938,553.75 | 75,963,354.53 | 43,422,110.81 | 78,849,535.92 |

Source: PTO, Davao del Norte

The table above shows that the province of Davao del Norte has accumulated a total income of P444,717,131.31 from different sources in 2003. In the succeeding years, total income realized was P480,166,414.00 for 2004, then P 510,217,872.23 in 2005, P510,208,793.39 in 2006 and P 559,949,983.88 in 2007. Increase in income realized was 7.97% in 2004, 6.25% in 2005 and 9.75% in 2007. The increase in income in 2005 was attributed to the revenue received for

Extraordinary Receipts/Grants/Aids P9,534,267.09 which was available only on that said year. Since this particular income did not happen in 2006 explains why there is a drop in income realized by a slight 0.0017%.

The continual growth of the total income of the province of Davao del Norte suggests a promising economy. In the above statement, it can be noted that every year's annual income has maintained an uptrend because the provincial government of Davao del Norte was able to address most specifically the need for more development projects that hastened the economic activities particularly in the countryside.

*Table No. 3-187: Income and Expenditure by Province and City
 Region XI, CY 2007*

| LGU | Income (Php) | Expenditure (Php) |
|-----------------------------|---------------------|--------------------------|
| Provinces | | |
| Davao del Norte | 559,949,983.88 | 481,100,447.96 |
| Compostela Valley | 662,597,721.37 | 537,334,380.64 |
| Davao Oriental | 527,967,047.92 | 498,974,231.33 |
| Davao del Sur | 436,239,374.45 | 187,350,223.96 |
| Cities | | |
| Davao City | 3,079,271,140.19 | 3,263,147,255.94 |
| Tagum City | 496,158,704.59 | 475,894,645.69 |
| Digos City | 394,699,784.22 | 385,357,066.34 |
| Island Garden City of Samal | 278,450,034.07 | 266,325,982.45 |
| Panabo City | 426,831,730.52 | 355,645,586.82 |

Source: PTO, Davao del Norte

The above table presents the income and expenditure data of the provinces and cities in Region XI. It can be gleaned that Compostela Valley has the biggest income among the provinces, followed only by its mother province, Davao del Norte. This takes into consideration that the province of Compostela Valley has eleven municipalities which contribute to the province's income in addition to income realized from shares of national wealth. On the other hand Davao del Norte has three components cities which no longer contribute to the income of the province.

For the cities, Davao City has the biggest income considering that it is already a charter and well established city in terms of infrastructures and services delivery. Three of the cities belong to Davao del Norte, which incomes are already comparable to that of the province's income.

Except for Davao City that had a bigger expenditure than the income, all LGU's were astute when it comes to utilizing their resources.

9.1.5 Local Revenue Allocation

a. Local Government Budget Profile

During the five year period, 2003 to 2007, the annual appropriation (regular and supplemental) showed an average increase by 6.66%. The trend of increase had been fluctuating from 9.29% in 2004 to 6.93% in 2005 and 8.93% in 2006 to 4.17% in 2007, such decline was brought about by no increase in the province from the Internal Revenue Allotment. The national government was operating under a reenacted budget. The decline in increase in appropriation in 2007 was due to the reduction in income from equipment rental. (See tables at Annex C).

The allocation for 20% Development Fund has increased steadily from 2003 to 2007 and is relatively greater than the required amount as shown in Figure 3-32.

Figure No.3-32 : **20% Development Fund Allocation**
Province of Davao del Norte, CY : 2003-2007

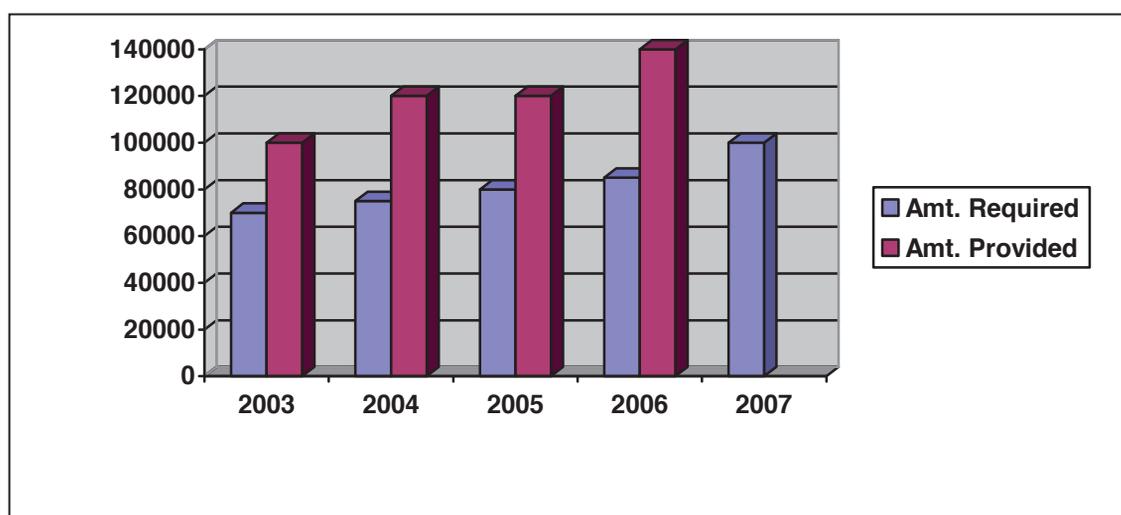


Table No 3-188: **Appropriations for Gender and Development/
Council of Women Projects and Activities**

| Year | Appropriation | Increase/ Decrease | Percent (%) |
|------|----------------|-----------------------|----------------|
| 2003 | P 1,585,000.00 | | |
| 2004 | 2,248,000.00 | P 663,000.00 | 41.83% |
| 2005 | 2,514,500.00 | 266,500.00 | 11.86% |
| 2006 | 1,739,000.00 | (775,500.00) | (30.84%) |
| 2007 | 1,845,065.00 | 106,065.00 | 6.10% |
| | Average | P 52,013.00 | 5.79% |

Sources: Provincial Budget Office, Davao del Norte

The percentage of increase in appropriation is high in 2004 due to the establishment of Women Development Center located at National Highway, Tagum City. This institution caters to women who are physically abused, maltreated and battered. However, its operations were stopped in 2006. Thus, the total appropriation for Gender and Development dropped by 30.84%

**Table No.3-189: Appropriations for Special Education Fund
 Province of Davao del Norte : CYs2003-2007**

| Year | Appropriation | Increase/ Decrease | Percent (%) |
|------|-----------------|-----------------------|----------------|
| 2003 | P 11,166,884.00 | | |
| 2004 | 16,478,291.97 | P 5,311,407.07 | 47.56% |
| 2005 | 15,055,075.56 | (1,423,216.41) | (8.64%) |
| 2006 | 19,949,390.84 | 4,894,315.28 | 32.51% |
| 2007 | 21,264,534.33 | 1,315,143.49 | 6.59% |
| | Average | P 2,019,529.89 | 15.60% |

Source: Provincial Budget Office, Davao del Norte

For the period 2003 to 2007, the Special Education Fund annual appropriation showed an average increase of 15.60%. Notable increases are in 2004 with 47.56% and 32.51% in 2006. A decrease of 8.64% was noted in 2005.

9.1.6 Local Revenue Utilization

a. Local Government Expenditure Pattern

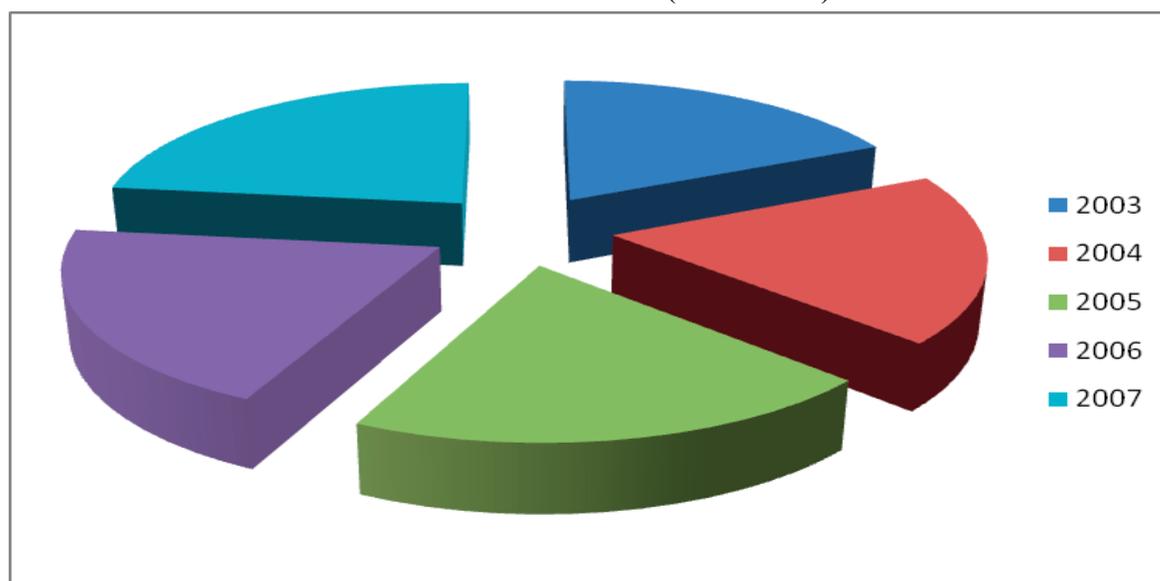
For the past five years CY 2003-2007, the local government expenditure for Personal Services showed an average of 37.73%, in Maintenance and Other Operating Expenses with 55.02%, Capital Outlay with 6.65% and Financial Expenses of .060% of total expenditures. This represents payment on loans to other financial institutions.

**Table No. 3-190: Comparative Local Government Expenditures
 Province of Davao del Norte, 2003-2007**

| Year | Personal Services | % | MOOE | % | Capital Outlay | % | Financial Expenses | % | Total |
|------|-------------------|-------|----------------|-------|----------------|-------|--------------------|------|----------------|
| 2003 | 162,423,713.35 | 37.95 | 235,348,017.80 | 54.99 | 24,553,808.57 | 5.73 | 5,636,262.54 | 1.33 | 427,961,802.26 |
| 2004 | 167,961,735.42 | 36.94 | 258,907,807.24 | 56.94 | 22,477,648.81 | 4.94 | 5,374,074.17 | 1.18 | 454,721,265.64 |
| 2005 | 179,495,925.16 | 37.38 | 249,723,233.24 | 52.00 | 49,175,246.59 | 10.24 | 1,791,718.62 | 0.38 | 480,186,123.61 |
| 2006 | 177,665,236.06 | 35.11 | 296,794,097.01 | 58.63 | 31,202,229.10 | 6.16 | 524,179.21 | 0.10 | 506,185,741.38 |
| 2007 | 206,967,841.39 | 41.27 | 263,041,959.26 | 52.52 | 30,911,880.48 | 6.17 | 201,284.82 | 0.04 | 500,852,965.95 |

*Source: Year-end Financial Statements
 Provincial Accountant's Office*

**Figure No.3-33: Comparative Local Government Expenditures
Province of Davao del Norte (2003 – 2007)**



**Table 3-191 : Summary of Expenditures of Davao del Norte
By Account Classification 2003-2007**

| Sources | 2003 | 2004 | % | 2005 | % | 2006 | % | 2007 | % |
|---|-----------------------|-----------------------|-------|-----------------------|--------|-----------------------|--------|-----------------------|--------|
| Personal Services (100) | 162,423,713.35 | 167,961,735.42 | 3.41 | 179,495,925.16 | 6.87 | 177,665,236.06 | -1.02 | 206,697,841.39 | 16.34 |
| Maintenance & Other Operating Expenses (200) | 173,569,991.53 | 173,685,355.61 | 0.06 | 193,717,223.84 | 11.53 | 218,029,706.02 | 12.55 | 210,030,732.72 | -3.32 |
| Capital Outlay (300) | 24,553,808.57 | 22,477,648.81 | -8.45 | 49,175,246.59 | 119.0 | 31,202,229.10 | -36.50 | 30,911,880.48 | -0.093 |
| Additional Information: LOCAL DEVELOPMENT FUND | 66,247,213.74 | 89,327,517.66 | 34.84 | 56,719,618.99 | -36.50 | 78,428,418.93 | 38.27 | 52,007,447.01 | -33.69 |
| Council of Women / Gender and Development Program | 1,167,075.07 | 1,269,008.14 | 8.73 | 1,078,109.03 | -15.04 | 860,151.27 | -20.20 | 1,205,064.35 | 40.10 |
| Totals | 427,961,802.26 | 454,721,026.54 | | 480,186,123.61 | | 506,185,741.38 | | 500,852,965.95 | |

Source: Year-End Financial Statements, Provincial Accountant's Office

The Personal Services expenditures showed an average of 5.14% increase for CY 2004 and 2005, a registered decrease by 1.02% in 2006 and an increase of 16.34% in 2007. The Maintenance and other Operating Expenses marked an average increase of 8.05% in 2004-2006 but declined by 3.32% in 2007.

The 20% Development Fund had increased by 34.84% and had fluctuated alternately; reduced by 36.50% in 2005, increased in 2006 by 38.27% and decreased again by 33.69% in 2007. The expenditure for the activities of Council of Women and GAD showed only an increase of 8.37% in 2004, however expenditures declined in two succeeding years, from 2005 by 15.04%, 2006 by 20.20% and a marked increase of 40.10% in 2007.

Expenditures for Capital Outlay had decreased by 8.45% in 2004, increased tremendously by 119% in 2005 but declined in 2006 and 2007 by 36.50% and .09%, respectively.

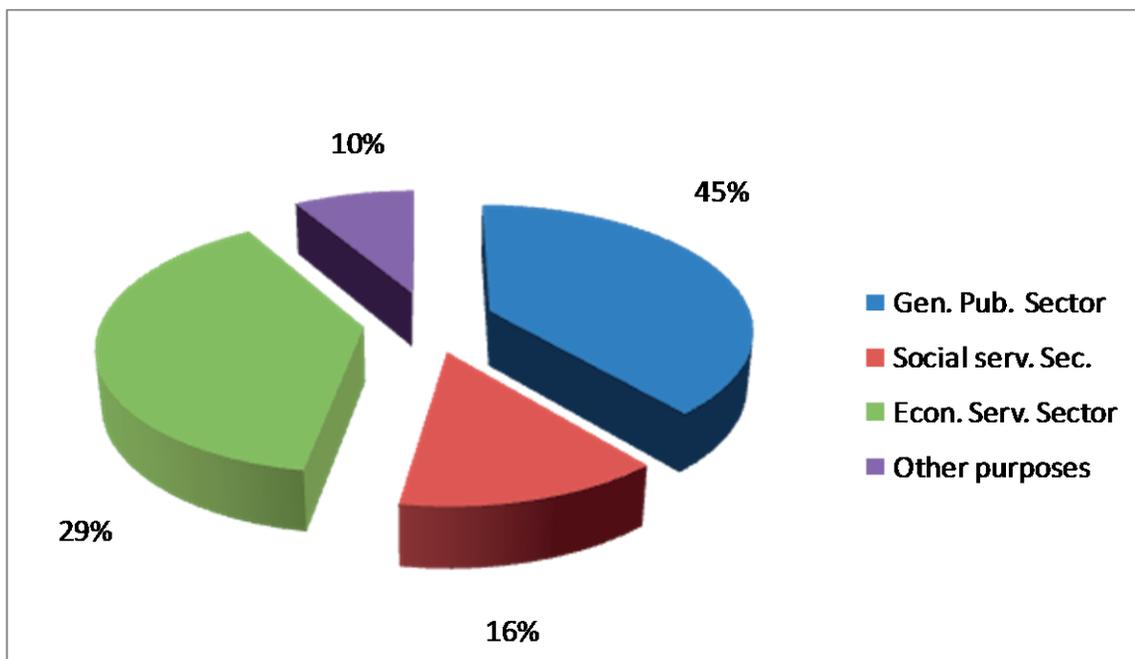
In totality, the local government expenditure over the five year-period (2003-2007) showed an increasing trend. An average increase of the following: 6.40% for Personal Services, 5.21% for Maintenance and Other Operating Expenses and 18.49% for Capital Outlay. On the other hand, 20% Development Fund showed only an average of 0.73% increase per year and the Council of Women including the Gender and Development Program (GAD) accounted for an average increase of 3.40% per year.

b. Trend of Provincial Expenditures

As shown in Figure 3-34 (Percentage of Distribution of LGU Expenditures), the General Sector captures the biggest share of the province’s total spending. It reaches to an average of 45% for 2003 – 2007. This includes the spending for regular program as well as those chargeable to 20% Development Fund.

This is followed by Economic Services Sector with an average of 29%, then by Social Services Sector by an average of 16%, and an average of 10% for Other Purposes, representing Debt Service, Retirement and other Benefits and Miscellaneous Other Purposes.

Figure No. 3-34: Trend of Provincial Expenditures Province of Davao del Norte



9.2 National Government Agencies and Government Owned and Controlled Corporations (GOCCs) with Offices in the Province

There are twenty-two (22) national line agencies and government-owned and controlled corporations at the present. These account 3,718 personnel who are organized in the different parts of the province. There are 61.57% or 2,289 women within the said number and 38.43% or 1,429 men. The government department with the most number of personnel force is the Department of Education, Culture and Sports with 2,263 personnel. 1,891 or 50.86% are women while only 372 or 10.01% are men.

Next in line is the Philippine National Police with a total of 662 in the force. Within the PNP, 63 or 1.69% are women while 599 or 16.12% are men. Third is the Department of Education of Environment and Natural Resources with 158 personnel where 52 or 1.40% are women and 106 or 2.85% are men. (See Table No.3-192).

Table No. 3-192: National Government Agencies and Government Owned and Controlled Corporation Personnel Force

| National Agencies | Female | Percent | Male | Percent | Total | Percent |
|---|--------------|--------------|--------------|--------------|--------------|------------|
| Commission on Audit | 12 | .32 | 3 | .08 | 15 | .40 |
| Commission on Elections | 23 | .62 | 11 | .29 | 34 | .91 |
| Civil Service Commission | 2 | .05 | 2 | .05 | 4 | .10 |
| Department of Agrarian Reform | 57 | 1.53 | 43 | 1.16 | 100 | 2.69 |
| Department of Education, Culture & Sports | 1,891 | 50.86 | 372 | 10.01 | 2,263 | 60.87 |
| Regional Trial Courts | 33 | .89 | 36 | .97 | 69 | 1.86 |
| Public Attorney's Office | 4 | .11 | 1 | .02 | 5 | .13 |
| National Agencies | Female | Percent | Male | Percent | Total | Percent |
| Provincial Prosecution Office | 18 | .48 | 15 | .41 | 33 | .89 |
| Bureau of Internal Revenues | 26 | .70 | 20 | .54 | 46 | 1.24 |
| Telecommunications Office | 5 | .14 | 25 | .67 | 30 | .81 |
| Land Transportation Office | 5 | .14 | 9 | .24 | 14 | .38 |
| Dept. of the Interior & Local Government | 9 | .24 | 16 | .43 | 25 | .67 |
| Philippine National Police | 63 | 1.69 | 599 | 16.12 | 662 | 17.81 |
| Bureau of Jail Management & Penology | 5 | .14 | 36 | .96 | 41 | 1.10 |
| Philippine Postal Corporation | 7 | .19 | 26 | .7 | 33 | .89 |
| National Food Authority | 18 | .48 | 28 | .76 | 46 | 1.24 |
| Dept. of Environment and Natural Resource | 52 | 1.40 | 106 | 2.85 | 158 | 4.25 |
| Philippine Coconut Authority | 3 | .08 | 5 | .14 | 8 | .22 |
| PAG-ASA | 0 | 0 | 1 | .03 | 1 | .03 |
| Department of Trade and Industry | 10 | .27 | 5 | .13 | 15 | .40 |
| Department of Public Works & Highways | 27 | .73 | 54 | 1.45 | 81 | 2.18 |
| Land Registration Authority | 19 | .51 | 16 | .43 | 35 | .94 |
| Total | 2,289 | 61.57 | 1,429 | 38.43 | 3,718 | 100 |

Sources : Individual Offices (Primary Source)

9.3 City and Municipal Government

a. Appointive Positions

The component cities and municipalities of the province have a total of 5,431 personnel. Out of this number, 1,672 or 30.84% are women while 3,759 or 69.17% are men. There are 404 or 18.55% women and 550 or 10.12% men at the management level. The same pattern is observed in the rank and file positions, where 1,268 or 23.3% are occupied by women and 3,209% or 59.06% are men. This is the same to the system of that of the provincial government. (See Table 3-193)

Women with civil service eligibility outnumbered men by the statistics 49.5953 and 50.41 respectively. This is reflected in the middle management level and the rank and file positions. (See Table No. 3-194)

Table No. 3-193: Classification of Government Personnel for Cities & Municipalities Davao del Norte

| Position | CLASSIFICATION | | | | | | | | | | | | TOTAL | |
|-------------------|----------------|-----|----|------|------------|------|-----|------|--------------------|------|-------|-------|-------|------|
| | Elective | | | | Appointive | | | | | | | | | |
| | | | | | Permanent | | | | Contractual/Casual | | | | | |
| | F | % | M | % | F | % | M | % | F | % | M | % | No. | % |
| Department Heads | 12 | .22 | 62 | 1.14 | 64 | 1.18 | 70 | 1.29 | 197 | 3.63 | 306 | 5.63 | 711 | 13.1 |
| Asst. Dept. Heads | 0 | 0 | 0 | 0 | 21 | .39 | 14 | .26 | 0 | 0 | 0 | 0 | 35 | .65 |
| Division Chiefs | 1 | .02 | 8 | .14 | 62 | 1.14 | 59 | 1.09 | 0 | 0 | 0 | 0 | 130 | 2.39 |
| Section Chiefs | 0 | 0 | 0 | 0 | 47 | .87 | 31 | .57 | 0 | 0 | 0 | 0 | 78 | 1.44 |
| Rank and File | 0 | 0 | 0 | 0 | 664 | 12.2 | 713 | 13.1 | 604 | 11.1 | 2,496 | 45.96 | 4,477 | 82.4 |
| Total | 13 | .24 | 70 | 1.28 | 858 | 15.8 | 887 | 16.3 | 801 | 14.8 | 2,802 | 51.59 | 5,431 | 100 |

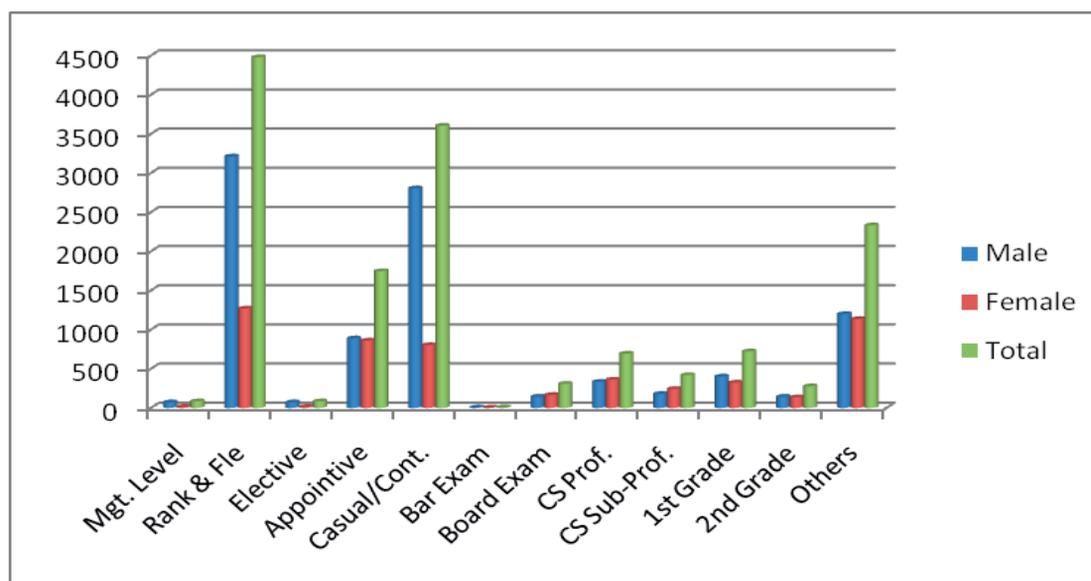
Source: C/MPDO, Cities and Municipalities
Davao del Norte

Table No.3-194: Civil Services Eligibilities of City & Municipal Personnel
Province of Davao del Norte

| | Nature of Eligibility | | | | | | | | | | | | | | Total | | | | | |
|-------------------|-----------------------|---|------------|-----|----------------------|-----|--------------------------|-----|-------------|-----|--------------|-----|--------|-------|--------|-------|-------|-------|------------|-------|
| | Bar Exam | | Board Exam | | Career Service Prof. | | Career Service Sub-Prof. | | First Grade | | Second Grade | | Others | | Female | | Male | | Both Sexes | |
| | F | M | F | M | F | M | F | M | F | M | F | M | F | M | No. | % | No. | % | No. | % |
| Dept. Heads | 2 | 1 | 26 | 26 | 27 | 27 | 0 | 1 | 0 | 1 | 58 | 56 | 1 | 3 | 114 | 2.40 | 115 | 2.42 | 229 | 4.82 |
| Asst. Dept. Heads | 0 | 2 | 6 | 4 | 10 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 17 | .36 | 10 | .21 | 27 | .57 |
| Division Chiefs | 0 | 0 | 6 | 4 | 17 | 15 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | .48 | 20 | .42 | 43 | .90 |
| Section Chiefs | 0 | 1 | 12 | 8 | 35 | 22 | 0 | 0 | 2 | 1 | 5 | 0 | 0 | 1 | 54 | 1.13 | 33 | .69 | 87 | 1.82 |
| Rank and File | 0 | 0 | 114 | 100 | 271 | 260 | 240 | 175 | 319 | 397 | 70 | 85 | 1,132 | 1,193 | 2,146 | 45.22 | 2,210 | 46.52 | 4,356 | 91.79 |
| Elective | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | .10 | 0 | .10 |
| Total | 2 | 4 | 164 | 142 | 360 | 331 | 240 | 177 | 321 | 399 | 134 | 141 | 1,133 | 1,197 | 2,354 | 49.59 | 2,391 | 50.41 | 4,745 | 100 |

Source: C/MPDO, Cities & Municipalities, Davao del Norte

Figure No. 3-35: **City/ Municipal Government Personnel Force Profile**
Province of Davao del Norte



b. Elective Positions

There are total of 117 elective positions in the city and municipal government units of 8 municipalities and 3 cities. 17 or .14.52% are held by women while 100 or 85.48.% are held by men. Women participation in the LGUs are far greater than that of the province.

Table No. 3-195: **Summary of Elective Positions of City/Municipal Gov't. Units**
Province of Davao del Norte

| Local Government Unit | Mayor | | | | Vice-Mayor | | | | Kagawad | | | | Total | | | |
|-----------------------|----------|-------------|----------|-------------|------------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| | F | % | M | % | F | % | M | % | F | % | M | % | F | % | M | % |
| Tagum City | 0 | 0 | 1 | .85 | 0 | 0 | 1 | .85 | 1 | .85 | 9 | 7.69 | 1 | .85 | 11 | 9.40 |
| New Corella | 0 | 0 | 1 | .85 | 0 | 0 | 1 | .85 | 2 | 1.71 | 6 | 5.13 | 2 | 1.71 | 8 | 6.84 |
| Asuncion | 0 | 0 | 1 | .85 | 0 | 0 | 1 | .85 | 0 | 0 | 8 | 6.84 | 0 | 0 | 10 | 8.55 |
| Sto. Tomas | 0 | 0 | 1 | .85 | 0 | 0 | 1 | .85 | 2 | 1.71 | 6 | 5.13 | 2 | 1.71 | 8 | 6.84 |
| Kapalong | 0 | 0 | 1 | .85 | 0 | 0 | 1 | .85 | 1 | .85 | 7 | 5.98 | 1 | .85 | 9 | 7.69 |
| Talaingod | 1 | .85 | 0 | 0 | 0 | 0 | 1 | .85 | 1 | .85 | 7 | 5.98 | 2 | 1.71 | 8 | 6.84 |
| Panabo | 0 | 0 | 1 | .85 | 0 | 0 | 1 | .85 | 1 | .85 | 9 | 7.69 | 1 | .85 | 11 | 9.40 |
| Carmen | 0 | 0 | 1 | .85 | 0 | 0 | 1 | .85 | 4 | 3.42 | 4 | 3.42 | 4 | 3.42 | 6 | 5.13 |
| Braulio Dujali | 1 | .85 | 0 | 0 | 0 | 0 | 1 | .85 | 1 | .85 | 7 | 5.98 | 2 | 1.71 | 8 | 6.84 |
| IGaCoS | 0 | 0 | 1 | .85 | 0 | 0 | 1 | .85 | 0 | 0 | 11 | 9.40 | 0 | 0 | 13 | 11.11 |
| San Isidro | 0 | 0 | 1 | .85 | 1 | .85 | 0 | 0 | 1 | .85 | 7 | 5.98 | 2 | 1.71 | 8 | 6.84 |
| Total | 2 | 1.71 | 9 | 7.69 | 1 | .85 | 10 | 8.5 | 14 | 11.97 | 81 | 69.23 | 17 | 14.52 | 100 | 85.48 |

Source: DILG, Davao del Norte

9.4 Barangay Governments

a. Sangguniang Barangay

There are 2,358 elective and appointive positions in the barangays of the Province. The women holding said positions total 790 or 33.51%, while the number of men is 1,568 or 66.48%. Despite the fact that the Chairmanship of the Sangguniang Kabataan, Punong Barangay and the Kagawad positions are traditionally held by men, the important appointive positions of Barangay Secretary and Barangay Treasurer are dominated by women. (See Table No. 3-196)

Table No. 3-196: **Barangay Officials by Positions**
Province of Davao del Norte

| Local Government Units | Punong Barangay | | Kagawad | | Brgy. Secretary | | Brgy. Treasurer | | SK Chair | | TOTAL | | | |
|------------------------|-----------------|------------|------------|--------------|-----------------|-----------|-----------------|-----------|-----------|------------|------------|--------------|-------------|--------------|
| | F | M | F | M | F | M | F | M | F | M | F | % | M | % |
| Tagum City | 5 | 18 | 29 | 132 | 17 | 6 | 16 | 7 | 10 | 13 | 77 | 3.27 | 176 | 7.46 |
| New Corella | 0 | 20 | 31 | 109 | 16 | 4 | 14 | 6 | 10 | 10 | 71 | 3.01 | 149 | 6.32 |
| Asuncion | 2 | 18 | 36 | 104 | 16 | 4 | 16 | 4 | 8 | 12 | 78 | 3.31 | 142 | 6.02 |
| Sto. Tomas | 0 | 19 | 23 | 110 | 14 | 5 | 14 | 5 | 7 | 12 | 58 | 2.46 | 151 | 6.4 |
| Kapalong | 1 | 13 | 20 | 78 | 12 | 2 | 11 | 3 | 5 | 9 | 49 | 2.08 | 105 | 4.45 |
| Talaingod | 0 | 3 | 2 | 19 | 5 | 0 | 4 | 1 | 1 | 2 | 12 | .51 | 25 | 1.06 |
| Panabo | 5 | 35 | 58 | 222 | 34 | 6 | 33 | 7 | 17 | 23 | 147 | 6.23 | 293 | 12.42 |
| Carmen | 0 | 20 | 32 | 108 | 19 | 1 | 17 | 3 | 8 | 12 | 76 | 3.22 | 144 | 6.11 |
| B.E. Dujali | 1 | 4 | 8 | 27 | 5 | 0 | 4 | 1 | 2 | 3 | 20 | .85 | 35 | 1.48 |
| IGC of Samal | 3 | 43 | 85 | 237 | 39 | 7 | 38 | 8 | 13 | 33 | 178 | 7.55 | 328 | 13.91 |
| San Isidro | 0 | 2 | 3 | 11 | 8 | 5 | 11 | 2 | 2 | 0 | 24 | 1.02 | 20 | .85 |
| TOTAL | 17 | 195 | 327 | 1,157 | 185 | 40 | 178 | 47 | 83 | 129 | 790 | 33.51 | 1568 | 66.48 |

Source : DILG, Davao del Norte

9.5 Women Participation in Politics and Governance

9.5.1 Women in Politics

Women have already played significant roles in politics and governance in the Province of Davao del Norte even before the advent of the People Power Revolution. In 1967, Mrs. Cecilia de la Paz was the first Vice-Governor of Davao del Norte. In the 1988 campaign period for the synchronized elections, de la Paz also assumed as OIC-Governor / Caretaker of the Province.

Mrs. Luz M. Sarmiento replicated the said achievement when she was appointed as the first OIC-Governor of the new province of Compostela Valley. Mrs. Providencia P. Nuñez achieved an outstanding feat by becoming the first woman member of the Sangguniang Panlalawigan in 1988 local elections. Mrs. Shirley Aala was also elected as a member of the said legislative body in the following elections of 1996. Today, Janet G. Gavina is the only female member of the Sangguniang Panlalawigan of the Province of Davao del Norte (2007-2010).

Despite the fact that males dominate the chairmanship of the various Sangguniang Kabataan, the first SK Provincial Federation President was Maria Carmen Zamora, elected in 1992. Another female leader Kim Quezada became the next SK leader in 2002.

Davao del Norte had a voting population of 428,781 electorates by 2007. 51.48% of them or 220,719 voters were male while 48.52 or 208,062 were females. The participation of women in

political exercises in the province showed that 325,724 electorates actually voted were 159,639 or 49.01% females while 166,085 or 50.99% males by 2007. (See Table No.3-206)

**Table No. 3-197: Electoral Statistical Data
May 14, 2007 Election, Davao del Norte**

| City/ Municipality | Classification | | | | | | | | |
|-----------------------|-------------------|----------------|----------------|-----------------------|----------------|----------------|-------------------|--------------|--------------|
| | Registered Voters | | | Voters Actually Voted | | | Percentage Voting | | |
| | F | M | Total | F | M | Total | F | M | Total |
| Tagum | 51,781 | 52,466 | 104,247 | 40,902 | 40,918 | 81,820 | 78.99 | 77.99 | 78.49 |
| Asuncion | 12,272 | 13,545 | 25,817 | 9,359 | 10,095 | 19,454 | 76.26 | 74.53 | 75.40 |
| New Corella | 10,556 | 11,910 | 22,466 | 8,619 | 9,551 | 18,170 | 81.65 | 80.19 | 80.92 |
| Sto. Tomas | 23,241 | 24,704 | 47,945 | 18,079 | 18,389 | 36,468 | 77.79 | 74.44 | 76.12 |
| Kapalong | 15,377 | 16,872 | 32,249 | 11,428 | 12,111 | 23,539 | 74.32 | 71.78 | 73.05 |
| Talaingod | 3,615 | 4,914 | 8,529 | 2,383 | 3,208 | 5,591 | 65.27 | 65.28 | 65.28 |
| Panabo | 42,423 | 44,682 | 87,105 | 29,910 | 31,040 | 60,950 | 70.50 | 69.47 | 69.99 |
| Carmen | 14,386 | 14,914 | 29,300 | 11,398 | 11,716 | 23,114 | 1979.23 | 78.56 | 78.90 |
| B.E. Dujali | 4,848 | 5,294 | 10,142 | 3,862 | 4,200 | 8,062 | 79.66 | 79.34 | 79.5 |
| IGaCoS | 23,193 | 24,062 | 47,255 | 19,014 | 19,470 | 38,484 | 81.98 | 80.92 | 81.45 |
| San Isidro | 6,370 | 7,356 | 13,726 | 4,685 | 5,387 | 10,072 | 73.55 | 73.23 | 73.39 |
| Total | 208,062 | 220,719 | 428,781 | 159,639 | 166,085 | 325,724 | 76.71 | 75.25 | 75.96 |
| Percentage | 48.52 | 51.48 | 100% | 49.01 | 50.99 | 100% | | | |

Source: COMELEC, Davao del Norte

9.5.2 Women in Governance

The participation of women in national and local governance has earned recognition on the abilities and capacities of women in the field of governance. In fact, this has already become an accepted trend.

This only suggests that women are welcome to serve in a gender-fair society such as ours. Men and women in the government service nowadays guarantees a more efficient and effective delivery of public services to our constituents

9.5.3 Women Participation in the Local Special Bodies

Provincial Level

Out of 93 members of various local special bodies at the provincial level, only 30 or 33.26% are women while 63 or 67.73% are men (See Table No. 3-198).

**Table No. 3-198: Membership in the Local Special Bodies
Province of Davao del Norte**

| Local Special Bodies | Female | Percent | Male | Percent | Total | Percent |
|---|-----------|--------------|-----------|--------------|-----------|---------------|
| Provincial Development Council | 10 | 10.75 | 26 | 27.96 | 36 | 38.71 |
| Provincial School Board | 3 | 3.22 | 3 | 3.22 | 6 | 6.45 |
| Provincial Health Board | 4 | 4.3 | 3 | 3.22 | 7 | 7.52 |
| Provincial Peace & Order Council | 11 | 11.83 | 29 | 31.18 | 40 | 43.01 |
| Prov'l. Pre-Qualification Bids & Awards Committee | 2 | 2.15 | 2 | 2.15 | 4 | 4.30 |
| Total | 30 | 33.26 | 63 | 67.73 | 93 | 100.00 |

Source: PGO, PPDO, DILG, Davao del Norte

9.5.4 Local Policies on Women in Development

Provincial Level

Gender and development is being advocated by the leadership of the Province. This is as shown by the promulgation of the following issuances supportive to the role and growth of women as partners in community mobilization and development. (See Table No.3-199)

Table No. 3-199: Summary of Provincial Executive Orders Concerning the Role of Women, Davao del Norte.

| E. O. No. | Particular |
|----------------------|---|
| E.O. No. 002 s. 2007 | An Order creating the Local Council for the Protection of Children Inter-Agency Monitoring Task Force (LCPCIMTF) |
| E.O. No. 008 s. 2007 | An Order Amending the Executive Order Reorganizing Provincial Peace and Order Council of Davao del Norte |
| E.O. No. 011 s. 2007 | Reorganization of the Provincial Council for the Welfare of Disabled Persons (PCWDP) of Davao del Norte |
| E.O. No. 013 s. 2007 | An Executive Order Reorganizing the Provincial Council on the Protection of Children (PCPC) Provincial Early Childhood Care and Development Coordinating Committee (PECCDCC) of Davao del Norte |
| E.O. No. 002 s. 2006 | “Creation of the Davao del Norte Prov’l. TB Diagnostic Committee, Its Roles & Function.” |
| E.O. No. 003 s. 2006 | Adoption of the Davao del Norte Contraceptive Self-Reliance (CSR) Guidelines |
| E.O. No. 004 s. 2006 | “Creating the Prov’l. Technical Committee on KALAHY Para sa Kalayaan Barangay Program” |
| E.O. No. 006 s. 2006 | An Order Adopting Guidelines to the Granting of Financial & Livelihood Assistance & other Services to the Rebel Returnees in Davao del Norte & Creating Oversight Committee to Implement the Program |
| E.O. No. 001 s. 2005 | Reorganization of the Prov’l. Council for the Welfare of Disabled Persons (PCWDP) of Davao del Norte |
| E.O. No. 005 s. 2005 | Amending the Exec. Order Reorganizing Provincial Peace & Order Council of Davao del Norte |
| E.O. No. 006 s. 2005 | Reorganization of the Provincial Nutrition Committee Province of Davao del Norte |
| E.O. No. 007 s. 2005 | Creation of the Food Fortification Task Force Province of Davao del Norte |
| E.O. No. 010 s. 2005 | Reconstitution of the Lupong Tagapamayapa Provincial Award Committee of Davao del Norte |
| E.O. No. 001 s. 2004 | Establishing the Prov’l. Technical Working Group (TWG) for the conduct of the Philippine follow-up measles campaign 2004 in the province of Davao del Norte and designating the Prov’l. Health Office as the lead office for the purpose. |
| E.O. No. 024 s. 2004 | An Order Reconstituting the Prov’l. Solid Waste Management Board of Davao del Norte |
| E.O. No. 025 s. 2004 | An Order Creating the Prov’l. Indigenous Peoples & Muslim Scholarship Grant Board of Davao del Norte |
| E.O. No. 027 s. 2004 | An Order Institutionalizing the Prov’l. Small & Medium Enterprise Dev’t. (SMED) Council & Prov’l. Small & Medium Enterprise Dev’t. (SMED) Center of Davao del Norte |
| E.O. No. 029 s. 2004 | An Order Creating the Emergency Crisis Management Committee of Davao del Norte |

9.5.5 Local Legislations Concerning Gender and Development

Provincial Level

To sustain the gender and development program, the Sangguniang Panlalawigan was able to put into legislation, measures that promote its advocacy. Such measures can best be gleaned in the following table.

Table No. 3-200: **Summary of Resolutions/Ordinances Passed by the Sangguniang Panlalawigan relating to Gender and Dev't. Davao del Norte (2003-2007)**

| No. | Date Enacted | Title/Brief Description |
|------------|---------------------|--|
| 2003-024 | Nov. 3, 2003 | Providing Protective Measures on Domestic Violence and for other purposes |
| 406 | Dec. 1, 2003 | Confirming Municipal Ordinance No. 327, Series of 2003, of the Sangguniang Bayan of Kapalong, Davao del Norte, Establishing a Crisis Center for Women and Children known as "Kapalong Sagip-Kalinga" and adopting the structure and policies for its operation |
| 2004-001 | March 1, 2004 | Providing for a Local Code on Children of Davao del Norte |
| 2006-001 | January 23, 2006 | Adopting the "KAHIMSUG" as the official publication of the Provincial Nutrition Committee of Davao del Norte |



CHAPTER 4

Development Issues, Goals, Objectives, Targets



Development Issues, Goals, Objectives/Targets

| Issues/Problems | Goals | Objectives |
|---|--|---|
| <p>Drivers:</p> <p>Population</p> <ul style="list-style-type: none"> • Rapid growth □ how to accommodate future population <p>Physical Resources</p> <ul style="list-style-type: none"> • Over exploitation of natural resources • Disaster mitigation <p>Transport/Access</p> <ul style="list-style-type: none"> • Inadequate external/internal access <p>Economy</p> <ul style="list-style-type: none"> • Lack of Economic Competitiveness • High cost of doing business <p>Symptoms/Indicators:</p> <ol style="list-style-type: none"> 1. Increasing poverty incidence <ul style="list-style-type: none"> • low incomes • lack of livelihood opportunities • unemployment/underemployment • job mismatch | <ol style="list-style-type: none"> 1. To create an environment conducive to business 2. To increase household income and provide more livelihood opportunities 3. To reduce poverty incidence | <ul style="list-style-type: none"> - To generate income in investments by at least 25% by 2013 a. To generate more employment slots and reduce unemployment b. To create more livelihood opportunities c. To reduce poverty incidence by 25% by 2013 - To increase income by 25% |

| Issues/Problems | Goals | Objectives |
|---|--|--|
| <p>2. Inadequate access to basic social services</p> <ul style="list-style-type: none"> • Inadequate access to social welfare services and facilities • Low crime and fire prevention efforts | <p>4. To develop a globally competitive workforce</p> <p>5. Improved social welfare services and facilities</p> <p>6. Peaceful and orderly communities</p> | <ul style="list-style-type: none"> - Promote gainful employment opportunities and optimize the development and utilization of the province's manpower. - To enhance the delivery of comprehensive and integrated social welfare services and facilities |
| <ul style="list-style-type: none"> • Poor health services • High incidence of some health indicators • Insufficient health care financing • Absence of some system in the health program implementation | <p>7. Access to quality health care services</p> | <ul style="list-style-type: none"> a. To enhance effectiveness of police and fire forces; and b. To strengthen operational readiness of police and fire forces |
| <ul style="list-style-type: none"> • Decreasing enrollment, survival and retention rates • Low academic performance/achievement in NAT | <p>8. Access to quality education services</p> | <ul style="list-style-type: none"> a. To strengthen health service delivery; b. To strengthen health regulations; c. To establish and strengthen health care financing; and d. To establish health system development - Quality education for all by 2015 |

| Issues/Problems | Goals | Objectives |
|---|--|---|
| <ul style="list-style-type: none"> • Access to quality and relevant education for the lumad and muslim children and youth • Schools situated at hazardous areas (exposed to environmental pollution caused by used chemicals, pesticides and those in areas with armed conflict) • Malnutrition and other health problems among school children • Secondary schools operating as Annex High Schools for several years • Out-of-school youth and adults not having received/completed basic education • Majority of children entering Grade I not ready for formal schooling • Enhancement of special talents and skills in the arts and sports among students • Modernization of education • Lack of housing services and facilities | <p>9. To enhance the housing service delivery program</p> <p>10. Available funding support to the delivery of basic services</p> | <ul style="list-style-type: none"> - To decrease by 25% the number of households occupying unacceptable dwelling units - Improve revenue and resource generation from local and outside sources |
| <p>3. Inadequate delivery of basic services</p> | | |

| Issues/Problems | Goals | Objectives |
|--|--|---|
| <p>4. Land Use</p> <p>3.1. Settlement Component</p> <ul style="list-style-type: none"> • Rapid urbanization of major growth centers • Poor mobility in rural areas. • Emergence of social and environmental problems associated with settlement growths <p>3.2. Protection Component</p> <ul style="list-style-type: none"> • Inadequate information and education campaign (IEC) • Absence of forestland use and management plan. • In appropriate farming practices in the uplands. • Non-declaration of protection areas | <p>11. To ensure sustainable use of land resources and protection of critical environmental concerns</p> | <ul style="list-style-type: none"> a. To allocate appropriate areas for urban settlement and rural development; and b. To dispose and encourage development activities outside the urban center to balance spatial development and stimulate rural growth. c. To provide for a systematic, comprehensive, ecological solid waste management program. |
| | | <ul style="list-style-type: none"> a. To strengthen the implementation of sustainable upland development program, and b. To increase farm production thru the use of appropriate technologies and farming systems a. To improve the ecological stability of the province; |

| Issues/Problems | Goals | Objectives |
|---|---|--|
| <p>3.3 Production Component</p> <ul style="list-style-type: none"> • Crop shifting • Presence of over-used land use • Flooding | | <ul style="list-style-type: none"> a. To rationalize the conversion of prime agricultural lands as well as crop shifting, and b. To provide general land use policies that will help control and manage physical development to promote social equity and encourage more sustainable development. c. To restore the production capacity of the land resources based on sustainable upland development; d. To optimize the utilization of sand and gravel and other quarry resources in order to generate income from extraction fees and charges; and e. To reforest the bank of the river for protection purposes. |
| <p>3.4 Transportation Component</p> <ul style="list-style-type: none"> • Inadequate flood control and drainage facilities | <p>12. To support and enhance the economic and social undertakings of the province by providing better access and linkages within and outside the province.</p> | <ul style="list-style-type: none"> a. Establish a stable and safe urban and rural networks in the entire province to facilitate and ensure the efficient flow of people, goods and services; b. Develop an integrated provincial water supply system; |

| Issues/Problems | Goals | Objectives |
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| <ul style="list-style-type: none"> • Insufficient and inadequate infrastructure facilities and utilities | | <ul style="list-style-type: none"> c. Improve and/or provide infrastructure facilities in rural areas; d. Enhance inter-provincial and intra provincial linkages; and e. Maintain and/or provide more infrastructure facilities and public utilities such as water, power, communication and transport services in production and settlement areas. |



CHAPTER 5

Strategies, Programs, Projects and Activities



Strategies, Programs, Projects and Activities

| Issues/Problems | Goals | Objectives | Strategies | Programs | Projects |
|--|--|---|--|--|--|
| <p>1. Increasing poverty incidence</p> <ul style="list-style-type: none"> • Low incomes • lack of livelihood opportunities • underemployment/ underemployment • job mismatch | <p>To create an environment conducive to business</p> | <p>To generate income in investments by at least 25% by 2013</p> | <ol style="list-style-type: none"> 1. Promote investments directed to identified strategic industries 2. Policy support and initiatives to the establishment of economic zones | <p>- Industry Clustering Program</p> | <ol style="list-style-type: none"> a. Industry Congress b. Industry benchmarking c. Processor-Supplier Match-ups d. Marketing Infrastructure Support |
| <p>To increase household income and provide more livelihood opportunities</p> <p>To reduce poverty</p> <p>To develop globally competitive workforce</p> | <p>- To generate more employment slots and reduce unemployment rate</p> <p>- To create more livelihood opportunities</p> <p>- To reduce poverty incidence by 25% by 2013</p> | <ol style="list-style-type: none"> 1. Support initiatives to value adding activities such as processing. | <ol style="list-style-type: none"> 1. One-Town-One Product Program in support to E.O. 173 | <ol style="list-style-type: none"> a. Research and development strengthening b. Industry information system strengthening c. Marketing Assistance d. Technology Upgrading e. Managerial Assistance f. Institutional Organization and Strengthening g. Product Consolidation | <ol style="list-style-type: none"> a. Commercial Lending b. Socialized lending for micro enterprises with cooperatives and rural |

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| <p>banks</p> <p>c. Hedging Assurance (DBP)</p> <p>d. Agri-finance solutions tie-up with LBP and DBP</p> <p>e. CAP-PBD thru LBP</p> <p>f. WORKTREP Program of DOLE</p> <p>g. PRESEED of LGUs</p> <p>h. TULAY SAP of DOLE/ LGUs</p> <p>i. SULONG Program</p> <p>j. GROW MICRO projects</p> | | <p>3. Consumer Welfare Program</p> | <p>- To increase income by 25%</p> <p>- To promote gainful employment opportunities and optimize the development and utilization of the province's manpower</p> | | |
| <p>a. Trade Fair Laws Enforcement</p> <p>b. Provincial Consumer Welfare and Price Coordinating Council Strengthening</p> <p>c. Price Monitoring</p> <p>d. Palengke ng Bayan</p> <p>e. Barangay enrichment and mobilization for resource access and consumer empowerment</p> <p>f. Consumer advocacy for sustained and healthy lifestyle thru the promotion of the ff:</p> <ul style="list-style-type: none"> • Healthy products and | | | | | |

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| <p>services</p> <ul style="list-style-type: none"> • Healthy OTOP products • Natural production and processing of products • Sustainable production and processing of products | | <p>1. Localization of the Micro, Small and Medium Enterprise Development Plan</p> | | |
| <p>a. Advocacy to SME Related Laws</p> <ul style="list-style-type: none"> • Implementation of National Laws (Act 3883, BMBE, Magna Carta for SME) [3] | | <p>2. Support initiatives to develop technical skills to respond to industry requirements</p> | | |
| <p>b. SME Institutions Restructuring and Strengthening</p> | | <p>3. To develop manpower skills that will match industry needs</p> | | |
| <p>c. SME Information Support</p> <ul style="list-style-type: none"> • Provision of consultancy services and advisory • SME Database • SME Center | | | | |
| <p>d. Facilitating Partnership Linkages for Competitive Support</p> | | | | |

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| <ul style="list-style-type: none"> - Market matching - Selling/trade missions | | | | | |
| <ul style="list-style-type: none"> e. Trade Fairs and access to market service - Assistance to Trade Fair participation | | | | | |
| <ul style="list-style-type: none"> - Trade Trainings and SME display centers | | | | | |
| <ul style="list-style-type: none"> f. Product Development and Design Services - Product Clinics - Benchmarking | | | | | |
| <ul style="list-style-type: none"> g. Information Technology Appreciation and Application - Information and Communications Technology Industry Streaming - Website Development | | | | | |
| <ul style="list-style-type: none"> h. SME Counseling and Advisory and upgrading of SME Center - Graduate Studies Practicum Program - Business Counseling | | | | | |

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| | | <p>4. Technology and livelihood trainings and skills development</p> | <ul style="list-style-type: none"> - Coaching on bookkeeping - Counseling on Operational Planning - Financial Management Consultancy - Technical Advisory Visit Program of Dole - Community Extension Program (Munting Tindahan) |
| | | | <ul style="list-style-type: none"> g. Industry Productivity and Quality Promotion - Productivity Trainings (Occupational Health and Safety and 5S) - Good Agricultural Practices - Good Manufacturing Practices - Center for Excellence Research (UM Tagum College) - Center for Excellence Technology (DNSC) |
| | | | <ul style="list-style-type: none"> h. Entrepreneurship Trainings - Trainer Training - Skills Training/upgrading on occupation within SMEs |
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| <ul style="list-style-type: none"> - Business Enterprise and livelihood training - Intra-Managerial Trainings | | | | | |
| <ul style="list-style-type: none"> i. Streamlining of Business Name Registration requirements <ul style="list-style-type: none"> ● One-Stop-Shop enhancement ● On-line Business Name Registration enhancement | | | | | |
| <ul style="list-style-type: none"> a. Integrated Production and Pest Management Programs b. Integrated Aquaculture c. Agro-Tropical Fruit Production d. Fishery Production and Development | <ul style="list-style-type: none"> 1. Food (Cereals) Production Program 2. Food Sufficiency Program 3. Diversified Farming Systems Development 4. Minimum Basic Needs Approach | | | | |
| <ul style="list-style-type: none"> a. Rubber, Oil Palm, Jatropha Production b. On Farm Research and Development b. Agricultural Support Services (Laboratories) | <ul style="list-style-type: none"> 5. Commercial and Industrial Crops Production Program 6. Research, Development & Extension Program | | | | |

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| <p>c. Integrated Coastal Resource Management</p> <ul style="list-style-type: none"> • Extension and Commercialization <p>d. Land Suitability and Fertility Mapping</p> <p>e. Maintenance and Operation of Farmer's Information and Technology Services</p> | | | | | |
| <p>a. Institutional Development and Agribusiness Support Services</p> <p>b. Capability Building Trainings on IGPs</p> <p>c. Food-Based Nutrition Intervention Program</p> <p>d. Cooperative development</p> | <p>7. Institutional Development Programs</p> | | | | |
| <p>a. Livestock and Poultry Dispersal</p> <p>b. Animal Production</p> <p>c. Animal Health Care Management</p> <p>d. Production Support Facilities</p> <p>e. Regulatory</p> <p>f. Laboratory and Research</p> <p>g. Animal Breeding and Upgrading</p> | <p>8. Livestock production program</p> | | | | |

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| <ul style="list-style-type: none"> h. Forage and pasture seed bank Development i. Small ruminants diseases control and eradication | | | | | |
| <ul style="list-style-type: none"> a. Meat processing b. Skin/hide utilization and marketing | <p>9. Animal Product and By-Product Utilization Program</p> | | | | |
| <ul style="list-style-type: none"> a. Livelihood projects and skills trainings for entrepreneurial and livelihood development | <p>10. Livelihood Programs - TLDC Entre Pinoy Livelihood Programs</p> | | | | |
| <ul style="list-style-type: none"> a. Jobs fair b. Special Program for the Employment of Students (SPES) | <p>11. Employment facilitation</p> | | | | |
| <ul style="list-style-type: none"> c. PESO Networking d. Phil-Jobnet-Labor Market Information System e. Employment kiosk | <p>12. Eco-Tourism Development</p> | | | | |
| <ul style="list-style-type: none"> a. On-site eco-tourism site development b. Ancestral/cultural village tourism development | | | | | |

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| <p>c. Birds/wildlife sanctuaries development d. Institutionalization of Local Tourism Councils e. Formulation of Tourism Development Master Plan f. Development of Provincial Tourism Brochure g. Establish Provincial Tourism Information Center and Souvenir Shop h. Participation in Tourism related exhibitions</p> | | | | | |
| <p>Support infrastructure and facilities :</p> <ul style="list-style-type: none"> • Farm to Market Roads • Pre and Post Harvest Facilities Assistance Projects • Irrigation and Drainage Systems Development • Food Terminals/Bagsakan Centers • reliable power supply • Sufficient supply of potable water • transport facilities | <p>13. Infrastructure and Utilities Support</p> | | | | |

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| <p>2. Inadequate access to basic social services and facilities</p> <ul style="list-style-type: none"> Inadequate access to social welfare services and facilities | <p>Improved social welfare services and facilities</p> | <p>- To enhance the delivery of comprehensive and integrated social welfare services and facilities</p> | <p>1. Promotion of welfare services for the youth, women, indigenous peoples, elderly, persons with disabilities, victims of natural and manmade disasters and other disadvantaged groups</p> | <ul style="list-style-type: none"> food storage and freight facilities auction centers cold storage abattoir/slaughter-house facilities feed mills livestock and poultry quarantine checkpoints Expansion and improvement of Animal Disease Diagnostic Laboratory Swine semen processing facility/laboratory Mill Analysis Laboratory Dairy Processing Center small ruminant semen processing laboratory Construction of tourism access roads Improvement of tourism facilities and utilities <p>e. Provincial Counterpart to National Programs</p> <ol style="list-style-type: none"> Day care centers Feeding Projects Responsible parenthood |
| | | | | <ol style="list-style-type: none"> Early childhood care and development Senior citizens program Moral recovery program |

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| <ul style="list-style-type: none"> • Low crime and fire prevention efforts • Poor health services • High incidence of some health indicators • Insufficient health care financing • Absence of some system in the health program implementation | <p>Peaceful and orderly communities</p> <p>Access to quality health care services</p> | <ul style="list-style-type: none"> a. To enhance the effectiveness of police and fire forces; and b. To strengthen operational readiness of police and fire forces | <ul style="list-style-type: none"> 1. Augmentation of forces/ mobility 2. Orientation/re-orientation of personnel 3. Information dissemination campaign/advocacies 1. To strengthen health service delivery | <p>4. Cultural mapping/ preservation</p> <p>5. Disaster preparedness program</p> <p>6. Livelihood program</p> <ul style="list-style-type: none"> 1. Procurement Programs 2. Hiring of personnel 3. Human resource development 4. Advocacy programs | <ul style="list-style-type: none"> • IEC/Capability building/advocacies a. Advocacy on moral recovery/ Formation and anti-Graft and Corruption b. Seminars on responsible parenthood and strong family life c. Peace and multi-culturalism Model IP Communities Acquisition and/or provision of rescue facilities/equipment Income generating projects for the out-of-school youth and the disables a. Purchase of mobile vehicles and equipment b. Hiring of police and fire officers c. Capability building and advocacy/values |
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| <ul style="list-style-type: none"> • Decreasing enrollment, survival and retention rates • Low academic performance/achievement in NAT • Access to quality and relevant education for the lumad and muslim children and youth • Schools situated at hazardous areas (exposed to environmental pollution caused by used chemicals, pesticides and those in areas with armed | <p>Access to quality education services</p> | <p>a. To strengthen health service delivery; b. To strengthen health regulations; c. To establish and strengthen health care financing; d. To establish health system development</p> | <p>2. Strengthen health regulations 3. Establish and strengthen health care financing 4. Establish health system development</p> <p>1. Network with barangay officials to campaign for enrolment of all school going age children and youth 2. Strict implementation of DepEd order on No Collection Policy</p> | <p>5. Establishment of fire stations</p> <p>1. Public health programs 2. Prevention and Control</p> <p>1. Enforcement of health-related laws: Milk Code, Asin Law, Food Fortification and other national laws. 2. Access to low cost quality drugs 3. Strengthened hospital drug revolving fund</p> | <p>formation</p> <p>d. Fire stations at New Corella, BE Dujali, San Isidro and Talaingod</p> <p>a. Maternal and child health care b. Health sanitation services c. Healthy lifestyle a. Vector borne diseases: (Dengue, malaria, filariasis, schistosomiasis and leprosy) b. Infectious diseases (TB, HIV/AIDS, vaccines preventable diseases and other emerging and re-emerging diseases) c. Conduct of extensive IECs d. Establishment of Botika sa Barangay e. Accreditation of District hospitals</p> |
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| <ul style="list-style-type: none"> • Malnutrition and other health problems among school children • Secondary schools operating as Annex High Schools for several years • Out-of-school youth and adults not having received/completed basic education • Majority of children entering Grade I not ready for formal schooling • Enhancement of special talents and skills in the arts and sports among students • Modernization of education | | <p>- Quality education for all by 2015</p> | <p>during enrolment</p> <ol style="list-style-type: none"> 3. Institute/adopt intervention measures such as remedial instruction, school feeding, school health and nutrition program, etc. 4. Intensify monitoring and supervision of schools 5. Provide adequate facilities, equipment and instructional materials. 6. Establish schools in lumad and muslim dominated areas using an enhanced and culture sensitive curriculum. 7. Network with other government agencies and NGOs to help address the malnutrition and other health problems of children 8. Deliver basic education to out of school youth and | <p>4. PHIC Accreditation</p> <ol style="list-style-type: none"> 5. Indigency program 6. Health system development program 1. Formulation of a Literacy Development Plan 2. Teachers Health Care Program | <p>f. PHIC enrollment</p> <ol style="list-style-type: none"> 1. Inter-local health system 2. Health information system 3. Disease surveillance system 1.- Remedial instruction classes <ul style="list-style-type: none"> - school feeding program, - food for school program, - School health and nutrition program - Universal medical dental check up program 2. Hiring of locally paid teachers 3. Remedial reading instruction and School Based Training Program (SBTP) in Science and Math 4. Legislation by congress for nationalization of annex high schools 5. Division and district monitoring |
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| <ul style="list-style-type: none"> Lack of housing services and facilities | <p>To enhance the housing service delivery program</p> | <p>To secure available funding support for the delivery of basic services</p> | <p>- To decrease by 25% the number of households occupying</p> | <p>adults through the</p> <ol style="list-style-type: none"> Alternative Learning System (ALS) Accreditation of private schools Organizing SPED classes/centers Campaign/advocacy for enrolment of special children to SPED classes/centers Land banking by LGU Partnership with private sector Mapping of homeless and disadvantaged families Secure ODA funding Increase local | <ol style="list-style-type: none"> Alternative Learning System (ALS) Accreditation of private schools Organizing SPED classes/centers Campaign/advocacy for enrolment of special children to SPED classes/centers Land banking by LGU Partnership with private sector Mapping of homeless and disadvantaged families Secure ODA funding Increase local | <ol style="list-style-type: none"> Special curriculum for lumads Scholarship Program and assistance Conduct of basic literacy classes and livelihood skills program under the Alternative Learning System (ALS) Accreditation and Equivalency (A & E) Program Implementation of the 8-week curriculum. |
| <ol style="list-style-type: none"> Inadequate delivery of basic services | | | | | | |

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| <p>4. Transport Access and Infrastructure</p> <p>a. Inadequate flood control and drainage facilities</p> | <p>1. To support and enhance the economic and</p> | <p>unacceptable dwelling units</p> <p>- To improve revenue and resource generation from local and outside sources</p> | <p>revenue collection</p> <p>2. Avail of outside funding like borrowings, foreign and local grants and aids</p> <p>3. Strengthen linkages with non-government organizations, private sector and community service organizations</p> <p>4. Implementation of RA 6656 (Reorganization Law)</p> <p>5. Establishment of E-Governance in all offices including LGUs</p> | <p>Gawad Kalinga Program</p> <p>1. Real Property Tax General Revision</p> <p>2. Review and Reorganization of the Provincial Government Organizational Structure and Staffing Pattern</p> <p>3. Synchronized Management Information System for all provincial offices</p> <p>4. Revenue Generation and Resource Mobilization Program</p> <p>5. Improvement of Provincial Government Center Offices</p> | <p>Institutionalization of the Provincial Housing Board</p> |
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| <p>b. Insufficient and inadequate infrastructure facilities and utilities</p> | <p>social undertakings of the province by providing better access and linkages within and outside the province.</p> | <p>a. To establish a stable and safe urban and rural networks in the entire province to facilitate and ensure the efficient flow of people, goods and services;</p> <p>b. To develop an integrated</p> | <p>1. Maximize the resources of the province in the construction and maintenance of road network, bridges and other infrastructure facilities which will provide linkages within and outside the province;</p> | <p>6. Formulation of a Provincial Manual of Operation and Agency Risk Management System</p> <p>7. Formulation of a Integrated Area Community Public Safety Plan (IACPSP)</p> <p>9. Installation of Geographical Information System</p> <p>10. Provision of storage area for old and inactive files</p> <p>Construction/improvement/rehabilitation and conversion of provincial roads</p> | <p>1. Construction/improvement of:</p> <ul style="list-style-type: none"> • Kapalong-Talaingod-Bukidnon Road • Asuncion-Igangon and Igangon-Soop Road • Sonlon Longganapan Road • Asuncion-San Isidro Road |
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| | | <p>provincial water supply system; c. Improve and/or provide infrastructure facilities in rural areas; d. To enhance inter-provincial and intra-provincial linkages; and e. To maintain and/or provide more infrastructure facilities and public utilities such as water,</p> | <p>2. Strengthen the implementation of disaster mitigating programs and projects;</p> | <p>1. Formulation of a Disaster and Risk Reduction Management Plan</p> | <ul style="list-style-type: none"> • Tagum-Sto. Tomas Road • Tuganay-Dujali Road • Kapalong-Talaingod Road • Babak-Samal-Kaputian Circumferential Road • T-A-K-S-D-P (Tagum-Asuncion-Kapalong-Sto. Tomas-Panabo) Circumferential Road • Tugnay-La Paz Coastal Road • Farm to market roads <p>2. Upgrading and concreting of existing provincial roads</p> <p>3. Conversion of provincial roads to national roads</p> <p>4. Construction and upgrading of bridges</p> <p>1. Determining current reality</p> <ul style="list-style-type: none"> • Community risk assessment • Vulnerability assessment • Capacity assessment • People's perception of risk |
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|--|--|--|--|-------------------------------------|---|
| | | | | <p>2. Prevention and mitigation</p> | <p>2. Securing structural measures (dikes, dams, drains, sea walls, raising of roads & houses, earthquake resistant construction)</p> <p>3. Non-Structural Measures: (safety measures, community health & sanitation, strengthening livelihood & economic activities, planting coastal shelter belts such as: coconut trees,</p> <p>4. mangrove, etc., building codes, legislation, policy study & advocacy)</p> <p>5. Emergency responses: (repair of critical facilities and services, evacuation and evacuation center management, first aid & medical assistance, relief delivery (food, water, clothing, blankets), search & rescue operation and</p> |
|--|--|--|--|-------------------------------------|---|

| | | | | | | |
|-------------------------------------|---|---|--|--|--|--|
| <p>emergency operations center)</p> | <p>6. After disaster measures (cleaning up the debris, rebuilding & strengthening of damaged structures, relocation to safe place and income-generating projects)</p> | <p>1. Energization of remote barangays</p> <p>2. Upgrading of services by service providers</p> | <p>1. Implementation of the Davao del Norte Integrated Water Resource</p> <p>2. Construction and upgrading of potable water supply systems</p> | <p>3. Diversify energy sources toward energy best mix and to augment existing power supply;</p> <p>4. Integrate water resources and minimize the cost of its production;</p> | | |
|-------------------------------------|---|---|--|--|--|--|

Strategies, Programs and Projects derived from Land Use

| Issues/Problems | Goals | Objectives/Targets | Strategies | Programs | Projects |
|--|--|---|---|---|---|
| Settlements Rapid Urbanization | Rationalize land conversion and protect prime agricultural lands | Rationalize land conversion in urban centers and major growth areas. Ensure protection from conversion of SAFDZ areas within the planning period | Encourage development activities outside the urban center to balance spatial development and stimulate rural growth Enhance agricultural production to discourage conversion and crop shifting | Urban/settlement expansion program Land banking Agricultural productivity program | Access road construction project Relocation projects - Rice intensification program. - Integrated farming system - agricultural productivity research project - Rehabilitation and improvement of existing irrigation system |
| Basic services in rural areas | Improve basic services in rural areas | Provide adequate social services and facilities in rural areas within the planning period | Allocate appropriate areas for urban settlement and rural development | Infrastructure development program | Access road construction and rehabilitation of existing ones. Construction of additional classrooms and other social amenities |
| Emergence of environmental problems associated with settlements growth | Protection of population from man made and natural hazards | Restrict settlements in areas lying within the coastal zone, river banks and flood prone. | Strengthen disaster and risks management programs and activities | - watershed rehabilitation - disaster risk reduction program | watershed rehabilitation and riverbanks stabilization and protection - IEC and advocacy - construction of dikes and other flood mitigating projects - rehabilitation and improvement of existing drainage projects |

| Issues/Problems | Goals | Objectives/Targets | Strategies | Programs | Projects |
|---|--|---|--|--|---|
| <p>Production Land Use</p> <p>Staple crop sufficiency due to crop shifting</p> | <p>Improve production of staple crops</p> | <p>Increase farm productivity of 17,413 has. Of rice area</p> <p>Limit crop shifting from staple crop to commercial and industrial crops.</p> | <p>Intensify implementation of appropriate farming technologies</p> <p>Policy formulation</p> | <p>Rice intensification program</p> <p>Rice intensification program</p> | <p>- Agriculture research project</p> <p>- rice seed subsidy, post harvest facility, assistance, extension services and training.</p> |
| <p>Flooding</p> | <p>Protect production area from flooding</p> | <p>Protect 39,565 has. of production area within next 15 years.</p> | <p>Protect and rehabilitate watershed and river banks</p> <p>Strengthen implementation of protective infrastructure</p> | <p>Sustainable upland development program</p> <p>Flood control program</p> | <p>- Tree planting projects</p> <p>- small watershed rehabilitation project</p> <p>- agro-forestry development</p> <p>- SALT project</p> <p>- construction of dikes and other flood mitigating projects</p> <p>- rehabilitation and improvement of drainage</p> |
| <p>Protection land Use</p> <p>Environmental degradation</p> | <p>Reduce environmental degradation</p> | <p>Increase forest cover by 20 percent within next 15 years</p> | <p>Strengthen implementation of environmental programs and projects</p> <p>Proper delineation and proclamation of highly critical ecological areas as protection forest.</p> | <p>Forest rehabilitation and protection program</p> <p>-do-</p> | <p>IFS/CBFM projects watershed development projects</p> <p>Barangay Forest Protection and Mgt. Schemes (BFPMS)</p> |

| Issues/Problems | Goals | Objectives/Targets | Strategies | Programs | Projects |
|---|---|---|--|--|--|
| | | <p>Reduce solid waste discharge by 100 percent within the next 15 years</p> | <p>Rehabilitation and reforestation of open canopy areas</p> <p>Sustainable implementation and monitoring of existing environmental laws and policies.</p> | <p>Sustainable upland development program</p> <p>Solid waste management program (RA 9003)</p> | <p>agro-forestry development</p> <p>IEC and advocacy and monitoring and evaluation activities</p> |
| <p>Transport/Infrastructure</p> <p>Poor access to basic infra services and social facilities</p> | <p>Increase access to basic infra services and facilities</p> | <p>Increase inter and intra-provincial linkage within next 10 years</p> <p>Increase household power connection by 100 percent within 5 years</p> <p>Reduce classroom deficiency by 50 percent within 10 years</p> <p>Upgrade hospital service and facilities in three districts within 3 years</p> <p>Enhance basic social services facilities in all barangays within 15 years</p> <p>Provide sufficient potable water supply in major centers within 10 years</p> | <p>Strengthen implementation of basic infrastructure facilities and social services</p> | <p>Urban and rural expansion road program</p> <p>Electrification program</p> <p>Education facilities Program</p> <p>Hospital facilities program</p> <p>Social services program</p> | <p>- opening of roads connecting Davao del Norte into the province of Bukidnon</p> <p>- improvement and rehabilitation of roads (national down to barangay roads), and bridges</p> <p>Rural electrification project</p> <p>- construction and rehabilitation of school buildings</p> <p>- improvement of hospital facilities</p> <p>- construction of social services facilities</p> |
| | | <p>Develop an integrated provincial water supply system</p> | | <p>Water system development program</p> | <p>- water drilling and exploration projects</p> <p>- construction and rehabilitation of water system projects.</p> <p>- Davao del Norte Integrated Water Resource Development Project</p> |



ANNEXES



**Tourist Attractions of Davao del Norte
 As of April 2008**

| Waterfalls/Springs | | | |
|----------------------------|---|------------------------------|--|
| ATTRACTION | LOCATION | TYPE | STATUS |
| 1. Lundan Waterfalls | Liguyon, Blnancian, Asuncion | Natural | For rehabilitation |
| 2. Kakawgan waterfalls | Liguyon, Blnancian, Asuncion | Natural | For rehabilitation |
| 3. Beto Waterfalls | Camansa, Asuncion | Natural | For inspection |
| 4. Sampaw waterfalls | Camansa, Asuncion | Natural | For inspection |
| 5. Tuburan waterfalls | Camansa, Asuncion | Natural | For inspection |
| 6. Laya waterfalls | Camansa, Asuncion | Natural | For inspection |
| 7. Kabawkawan waterfalls | Camansa, Asuncion | Natural | For inspection |
| 8. Kalisawan waterfalls | Blnancian, Asuncion | Natural | For inspection |
| 9. Twin waterfalls | Suaon Natures Park, Sambayon, Suaon, Kapitalong | | Protected within the underground river, open for eco-tourism |
| 10. Matol falls | Matol, Gupitan, Kapitalong | Break-in mountain waterfalls | Not yet developed |
| 11. Panas waterfalls | Carcor, New Corella | Natural inland resort | Operational |
| 12. Matinao Spring | New Cortez, New Corella | Natural inland resort | Operational |
| 13. Katualan Spring | Katualan, Panabo City | Natural | To be developed |
| 14. Tagaktak waterfalls | San Nicolas, Panabo City | Natural | To be developed |
| 15. Hagimit falls | Island Garden City of Samal | Natural | Not yet developed |
| 16. Tinubdan Hagimit Falls | Island Garden City of Samal | Natural | Not yet developed |
| 17. Tugtugan falls | Brgy. Dakudao, San Isidro | Natural | Partially operational |
| 18. Sambulawan falls | Brgy. Dakudao, San Isidro | Natural | Not yet operational |
| 19. Tingkub falls | Sawata, San Isidro | Natural | Not yet developed |
| 20. Mikayaga | Mesolong, Talaingod | Natural | Not yet developed |
| 21. Kalapat | Lower Mesolong, Talaingod | Natural | Not yet developed |
| 22. Kiomoy | Angelo, Talaingod | Natural | Not yet developed |
| 23. Lanut-Lanut | Cabadiangan, Talaingod | Natural | Not yet developed |
| 24. Kalinuobod | Cabadiangan, Talaingod | Natural | Not yet developed |
| Caves | | | |
| 1. Napungas caves | Napungas, Asuncion | Natural | For exploration, protection and development |
| 2. Camansa caves | Camansa, Asuncion | Natural | For exploration, |

| | | | |
|-----------------------------|--|----------------------------|--|
| | | | protection and development |
| 3. Binancian Caves | Binancian, Asuncion | Natural | For exploration, protection and development |
| 4. Sonlon Caves | Sonlon, Asuncion | Natural | For exploration, protection and development |
| 5. Okbot caves | Suaon Natures Park, Samabayon, Suaon, Kaaplong | Historical cave | Open for eco-tourism |
| 6. Alena Cave | Suaon Natures Park, Samabayon, Suaon, Kaaplong | Semi-technical caves | Open for eco-tourism |
| 7. Kambal Caves | Suaon Natures Park, Samabayon, Suaon, Kaaplong | Fresh water fish sanctuary | For exploration, protection and development |
| 8. Otso Cave | Suaon Natures Park, Samabayon, Suaon, Kapalng | King Cobra sanctuary | Close for rehabilitation and clean up |
| 9. Kapunit cave | Suaon Natures Park, Samabayon, Suaon, Kaaplong | Bat sanctuary | Open for bat research |
| 10. Suaon Underground river | Suaon Natures Park, Samabayon, Suaon, Kaaplong | Recreational | Open for ecotourism |
| 11. Gitgitan Cave | Suaon Natures Park, Samabayon, Suaon, Kaaplong | Swift Bird and show cave | For assessment and rehabilitation |
| 12. Unnamed cave | Suaon Natures Park, Samabayon, Suaon, Kaaplong | Historical and cave show | For rehabilitation conservation and protection |
| 13. Sayaw Cave | Suaon Natures Park, Samabayon, Suaon, Kaaplong | Swift bird sanctuary | For assessment and rehabilitation |
| 14. Paradise Caves | New Corella | Cave System | Not yet developed |
| 15. Bondoc Caves | Patrocenio, New COrella | Cave System | Not yet developed |
| 16. Kimoko Cave | Island Garden City of Samal | Natural | Partially developed |
| 17. Mangongawon cave | Island Garden City of Samal | Natural | Partially developed |
| 18. Balete Cave | Island Garden City of Samal | Natural | Partially developed |
| 19. Camaonon Cave | Island Garden City of Samal | Natural | Partially developed |
| 20. Dadatan Cave | Island Garden City of Samal | Natural | Partially developed |
| 21. Angels Cave | Island Garden City of Samal | Natural | Partially developed |
| 22. Linosutan cave | Island Garden City of Samal | Natural | Partially developed |
| 23. San Antonio Cave | Island Garden City of Samal | Natural | Partially developed |
| 24. Spring cave | Island Garden City of Samal | Natural | Partially developed |

| | | | |
|-------------------------|---|---------------|------------------------------------|
| 25. Water cave | Island Garden City of Samal | Natural | Partially developed |
| 26. Isla Reta Cave | Island Garden City of Samal | Natural | Partially developed |
| 27. Baga Cave | Island Garden City of Samal | Natural | Partially developed |
| 28. Tagbaobo Cave | Island Garden City of Samal | Natural | Partially developed |
| 29. Simbahang Dako Cave | Island Garden City of Samal | Natural | Partially developed |
| 30. Paniki Cave | Island Garden City of Samal | Natural | Partially developed |
| 31. Horop Cave | Cabadiangan, Talaingod | Natural | Not yet developed |
| 32. Nabantalan Cave | Cabadiangan, Talaingod | Natural | Not yet developed |
| 33. Sulong Cave | Tibi-Tibi, talaingod | Natural | Not yet developed |
| 34. Pilang cave | Angelo, Talaingod | Natural | Not yet developed |
| Rivers/Lakes | | | |
| 1. Saug River | Stretching from Camansa to Buclad | Natural | For rehabilitation and development |
| 2. Magpao River | Cutting the edge of Brgys. Concepcion and Binancian | Natural | For enhancement and development |
| 3. Macgum River | Cutting the edge of Brgys. Binancian and Sonlon | Natural | For enhancement and development |
| 4. Bunawan creek | Cutting the edge of Concepcion and Sonlon | Natural | For inspection |
| 5. Sampao River | Mamacao dam to Sampao quarry | Eco-Adventure | For development |
| 6. Libuganon River | Gupitan to Mabantao | Eco-Adventure | For development |
| 7. Tublihon Lake | Tublihon, Florida | Ecotourism | For development |
| 8. Lasang River | Brgy. JP Laurel | Natural | Operational |
| 9. Malino Spring | Island Garden City of Samal | Natural | Not yet developed |
| 10. Tagbinao Spring | Island Garden City of Samal | Natural | Not yet developed |
| 11. Liboganon River | Brgy. Libuganon, Tagum City | Natural | Operational |
| 12. Madaum River | Madaum, Tagum City | Natural | Operational |
| 13. Canocotan lake | Canocotan, Tagum City | Natural | Not yet developed |
| 14. Paiton lake | Dagohoy, Talaingod | Natural | Not yet developed |
| 15. Kilomayon | Palma Gil, Talaingod | Natural | Not yet developed |
| 16. Bulisong | Sto. Niño, Talaingod | Natural | Not yet developed |

| ATTRACTION | LOCATION | TYPE | STATUS |
|---|--|---------------------------|---------------------|
| Mountains, Forests, View Decks | | | |
| 1. Mt. Nabayaw | Binancian, Asuncion | Natural | For Rehabilitation |
| 2. Liguyon View Deck | Binancian, Asuncion | Natural | For development |
| 3. Binancian View deck | Binancian, Asuncion | Natural | For development |
| 4. kabawkawan View deck | Camansa, Asuncion | Natural | For development |
| 5. Mt. Sangan, Marble Mountain | Gupitan | Eco-adventure and culture | For development |
| 6. Magsaysay View Deck | San Jose, New Corella | Mountain view | Not yet developed |
| 7. Hayans cawa View deck | Patrocenio, New Corella | Mountain view | Not yet developed |
| 8. Mabunao View Decks | Mabunao | Natural | To be developed |
| 9. Bird Sanctuary | Brgy. JP Laurel | Natural | To be developed |
| 10. Mangrove Forest | Brgy. JP Laurel, Cagangohan, Gredu | Natural | To be developed |
| 11. Mountain view of Candu and Paet | Island Garden City of Samal | Natural | Operational |
| 12. Beto Forest | Island Garden City of Samal | Natural | Operational |
| 13. Island Hill Mountain Resort | Island Garden City of Samal | Natural | Operational |
| 14. Putting Bato | Island Garden City of Samal | Natural | Operational |
| 15. Thrill Path | Island Garden City of Samal | Natural | Operational |
| 16. Pantaron | Palma Gil, Talaingod | Nature View Park | Not yet developed |
| 17. Mikamangga | Cabadiangan, Talaingod | Nature View Park | Not yet developed |
| Cultural, Historical, Religious Attraction | | | |
| 1. Mt. Nabayaw | Binancian, Asuncion | Natural | For development |
| 2. Parochial Fiesta | Poblacion, Asuncion | | |
| 3. Araw ng Asuncion | Poblacion, Asuncion | | |
| 4. Sinawug Festival | Camansa, Asuncion | River/Tribal | |
| 5. Veterans Shrine | Carmen | Man made | Partially developed |
| 6. Divine Mercy Shrine | Carmen | Man made | Not yet developed |
| 7. Dibabawon Cultural Site | Dugayan, Gupitan | Cultural | For development |
| 8. Ata Manobo Cultural | Gupitan and Tagpopoot, Florida, Kapalong | Cultural | For development |
| 9. Bakdang Festival | Poblacion, New Corella | IP Cultural Feast | New |
| 10. Araw Celebration | Poblacion, New Corella | Foundation | Annual |

| | | | |
|---|--|----------------------|--|
| | | Anniversary Shrine | Not yet developed |
| 11. Agony Hill Shrine | Carcor, New Corella | Shrine | Not yet developed |
| 12. Divine Mercy Sanctuary | Brgy. San Pedro | Manmade | Operational |
| 13. Panabo old city hall | New Pandan, Panabo | manmade | To be converted as museum |
| 14. Sto. Nino Parish | Panabo City | manmade | Operational |
| 15. San Agustin | Cagangohan, Panabo | Manmade | Operational |
| 16. Auring Village | Island Garden City of Samal | | Partially developed |
| 17. MOncado Vilage | Island Garden City of Samal | | Partially developed |
| 18. Ancestral Homes | Island Garden City of Samal | | Partially developed |
| 19. Dinagat & Samal Village | Island Garden City of Samal | | Partially developed |
| 20. Regina Rosary Shrine | Tagum City | Natural/man made | Operational |
| 21. Marys Woods | Tagum City | Natural/man made | Partially operational |
| 22. New Christ the King cathedral | Tagum City | Natural/man made | Operational |
| 23. Giant Rosary | Tagum City | Natural/man made | Operational |
| 24. Our Lady of Assumption Church | Tagum City | Natural/man made | Operational |
| 25. Ata-Manobo Village | Talaingod | Cultural, Historical | Partially developed |
| 26. Langgolian | Talaingod | Cultural, Historical | Partially developed |
| 27. Kaylawan | Talaingod | Cultural, Historical | Partially developed |
| Agri-Industrial/Historical | | | |
| 1. Cassava plantation | Sonlon, Asuncion | Man-made | Ideal for tour related to cassava farming and technology |
| 2. Banana Plantation | Asuncion, Sto. Tomas, Panabo, Carmen, Tagum, B.E Dujali, Kapalong, New Corella | Man-made | Ideal for banana tour package especially the small processing set up |
| 3. Mafimco | Carmen | Man made | Operational |
| 4. Aqua Penon | Carmen | Man made | Operational |
| 5. Diamond Star | Carmen | Man made | Operational |
| 6. MUSATECH | Carmen | Man made | Operational |
| 7. Diamond Farm | Carmen | Man made | Operational |
| 8. Pag-asa farms ORCHID Garden and Wildlife Rescue Center | Pag-asa, Kapalong | Agri-Eco Tourism | Developed |
| 9. TADECO | Brgy. AO Floirendo, Panabo City | Manmade | operational |

| | | | |
|--|-----------------------------|------------------|-----------------------|
| 10. DOLE STANFILCO | Panabo City | Manmade | operational |
| 11. ARC-Men Food and Plastic | Panabo City | Manmade | operational |
| 12. Evergreen Farms | Panabo City | Manmade | operational |
| 13. Checkered Farms, Inc. | Panabo City | Manmade | operational |
| 14. Crab Park | Tagum City | Manmade | operational |
| 15. Mangrove Reforestation | Tagum City | Manmade | operational |
| 16. Plant Nursery | Tagum City | Manmade | operational |
| Fish Sanctuary | | | |
| 1. Camansa Lake | Camansa, Asuncion | Natural | For development |
| 2. Small Water Impounding (SWIP) | New Loon, Asuncion | Natural | For development |
| 3. Sagayen Lake | Sagayen, Asuncion | Dead river | For development |
| 4. New Bantayan Lake | New Bantayan, Asuncion | Dead River | For development |
| 5. Saug RIS Basin | Sagayan, Asuncion | Man-made | For development |
| 6. Espartero Inland Fishpond | Sitio Pawas, Dujali | manmade | Partially operational |
| 7. Mariculture Park | Cagangohan, Panabo City | Man made | Operational |
| 8. Cagangohan Fish Sanctuary | -do- | manmade | Operational |
| 9. Coral Garden Marine Park | IGC of Samal | | Not yet developed |
| 10. Fish Sanctuary | IGC of Samal | | Not yet developed |
| 11. Marine Protected area | Tagum City | Natural/man made | Developed |
| Beach/Inland Resorts | | | |
| 1. Barret Beach Resort | Tagum City | Natural | Operational |
| 2. Elenas Inland Resort | Tagum City | manmade | Operational |
| 3. Palm Hill Beach Resort | Island Garden City of Samal | Natural | Operational |
| 4. Isla Beach Resort | Island Garden City of Samal | Natural | Operational |
| 5. Paradise Island Beach Resort | Island Garden City of Samal | Natural | Operational |
| 6. Pearl Farm Beach Resort | Island Garden City of Samal | Natural | Operational |
| 7. Samal casino Resort | Island Garden City of Samal | Natural | Operational |
| 8. Kaputian Beach Park | Island Garden City of Samal | Natural | Operational |
| 9. Wishing Island Resort | Island Garden City of Samal | Natural | Operational |
| 10. Buenavista Beach Resort | Island Garden City of Samal | Natural | Operational |
| 11. Budyong Beach resort | Island Garden City of Samal | Natural | Operational |
| 12. Monterosa Beach | Island Garden City of Samal | Natural | Operational |
| 13. Holy Cross Beach & Training Center | Island Garden City of Samal | Natural | Operational |
| 14. Isla Cristina Beach Resort | Island Garden City of Samal | Natural | Operational |
| 15. Samal Island Beach resort | Island Garden City of Samal | Natural | Operational |
| 16. Isla Reta II | Island Garden City of Samal | Natural | Partially Operational |
| 17. Coral Garden Beach | Island Garden City of Samal | Natural | Partially |

| | | | |
|--------------------------------|-----------------------------|---------|-----------------------|
| Resort | | | Operational |
| 18. Tambang Beach Resort | Island Garden City of Samal | Natural | Partially Operational |
| 19. Canibad Beach Resort | Island Garden City of Samal | Natural | Operational |
| 20. Coco Caliclic Beach Resort | Island Garden City of Samal | Natural | Partially Operational |
| 21. Dayang Beach Resort | Island Garden City of Samal | Natural | Operational |
| 22. Cosat Marina Beach resort | Island Garden City of Samal | Natural | Operational |
| 23. Balonos Beach Resort | Island Garden City of Samal | Natural | Partially Operational |
| 24. RJ Homes Beach Resort | Island Garden City of Samal | Natural | Operational |
| 25. Jo Uy Beach resort | Island Garden City of Samal | Natural | Operational |
| 26. Santos Beach Resort | Island Garden City of Samal | Natural | Partially Operational |
| 27. Jims Island Beach Resort | Island Garden City of Samal | Natural | Operational |
| 28. Villarica Beach resort | Island Garden City of Samal | Natural | Partially Operational |
| 29. Samal Beach Club | Island Garden City of Samal | Natural | Operational |
| 30. Punta Beach Resort | Island Garden City of Samal | Natural | Partially Operational |
| 31. Pigma-an Beach Resort | Island Garden City of Samal | Natural | Operational |
| 32. Dominican Sisters | Island Garden City of Samal | Natural | Partially Operational |
| 33. San Pedro College | Island Garden City of Samal | Natural | Operational |
| 34. Gumoni Beach Resort | Island Garden City of Samal | Natural | Operational |
| 35. Babusanta Beach Resort | Island Garden City of Samal | Natural | Operational |
| 36. Goc-ong Beach Resort | Island Garden City of Samal | Natural | Operational |
| 37. White Sand Beach Resort | Island Garden City of Samal | Natural | Operational |
| 38. Fish Landing Area Resort | Island Garden City of Samal | Natural | Operational |

**Inventory of Provincial Roads, by Type of Pavement,
by City and Municipality,
Province of Davao del Norte: CY 2007**

| Road Name | Length in Kilometers | | | | |
|--|----------------------|----------|----------|----------|--------------|
| | Gravel | Asphalt | Concrete | Earth | Total |
| ASUNCION | | | | | |
| Asuncion-Madgao | 12.5 | | | | 12.5 |
| Sagayen-Concepcion | 4 | | | | 4 |
| Km. 9 Doña Andrea-Pamacaun | 4.8 | | | | 4.8 |
| Pamacaun-New Loon | 6.5 | | | | 6.5 |
| Jct. Pagsabangan-Magatos | 6.4 | | | | 6.4 |
| Asuncion-Mahayahay | 4 | | | | 4 |
| Madgao-Napungas-Sonlon | 9.2 | | | | 9.2 |
| Camoning-San Vicente-Canatan | 7 | | | | 7 |
| Saug-Sonlon | 4.8 | | | | 4.8 |
| Mahayahay-New Anda-Mesaoy | 4 | | | | 4 |
| Del Pilar-Monte Carlo-Jct. Mahayahay | 5.7 | | | | 5.7 |
| New Bantayan-Magatos | 5.5 | | | | 5.5 |
| San Vicente-Butay | 7.5 | | | | 7.5 |
| Asuncion-New Ibahay | 4 | | | | 4 |
| Kipalili-New Loon | 2 | | | | 2 |
| New Bantayan-Ilog | 4 | | | | 4 |
| Sonlon-Longanapan | 10 | | | | 10 |
| Doña Andrea-New Santiago- Kapungagan | 5.5 | | | | 5.5 |
| Cambanogoy-Purok Talisay | 2 | | | | 2 |
| New-Corella-Sambog-Canatan | 2 | | | | 2 |
| San. Roque-Sta. Felomina-Jct. Canatan | 4 | | | | 4 |
| Pamacaun-Lasang-Banate | 5.1 | | | | 5.1 |
| sub-total | 120.5 | 0 | 0 | 0 | 120.5 |
| KAPALONG | | | | | |
| Jct. Kapalong-Gabuyan-Semong | 4 | | | | 4 |
| Kapalong-Mabantao-Florida | 8.4 | | | | 8.4 |
| Jct. Highway-Bienvenida Mamacao | 10.7 | | | | 10.7 |
| Pandulian-New Boholano | 4.3 | | | | 4.3 |
| Florida-Tagpopoot-Suaon | 8 | | | | 8 |
| Doña Andrea-New Santiago- Kapungagan | 3.1 | | | | 3.1 |
| Monte Dujali-Gupitan | 4 | | | | 4 |

| | | | | | |
|---------------------------------------|----------------|----------|---------------|----------|---------------|
| Jct. Gabuyan-Katipunan-Bucana | 6.1 | | | | 6.1 |
| Patel-Langan | 7 | | | | 7 |
| Suaon-Gupitan | 5 | | | | 5 |
| Tagpopoot-Sambayon-Libuton | 6 | | | | 6 |
| Kapungagan-Mabuhay-Pandulian | 9.2 | | | | 9.2 |
| Sawat-Libuton-Monte Dujali-Patel | 15.5 | | | | 15.5 |
| NEW CORELLA | | | | | |
| Bdry. Tagum, Baca-New Corella | 1.954 | | 10.046 | | 12 |
| New Corella-Saug | 12.03 | | 0.27 | | 12.3 |
| New Corella-New Bohol(Bdry.Tagum) | 12 | | | | 12 |
| New Talisay-Malitbog-El Unido | | | | | |
| Mahayahay-New Anda-Mesaoy | 1.9 | | | | 1.9 |
| Del Pilar-Monte Carlo-Jct. Mahayahay | 4.8 | | | | 4.8 |
| New Corella-El Unido-Jct. Mesaoy | 8 | | | | 8 |
| New Corella-Sto. Niño-Macgum | 16.6 | | | | 16.6 |
| Malitbog-El Unido | 3.1 | | | | 3.1 |
| Mesaoy-Dasing | 2.4 | | | | 2.4 |
| New Corella-Guadalupe-Del Monte | 18 | | | | 18 |
| Limbaan-Sta. Fe-El Salvador | 16.2 | | | | 16.2 |
| Del Pilar-Jct. Silangan | 4 | | | | 4 |
| Limbaan-Sto. Niño | 5 | | | | 5 |
| Mesaoy-New Bohol | 5 | | | | 5 |
| New-Corella-Sambog-Canatan | 7.5 | | | | 7.5 |
| San. Roque-Sta. Felomina-Jct. Canatan | 4 | | | | 4 |
| Tagaytay-Buan | 4.95 | | 0.05 | | 5 |
| Jct. El Unido-New Bohol | 2.04 | | | | 2.04 |
| Sta. Fe-Maming | 7 | | | | 7 |
| Jct. El Unido-Kauswagan-New Cortez | 1.2 | | | | 1.2 |
| sub-total | 145.674 | 0 | 10.366 | 0 | 156.04 |
| SAN ISIDRO | | | | | |
| Sawata-San Vicente | 3 | | | | 3 |
| Concepcion-Sawata | 11 | | 0.4 | | 11.4 |
| Igangon-Soop | 5 | | | | 5 |
| San Miguel-Linao-Sawata | 9 | | | | 9 |
| Sitio San Isidro-Jnc. San Miguel | 1.5 | | | | 1.5 |
| Sawata-Mamangan-Pinamuno | 14 | | | | 14 |

| | | | | | |
|-------------------------------------|-------------|----------|------------|----------|-------------|
| Sawata-Libuton-Monte Dujali-Patel | 30.5 | | | | 30.5 |
| Jct. Libuton-Mabuhay | 6 | | | | 6 |
| Monte Dujali-Gupitan | 2 | | | | 2 |
| Tagpopoot-Sambayon-Libuton | 4.4 | | | | 4.4 |
| Jct. Km. 15-Kipalili | 6 | | | | 6 |
| sub-total | 92.4 | 0 | 0.4 | 0 | 92.8 |
| TALAINGOD | | | | | |
| Dagohoy-Paiton | 3 | | | | 3 |
| Dagohoy-Daligdigon | 7.8 | | | | 7.8 |
| Sto. Niño-Daligdigon-Mibolo | 34.9 | | | | 34.9 |
| Sto. Niño-Palma Gil-Lumabag | 9 | | | | 9 |
| sub-total | 54.7 | 0 | 0 | 0 | 54.7 |
| CARMEN | | | | | |
| Jct. Highway-Carmen-Mangalcal-Tubod | 12 | | | | 12 |
| Sto. Niño-Cebulano | 3.4 | | | | 3.4 |
| Cebulano-Mangalcal | 4 | | | | 4 |
| Loceta-Mangalcal | 2 | | | | 2 |
| Cebulano-Loceta-Lower Mangalcal | 4.6 | | | | 4.6 |
| Basa-Tubod | 2 | | | | 2 |
| Tubod-Basa-Mangalcal | 4.5 | | | | 4.5 |
| Jct. Highway-Sto. Niño-La Paz | 4 | | | | 4 |
| La Paz-San Vicente | 3 | | | | 3 |
| Ising-Sadpodon-Taba-Diladila | 5.4 | | | | 5.4 |
| Tuganay-Taba | 5 | | | | 5 |
| Jct. Highway-Ising-Magsaysay | 10.95 | | | | 10.95 |
| Anahaw-Maligaya | 5 | | | | 5 |
| Maligaya-New Camiling | 2.7 | | | | 2.7 |
| New Camiling-Alejal-Lower Magsaysay | 5.8 | | | | 5.8 |
| Alejal-Alemag | 1.5 | | | | 1.5 |
| Jct. Highway-Tuganay-Taba | 3.6 | | | | 3.6 |
| Tuganay-Anibongan-San Isidro | 1.63 | | 1.37 | | 3 |
| Jct. Highway-Tuganay-Anibongan | 5.15 | | | | 5.15 |
| Anibongan-Guadalupe | 4.7 | | | | 4.7 |
| Anibongan-Salvacion-Cabayangan | 6 | | | | 6 |
| Guadalupe-Mabaus-San Miguel | 8.1 | | | | 8.1 |
| Mabaus-Salvacion | 3.3 | | | | 3.3 |

| | | | | | |
|--|---------------|----------|-------------|----------|--------------|
| Dalisay-Mabuhay | 5.3 | | | | 5.3 |
| Sitio Malaga-Tibulao | 4 | | | | 4 |
| Lower Asuncion-Upper Asuncion | 2 | | | | 2 |
| Jct. Highway-Tubod-Bagong Silang | 2.2 | | | | 2.2 |
| sub-total | 121.83 | 0 | 1.37 | 0 | 123.2 |
| STO. TOMAS | | | | | |
| Crossing Esperanza-Salvacion-Kinamayan | 7 | | 1.34 | | 8.34 |
| Kinamayan-Sto. Tomas | 7.54 | | 0.16 | | 7.7 |
| Magupising-Esperanza-Talomo | 12.3 | | | | 12.3 |
| San Vicente-Lower Balisong-Cabay-angan | 5 | | | | 5 |
| Kinamayan-Moslog-Mahayag | 3.7 | | | | 3.7 |
| San Miguel-Moslog-Kinamayan | 3.26 | | | | 3.26 |
| San Miguel-Crossing Kinamayan | 2.8 | | | | 2.8 |
| San Miguel-Libertad | 5.87 | | 0.13 | | 6 |
| San Miguel-Casig-ang | 4.1 | | | | 4.1 |
| Kinamayan-Lungaog | 5.4 | | | | 5.4 |
| Lungaog-Talomo | 4 | | | | 4 |
| Feeder rd. 3-Kimamon-Luna | 11.53 | | 0.47 | | 12 |
| Kimamon-Lungaog | 3 | | | | 3 |
| Prk. Apitong-Upper Balisong-Dalisay | 3.8 | | | | 3.8 |
| Prk. Magsaysay-Lungaog-Dalisay | 3.6 | | | | 3.6 |
| Sto. Tomas-Sagana | 5.6 | | | | 5.6 |
| Feeder rd. 3-Upper Lungaog-San Jose | 3.62 | | 0.38 | | 4 |
| Feeder rd. 2-Sto. Tomas-Magwawa | 11.57 | | 0.43 | | 12 |
| Menzi-Bobongon-Balagunan | 6.5 | | | | 6.5 |
| Balagunan-Tulalian-Apalili | 4 | | | | 4 |
| NAFCO-Bobongon | 3 | | | | 3 |
| Libertad-Balagunan | 4.1 | | | | 4.1 |
| Jct. Highway-Tanglaw | 6.8 | | | | 6.8 |
| Jct. Highway-Bugtong Lubi-Balagunan | 4 | | | | 4 |
| Sitio Paradise-Magkakaisa-Esperanza | 5 | | | | 5 |
| Mugas-Lanatad | 3.6 | | | | 3.6 |
| Los Amigos-Esperanza | 4.49 | | | | 4.49 |

| | | | | | |
|----------------------------------|----------------|----------|---------------|----------|---------------|
| Mugas-Lungaog | 3.8 | | | | 3.8 |
| New Katipunan-Pantaron-Kinamayan | 6.6 | | | | 6.6 |
| sub-total | 155.58 | 0 | 2.91 | 0 | 158.49 |
| B.E. DUJALI | | | | | |
| San Isidro-Dujali-San Miguel | 6.73 | | 1.47 | | 8.2 |
| Magupising-Crossing Esperanza | | | 2.66 | | 2.66 |
| Dujali-Bacali-Tanglaw | 3.48 | | 0.12 | | 3.6 |
| Bacali-Casig-ang-Libertad | 5 | | | | 5 |
| Dujali-New Casay | 2.5 | | | | 2.5 |
| | | | | | |
| Dujali-Cabay-angan-Magupising | 5.93 | | | | 5.93 |
| Mabaus-Cabay-angan | 3.6 | | | | 3.6 |
| Dujali-Balisong-Cabay-angan | 4 | | | | 4 |
| Cabay-angan-Esti-Esperanza | 5.2 | | | | 5.2 |
| New Casay-Bugtong Talisay | 3 | | | | 3 |
| Dujali-Sitio Pawas | 4.7 | | | | 4.7 |
| sub-total | 44.14 | 0 | 4.25 | 0 | 48.39 |
| | | | | | |
| Gravel | 826.124 | | | | |
| Asphalt | | 0 | | | |
| Concrete | | | 19.296 | | |
| Earth | | | | 0 | |
| Grand Total | | | | | 845.42 |

Source: PEO, Davao del Norte

Table No. C-1: Levels of LGU Appropriation (in pesos)
Province of Davao del Norte: CY 2003-2007

| Province of Davao Del Norte | 2003 | 2004 | 2005 | 2006 | 2007 | Average |
|---|-------------|-------------|-------------|-------------|-------------|----------------|
| Grand Total | 500,420,540 | 546,927,100 | 584,856,245 | 637,056,144 | 663,590,454 | 586,570,097 |
| Total Economic Services | 66,719,963 | 81,750,127 | 86,198,206 | 95,551,906 | 92,119,852 | 84,468,011 |
| Agriculture/Veterinary Services | 17,243,049 | 21,223,446 | 24,529,03 | 16,635,523 | 23,299,940 | 20,586,204 |
| Environment/ Natural Resources Services | 4,723,075 | 5,215,332 | 4,840,919 | 4,730,092 | 5,074,757 | 4,916,835 |
| Cooperative Services | 0 | 122,000 | 387,000 | 2,000,000 | 0 | 501,800 |
| Engineering Services | 12,260,677 | 13,676,850 | 13,767,692 | 14,789,361 | 16,492,893 | 14,197,495 |
| Tourism Projects | 1,124,892 | 1,000,000 | 2,191,257 | 0 | 0 | 863,230 |
| Commercial/Industrial Development Project | 0 | 0 | 0 | 0 | 0 | 0 |
| Energy Development Projects | 0 | 0 | 2,000,000 | 0 | | 400,000 |
| Livelihood Projects | 0 | 0 | 250,000 | 664,000 | 0 | 182,800 |
| Other Economic Services | 350,000 | 0 | 1,000,000 | 4,804,213 | 0 | 1,230,843 |
| Economic Enterprise | 31,018,272 | 40,512,499 | 37,232,275 | 51,928,718 | 47,252,262 | 44,231,438 |
| Provincial Equipment Pool Economic Enterprise | 28,439,652 | 36,366,331 | 35,283,755 | 49,570,918 | 45,094,060 | 41,578,766 |
| RCPC Casting and CHB Making | 2,578,620 | 4,146,168 | 1,948,520 | 2,357,800 | 2,158,202 | 2,652,673 |
| | | | | | | |
| Total Social Services | 60,809,049 | 70,968,793 | 81,193,837 | 89,154,303 | 94,116,413 | 79,248,479 |
| Education, Culture, Sports, & Manpower Services | 2,285,000 | 4,510,000 | 4,959,071 | 9,617,780 | 0 | 4,274,370 |
| Health Services | 51,748,077 | 58,207,798 | 64,362,697 | 64,933,497 | 76,986,762 | 63,247,766 |
| Hospital Services | 32,994,257 | 39,190,717 | 40,174,153 | 41,295,311 | 51,944,444 | 41,119,776 |
| Other Health Services | 18,753,820 | 19,017,081 | 24,188,544 | 23,638,186 | 25,042,318 | 22,127,990 |
| Social Welfare Services (incl. Popn Office) | 6,775,973 | 8,250,995 | 11,772,069 | 11,123,240 | 17,129,651 | 11,010,385 |
| Housing & Community Development Services | 0 | 0 | 100,000 | 3,479,787 | 0 | 715,957 |
| Gen. Public Services | 198,706,888 | 210,077,613 | 205,647,803 | 248,835,049 | 257,081,817 | 222,269,834 |
| Other Purposes | 69,402,012 | 67,383,971 | 87,416,925 | 58,355,285 | 57,852,487 | 68,082,136 |
| Debt Service | 36,404,532 | 29,047,798 | 30,625,091 | 6,801,406 | 3,471,485 | 21,270,062 |
| Retirement and Other Benefits | 4,480,363 | 6,294,981 | 7,844,628 | 6,074,600 | 8,150,590 | 6,569,032 |
| Misc. Other Purposes (including 5% Calamity Fund) | 28,517,117 | 32,041,192 | 48,947,206 | 45,479,279 | 46,230,412 | 40,243,041 |
| 20% Devit. Fund | 104,782,628 | 125,746,596 | 124,399,475 | 145,159,601 | 162,419,885 | 132,501,637 |
| Economic Services | 64,779,862 | 86,679,602 | 95,839,875 | 123,833,091 | 77,012,842 | 89,629,054 |
| Social Services | 22,036,100 | 16,912,147 | 6,735,600 | 12,296,510 | 8,902,598 | 13,376,591 |
| Genl Public Services | 17,966,666 | 22,154,847 | 21,824,000 | 9,030,000 | 76,504,445 | 29,495,992 |

**Table No. C-2: Percentage Distribution of LGU Appropriation (%)
Province of Davao del Norte: CYs: 2003-2007**

| Province of Davao Del Norte | 2003 | 2004 | 2005 | 2006 | 2007 | Average |
|---|-------------|-------------|-------------|-------------|-------------|----------------|
| Grand Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Total Economic Services | 13.33 | 14.95 | 17.74 | 15.00 | 13.88 | 14.40 |
| Agriculture/Vet. Services | 3.45 | 3.88 | 4.19 | 2.61 | 3.51 | 3.51 |
| Environment/Natural Resources Services | 0.94 | 0.95 | 0.83 | 0.74 | 0.76 | 0.84 |
| Cooperative Services | 0.00 | 0.02 | 0.07 | 0.31 | 0.00 | 0.09 |
| Engineering Services | 2.45 | 2.50 | 2.35 | 2.32 | 2.49 | 2.42 |
| Tourism Projects | 0.22 | 0.18 | 0.37 | 0.00 | 0.00 | 0.15 |
| Commercial/Industrial Dev't. Projects | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Development Projects | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 | 0.07 |
| Livelihood Projects | 0.00 | 0.00 | 0.04 | 0.10 | 0.00 | 0.03 |
| Other Economic Services | 0.07 | 0.00 | 0.17 | 0.75 | 0.00 | 0.21 |
| Economic Enterprise | 6.20 | 7.41 | 6.37 | 8.15 | 7.12 | 7.54 |
| Provl. Equipment Pool Economic Enterprise | 5.68 | 6.65 | 6.03 | 7.78 | 6.80 | 7.09 |
| RCPC Casting & CHB Making | 0.52 | 0.76 | 0.33 | 0.37 | 0.33 | 0.45 |
| Total Social Services | 12.15 | 12.98 | 13.88 | 13.99 | 14.18 | 13.51 |
| Education, Culture, Sports, & Manpower Services | 0.46 | 0.82 | 0.85 | 1.51 | 0.00 | 0.73 |
| Health Services | 10.34 | 10.64 | 11.00 | 10.19 | 11.60 | 10.78 |
| Hospital Services | 6.59 | 7.17 | 6.87 | 6.48 | 7.83 | 7.01 |
| Other Health Services | 3.75 | 3.48 | 4.14 | 3.71 | 3.77 | 3.77 |
| Social Welfare Services (incl. Popn Office) | 1.35 | 1.51 | 2.01 | 1.75 | 2.58 | 1.88 |
| Housing & Community Development Services | 0.00 | 0.00 | 0.02 | 0.55 | 0.00 | 0.12 |
| General Public Services | 39.71 | 36.76 | 35.16 | 39.06 | 38.74 | 37.89 |
| Other Purposes | 13.87 | 12.32 | 14.95 | 9.16 | 8.72 | 11.61 |
| Debt Service | 7.27 | 5.31 | 5.24 | 1.07 | 0.52 | 3.63 |
| Retirement and Other Benefits | 0.90 | 1.15 | 1.34 | 0.95 | 1.23 | 1.12 |
| Misc. Other Purposes (incl. 5% Calamity Fund) | 5.70 | 5.86 | 8.37 | 7.14 | 6.97 | 6.86 |
| 20% Development Fund | 20.94 | 22.99 | 21.27 | 22.79 | 24.48 | 22.59 |
| Economic Services | 12.95 | 15.85 | 16.39 | 19.44 | 11.61 | 15.28 |
| Social Services | 4.40 | 3.09 | 1.15 | 1.93 | 1.34 | 2.28 |
| General Public Services | 3.59 | 4.05 | 3.73 | 1.42 | 11.53 | 5.03 |

Source: Provincial Budget Office, Davao del Norte

*Table No. C-3: Growth Rate of LGU Appropriation (%)
Province of Davao del Norte
CYs 2004-2007*

| Province of Davao Del Norte | 2004 | 2005 | 2006 | 2007 | Average |
|---|-------------|-------------|-------------|-------------|----------------|
| Grand Total | 9.29 | 6.93 | 8.93 | 4.17 | 6.66 |
| Total Economic Services | 22.53 | 5.44 | 10.85 | -3.59 | 4.06 |
| Agriculture/Veterinary Services | 23.08 | 15.58 | -32.18 | 40.06 | 3.16 |
| Environment/ Natural Resources Services | 10.42 | -7.18 | -2.29 | 7.29 | -0.91 |
| Cooperative Services | 0 | 217.21 | 416.80 | 100.00 | -100.00 |
| Engineering Services | 11.55 | 0.66 | 7.42 | 11.52 | 6.44 |
| Tourism Projects | -11.10 | 119.13 | -100.00 | 0 | -100.00 |
| Comm[un]ity/Industrial Dev[elopment] Projects | | | | | |
| Energy Dev[elopment] Projects | | | | | |
| Livelihood Projects | 0 | 0 | 165.6 | 100.00 | 0 |
| Other Economic Services | 100.00 | 0 | 380.42 | 100.00 | 0 |
| Economic Enterprise | 30.61 | -8.10 | 39.47 | -9.01 | 5.26 |
| Prov[ince] Equipment Pool Economic Enterprise | 27.87 | -2.98 | 40.49 | -9.03 | 7.43 |
| RCPC Casting & CHB Making | 60.79 | -53.00 | 21.00 | -8.47 | -19.56 |
| Total Social Services | 16.71 | 14.41 | 9.80 | 5.57 | 9.87 |
| Education, Culture, Sports, & Manpower Services | 97.37 | 9.96 | 93.94 | -100.00 | -100.00 |
| Health Services | 12.48 | 10.57 | 0.89 | 18.56 | 9.77 |
| Hospital Services | 18.78 | 2.51 | 2.79 | 25.79 | 9.85 |
| Other Health Services | 1.40 | 27.19 | -2.28 | 5.94 | 9.61 |
| Social Welfare Services (incl. Popn Office) | 21.77 | 42.67 | -5.51 | 54.00 | 27.57 |
| Housing & Community Dev[elopment] Services | 0 | 0 | 3379.79 | 100.00 | 0 |
| General Public Services | 1.19 | 2.27 | 21.00 | 3.31 | 8.53 |
| Other Purposes | -2.91 | 29.73 | -33.24 | -0.86 | -4.96 |
| Debt Service | -20.21 | -5.43 | -77.79 | -48.96 | -50.74 |
| Retirement & Other Benefits | 40.50 | 24.62 | -22.56 | 34.17 | 8.99 |
| Misc. Other Purposes (incl. 5% Calamity Fund) | 12.36 | 52.76 | -7.09 | 1.65 | 13.00 |
| 20% Development Fund | 20.01 | -1.07 | 16.69 | 11.89 | 8.90 |
| Economic Services | 33.81 | 10.57 | 29.21 | -37.81 | -3.86 |
| Social Services | -23.25 | -60.17 | 82.56 | -27.60 | -19.26 |
| General Public Services | 23.31 | -1.49 | -58.62 | 747.23 | 51.15 |

Source: Provincial Budget Office, Davao del Norte

LGU EXPENDITURES BY FUNCTION

Table No. C-4: Levels of LGU Expenditures (in pesos)
Province of Davao del Norte : CYs 2003-2007

| | 2003 | 2004 | 2005 | 2006 | 2007 | Average |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Grand Total | 427,961,802 | 454,721,266 | 480,186,124 | 506,185,742 | 500,852,966 | 473,981,580 |
| Total Economic Services | 65,002,754 | 75,362,479 | 77,408,750 | 86,312,412 | 87,495,945 | 78,316,468 |
| Agriculture/Veterinary Services | 16,907,257 | 19,264,267 | 18,894,099 | 15,672,127 | 21,752,130 | 18,497,976 |
| Environment/Natural Resources Services | 4,620,312 | 4,960,719 | 4,659,259 | 4,454,629 | 4,857,451 | 4,710,474 |
| Architectural Services | 0 | 0 | 0 | 0 | 0 | 0 |
| Engineering Services | 11,860,502 | 12,320,383 | 12,967,158 | 14,016,642 | 15,429,040 | 13,318,745 |
| Tourism Projects | 927,628 | 659,635 | 1,909,694 | 0 | 0 | 699,391 |
| Commercial/Industrial Dev't. Projects | 0 | 0 | 0 | 0 | 0 | 0 |
| Energy Dev't Projects | 0 | 0 | 1,949,998 | 0 | 0 | 390,000 |
| Livelihood Projects | | | 122,473 | 389,000 | 0 | 102,295 |
| Other Economic Services | 134,711 | | 644,345 | 1,514,252 | | 458,662 |
| Economic Enterprise | 30,552,344 | 38,079,950 | 36,003,631 | 50,265,761 | 45,457,324 | 40,071,802 |
| | | | | | | |
| Total Social Services | 57,147,091 | 63,077,122 | 64,670,542 | 70,156,407 | 82,660,377 | 67,542,308 |
| Education, Culture, Sports, & Manpower Services | 1,969,597 | 2,951,064 | 2,487,551 | 6,046,299 | 0 | 2,690,902 |
| Health Services | 48,570,375 | 52,841,142 | 52,636,363 | 50,647,567 | 67,158,688 | 54,370,827 |
| Hospital Services | 31,702,006 | 35,405,176 | 32,411,601 | 33,538,713 | 45,388,411 | 35,689,181 |
| Other Health Services | 16,868,368 | 17,435,966 | 20,224,762 | 17,108,854 | 21,770,277 | 18,681,645 |
| Social Welfare Services (incl. Pop'n Office) | 6,607,119 | 7,284,916 | 9,546,628 | 9,982,754 | 15,501,689 | 9,784,621 |
| Labor & Employment Services | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| Housing & Community Development Services | | | 3,479,787 | | 0 | 695,957 |
| General Public Services | 168,780,020 | 170,062,831 | 185,465,247 | 217,902,274 | 235,501,938 | 195,542,462 |
| Other Purposes | 54,613,214 | 46,237,882 | 68,479,046 | 38,957,465 | 28,192,412 | 47,296,004 |
| Debt Service | 35,548,286 | 29,044,063 | 26,700,073 | 3,746,809 | 3,423,608 | 19,692,506 |
| Retirement & Other Benefits | 4,360,429 | 5,039,113 | 7,017,998 | 4,820,809 | 6,312,784 | 5,510,227 |
| Misc. Other Purposes (including 5% Calamity Fund) | 14,704,499 | 12,154,705 | 34,760,975 | 30,390,154 | 18,456,020 | 22,093,271 |
| 20% Development Fund | 82,418,723 | 99,980,952 | 84,162,539 | 92,857,184 | 67,002,294 | 85,284,338 |
| Economic Services | 52,150,234 | 68,095,380 | 65,752,870 | 77,649,808 | 24,653,160 | 57,660,290 |
| Social Services | 17,349,203 | 13,178,044 | 2,963,439 | 9,875,903 | 7,225,109 | 10,118,340 |
| General Public Services | 12,919,286 | 18,707,527 | 15,446,231 | 5,331,474 | 35,124,025 | 17,505,709 |

Source: Provincial Treasurer's Office, Davao del Norte

Table No. C-5: Percentage Distribution of LGU Expenditures (%)
Province of Davao del Norte
CYs 2003-2007

| | 2003 | 2004 | 2005 | 2006 | 2007 | Average |
|---|---------------|---------------|---------------|---------------|---------------|----------------|
| Grand Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Total Economic Services | 15.19 | 16.57 | 16.12 | 17.05 | 17.47 | 16 |
| Agriculture/Veterinary Services | 3.95 | 4.24 | 3.93 | 3.10 | 4.34 | 4 |
| Environment/ Natural Resources Services | 1.08 | 1.09 | 0.97 | 0.88 | 0.97 | 1 |
| Cooperative Services | 0.00 | 0.02 | 0.05 | 0.00 | 0.00 | 0 |
| Architectural Services | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Engineering Services | 2.77 | 2.71 | 2.70 | 2.77 | 3.08 | 3 |
| Tourism Projects | 0.22 | 0.15 | 0.40 | 0.00 | 0.00 | 0 |
| Commercial/Industrial Development Projects | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Development Projects | 0.00 | 0.00 | 0.41 | 0.00 | 0.00 | 0 |
| Livelihood Projects | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0 |
| Other Economic Services | 0.03 | 0.00 | 0.13 | 0.30 | 0.00 | 0 |
| Economic Enterprise | 7.14 | 8.37 | 7.50 | 9.93 | 9.08 | 8 |
| Total Social Services | 13.35 | 13.87 | 13.47 | 13.86 | 16.50 | 14 |
| Education, Culture, Sports, & Manpower Services | 0.46 | 0.65 | 0.52 | 1.19 | 0.00 | 1 |
| Health Services | 11.35 | 11.62 | 10.96 | 10.01 | 13.41 | 11 |
| Hospital Services | 7.41 | 7.79 | 6.75 | 6.63 | 9.06 | 8 |
| Other Health Services | 3.94 | 3.83 | 4.21 | 3.38 | 4.35 | 4 |
| Social Welfare Services (incl. Popn Office) | 1.54 | 1.60 | 1.99 | 1.97 | 3.10 | 2 |
| Labor & Employment Services | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Housing & Community Development Services | 0.00 | 0.00 | 0.72 | 0.00 | 0.00 | 0.00 |
| General Public Services | 39.44 | 37.40 | 38.62 | 43.05 | 47.02 | 41 |
| Other Purposes | 12.76 | 10.17 | 14.26 | 7.70 | 5.63 | 10 |
| Debt Service | 8.31 | 6.39 | 5.56 | 0.74 | 0.68 | 4 |
| Retirement and Other Benefits | 1.02 | 1.11 | 1.46 | 0.95 | 1.26 | 1 |
| Misc. Other Purposes (including 5% Calamity Fund) | 3.44 | 2.67 | 7.24 | 6.00 | 3.68 | 5 |

| | | | | | | |
|-------------------------------------|-------|-------|-------|-------|-------|----|
| 20% Development Fund | 19.26 | 21.99 | 17.53 | 18.34 | 13.38 | 18 |
| Economic Services | 12.19 | 14.98 | 13.69 | 15.34 | 4.92 | 12 |
| Social Services | 4.05 | 2.90 | 0.62 | 1.95 | 1.44 | 2 |
| General Public Services | 3.02 | 4.11 | 3.22 | 1.05 | 7.01 | 4 |
| | | | | | | |
| Memo item: | | | | | | |
| Total (regular program plus 20% DF) | 27.37 | 31.55 | 29.81 | 32.39 | 22.39 | 29 |
| Economic Services | 17.41 | 16.77 | 14.08 | 15.81 | 17.95 | 16 |
| Social Services | 42.46 | 41.51 | 41.84 | 44.10 | 54.03 | 45 |
| General Public Services | | | | | | |

Source: Provincial Treasurer's Office, Davao del Norte

LGU Appropriation by Function

Table No. C-6: Growth Rate of :LGU Expenditures (%)
Province of Davao del Norte : CYs 2003-2007

| | 2005 | 2006 | 2007 | Average |
|---|-------------|-------------|--------------|----------|
| Grand Total | 5.60 | 5.41 | -1.05 | 3 |
| Total Economic Services | 2.72 | 11.50 | 1.37 | 5 |
| Agriculture/Veterinary Services | -1.97 | -17.05 | 38.80 | 7 |
| Environment/ Natural Resources Services | -6.08 | -4.39 | 9.04 | 0 |
| Cooperative Services | 232.91 | -100.00 | | 66 |
| Engineering Services | 5.25 | 8.09 | 10.08 | 8 |
| Tourism Projects | 189.51 | -100.00 | | |
| Commercial/Industrial Dev't. Projects | | | | |
| Energy Development Projects | | -100.00 | | |
| Livelihood Projects | | 217.62 | -100.00 | |
| Other Economic Services | | 135.01 | -100.00 | |
| Economic Enterprise | -5.45 | 39.61 | -9.57 | 8 |
| Total Social Services | 2.53 | 8.48 | 17.82 | 10 |
| Education, Culture, Sports, & Manpower Services | -15.71 | 143.06 | -100.00 | 9 |
| Health Services | -0.39 | -3.78 | 32.60 | 9 |
| Hospital Services | -8.46 | 3.48 | 35.33 | 10 |
| Other Health Services | 15.99 | -15.41 | 27.25 | 9 |

| | | | | |
|--|--------|---------|--------|-----|
| Social Welfare Services (incl. Popn Office) | 31.05 | 4.57 | 55.28 | 30 |
| Labor & Employment Services | | | | |
| Housing & Community Development Services | | -100.00 | | |
| General Public Services | 9.06 | 17.49 | 8.08 | 12 |
| Other Purposes | 48.10 | -43.11 | -27.63 | -8 |
| Debt Service | -8.07 | -85.97 | -8.62 | 13 |
| Retirement and Other Benefits | 39.27 | -31.31 | 30.95 | 13 |
| Misc. Other Purposes | 185.99 | -12.57 | -39.27 | 45 |
| 20% Development Fund | -15.82 | 10.33 | -27.84 | -11 |
| Economic Services | -3.44 | 18.09 | -68.25 | -18 |
| Social Services | -77.51 | 233.26 | -26.84 | 43 |
| General Public Services | -17.43 | -65.48 | 558.81 | 159 |

Source: Provincial Treasurer's Office, Davao del Norte

**Table No. C-7: Per Capital LGU Expenditure (in pesos)
Province of Davao del Norte : CYs 2003-2007**

| Province A | 2003 | 2004 | 2005 | 2006 | 2007 | Average |
|--|---------------|---------------|---------------|---------------|---------------|---------------|
| Grand Total | 418.83 | 402.46 | 416.54 | 430.36 | 417.35 | 417.11 |
| Total Economic Services | 63.62 | 66.70 | 67.15 | 73.38 | 72.91 | 68.75 |
| Agriculture/Veterinary Services | 16.55 | 17.05 | 16.39 | 13.32 | 18.13 | 16.29 |
| Environment/ Natural Resources Services | 4.52 | 4.39 | 4.04 | 3.79 | 4.05 | 4.16 |
| Cooperative Services | 0.00 | 0.07 | 0.22 | 0.00 | 0.00 | 0.06 |
| Architectural Services | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Engineering Services | 11.61 | 10.90 | 11.25 | 11.92 | 12.86 | 11.71 |
| Tourism Projects | 0.91 | 0.58 | 1.66 | 0.00 | 0.00 | 0.63 |
| Commercial/Industrial Dev't. Projects | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Development Projects | 0.00 | 0.00 | 1.69 | 0.00 | 0.00 | 0.34 |
| Livelihood Projects | 0.00 | 0.00 | 0.11 | 0.22 | 0.00 | 0.09 |
| Other Economic Services | 0.13 | 0.00 | 0.56 | 1.29 | 0.00 | 0.40 |
| Economic Enterprise | 29.90 | 33.70 | 31.23 | 42.74 | 37.88 | 35.09 |
| | | | | | | |
| Total Social Services | 55.93 | 55.83 | 56.10 | 59.65 | 68.88 | 59.28 |
| Education, Culture, Sports, & Manpower Services | 1.93 | 2.61 | 2.16 | 5.14 | 0.00 | 2.37 |

| | | | | | | |
|--|--------|--------|--------|--------|--------|--------|
| Health Services | 47.53 | 46.77 | 45.66 | 43.06 | 55.96 | 47.80 |
| Hospital Services | 31.03 | 31.34 | 28.12 | 28.51 | 37.82 | 31.36 |
| Other Health Services | 16.51 | 15.43 | 17.54 | 14.55 | 18.14 | 16.43 |
| Social Welfare Services (incl. Popn Office) | 6.47 | 6.45 | 8.28 | 8.49 | 12.92 | 8.52 |
| Labor & Employment Services | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Housing & Community Development Services | 0.00 | 0.00 | 3.02 | 0.00 | 0.00 | 0.60 |
| | | | | | | |
| General Public Services | 165.18 | 150.52 | 160.88 | 185.26 | 196.24 | 171.62 |
| | | | | | | |
| Other Purposes | 53.45 | 40.92 | 59.40 | 33.12 | 23.49 | 42.08 |
| Debt Service | 34.79 | 25.71 | 23.16 | 3.19 | 2.85 | 17.94 |
| Retirement and Other Benefits | 4.27 | 4.46 | 6.09 | 4.10 | 5.26 | 4.83 |
| Misc. Other Purposes | 14.39 | 10.76 | 30.15 | 25.84 | 15.38 | 19.30 |
| | | | | | | |
| 20% Development Fund | 80.66 | 88.49 | 73.01 | 78.95 | 55.83 | 75.39 |
| Economic Services | 51.04 | 60.27 | 57.04 | 66.02 | 20.54 | 50.98 |
| Social Services | 16.98 | 11.66 | 2.57 | 8.40 | 6.02 | 9.13 |
| General Public Services | 12.64 | 16.56 | 13.40 | 4.53 | 29.27 | 15.28 |

Source: Provincial Treasurer's Office, Davao del Norte

**Table No. C-8: Per Capital LGU Expenditure (in 1985 pesos)
Province of Davao del Norte
CYs 2003-2007**

| | 2003 | 2004 | 2005 | 2006 | 2007 | Average |
|---|---------------|---------------|---------------|---------------|---------------|----------------|
| Grand Total | 121.89 | 117.13 | 114.03 | 112.80 | 105.67 | 114.31 |
| Total Economic Services | 18.51 | 19.41 | 18.38 | 19.23 | 18.46 | 18.80 |
| Agriculture/Veterinary Services | 4.82 | 4.96 | 4.49 | 3.49 | 4.59 | 4.47 |
| Environment/ Natural Resources Services | 1.32 | 1.28 | 1.11 | 0.99 | 1.02 | 1.14 |
| Cooperative Services | 0.00 | 0.02 | 0.06 | 0.00 | 0.00 | 0.02 |
| Architectural Services | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Engineering Services | 3.38 | 3.17 | 3.08 | 3.12 | 3.26 | 3.20 |
| Tourism Projects | 0.26 | 0.17 | 0.45 | 0.00 | 0.00 | 0.18 |
| Commercial/Industrial Development Projects | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Development Projects | 0.00 | 0.00 | 0.46 | 0.00 | 0.00 | 0.09 |
| Livelihood Projects | 0.00 | 0.00 | 0.03 | 0.09 | 0.00 | 0.02 |
| Other Economic Services | 0.04 | 0.00 | 0.15 | 0.34 | 0.00 | 0.11 |
| Economic Enterprise | 8.70 | 9.81 | 8.55 | 11.20 | 9.59 | 9.57 |
| Total Social Services | 16.28 | 16.25 | 15.36 | 15.63 | 17.44 | 16.19 |
| Education, Culture, Sports, & Manpower Services | 0.56 | 0.76 | 0.59 | 1.35 | 0.00 | 0.65 |
| Health Services | 13.83 | 13.61 | 12.50 | 11.29 | 14.17 | 13.08 |
| Hospital Services | 9.03 | 9.12 | 7.70 | 7.47 | 9.58 | 8.58 |
| Other Health Services | 4.80 | 4.49 | 4.80 | 3.81 | 4.59 | 4.50 |
| Social Welfare Services (incl. Popn Office) | 1.88 | 1.88 | 2.27 | 2.22 | 3.27 | 2.30 |
| Labor & Employment Services | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Housing & Community Development Services | 0.00 | 0.00 | 0.83 | 0.00 | 0.00 | 0.17 |
| General Public Services | 48.07 | 43.81 | 44.04 | 48.56 | 49.69 | 46.83 |
| Other Purposes | 15.56 | 11.91 | 16.26 | 8.68 | 5.95 | 11.67 |
| Debt Service | 10.13 | 7.48 | 6.34 | 0.83 | 0.72 | 5.10 |
| Retirement and Other Benefits | 1.24 | 1.30 | 1.67 | 1.07 | 1.33 | 1.32 |
| Misc. Other Purposes | 4.19 | 3.13 | 8.25 | 6.77 | 3.89 | 5.25 |
| 20% Development Fund | 23.47 | 25.75 | 19.99 | 20.69 | 14.14 | 20.81 |
| Economic Services | 14.85 | 17.54 | 15.61 | 17.30 | 5.20 | 14.10 |
| Social Services | 4.94 | 3.39 | 0.70 | 2.20 | 1.52 | 2.55 |
| General Public Services | 3.68 | 4.82 | 3.67 | 1.19 | 7.41 | 4.15 |
| GNP IPIN | 343.6 | 343.6 | 365.28 | 381.51 | 394.96 | 365.79 |

Source: Provincial Treasurer's Office, Davao del Norte