

MUNICIPAL COMPREHENSIVE LAND USE PLAN

2010 - 2020

VOLUME 1

MUNICIPAL GOVERNMENT OF LINAPACAN 2010



Republic of the Philippines Province of Palawan Municipality of Linapacan OFFICE OF THE SANGGUNIANG BAYAN

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EXCERPT FROM THE MINUTES OF THE $10^{\rm TH}$ REGULAR SESSION OF THE SANGGUNIANG BAYAN OF LINAPACAN, PALAWAN HELD AT THE MUNICIPAL SESSION HALL ON MONDAY, SEPTEMBER 13, 2010

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Present	

Mun. Vice Mayor, Presiding Officer Hon. Angel M. Rey, SB Member Hon. Emil T. Neri, SB Member Hon. Rafael C. Rodriguez Jr, SB Member Hon. Pablo R. Palanca Jr, SB Member Hon. Freddie O. Tejada, SB Member Hon. Henry A. Liao, SB Member Hon. Darwin T. Alaska, SB Member Hon. Ruin Q. Abin, SB Member Hon. Perlito A. Mendoza,

Hon. Lily P. Fabrigas, SB Member, Liga President

Hon. Gerald A. Oyao, SB Member, SK Mun. Fed. President

Absent:

None

RESOLUTION NO. 2010-030

ADOPTING THE TEN-YEAR COMPREHENSIVE LAND USE PLAN FOR CY 2010-2020 OF THE MUNICIPALITY OF LINAPACAN, PALAWAN

WHEREAS, among the duties and functions of the Sangguniang Bayan as mandated by Republic Act 7160 otherwise known as the Local Government Code of 1991 is to adopt a comprehensive land use plan and to enact an integrated zoning ordinance in consonance with the approved comprehensive land use plan;

WHEREAS, the Municipal Chief Executive thru the office of the Municipal Planning & Development Coordinator submitted to this August Body the proposed ten(10) year comprehensive land use plan for the period 2010-20202;

WHEREAS, the CLUP has been found to be relevant & responsive to the aspirations of the people of Linapacan and in conformity with the existing government guidelines, standards, policies and strategies;

NOW THEREFORE, on motion of Hon. Darwin T. Alaska jointly seconded by Hon. Freddie O. Tejada & Hon. Rafael C. Rodriguez Jr, be it;

RESOLVED, as it is hereby resolved to adopt the Ten-Year Comprehensive Land Use Plan for CY 2010-2020 of the municipality of Linapacan, Palawan, a copy of which is hereto attached and made an integral part hereof;

RESOLVED FURTHER, that a copy of this resolution be forwarded to Hon. Bienvenido R. Cabiguen, Municipal Mayor and copies hereof be furnished the Municipal Planning & Development Office and the Sangguniang Panlalawigan thru the Hon. Vice Mayor & Presiding Officer for their information & appropriate action.

CARRIED UNANIMOUSLY.



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

CARMEN'S. USTARES Secretary to the Sanggunian

ATTESTED:

ANGEL M. REY Municipal Vice Mayor

APPROVED:

BIENVENIDOR. CABIGUEN Municipal Mayor



Republic of the Philippines Province of Palawan Municipality of Linapacan OFFICE OF THE SANGGUNIANG BAYAN

EXCERPT FROM THE MINUTES OF THE 10^{TH} REGULAR SESSION OF THE SANGGUNIANG BAYAN OF LINAPACAN, PALAWAN HELD AT THE MUNICIPAL SESSION HALL ON MONDAY, SEPTEMBER 13, 2010

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Hon. Angel M. Rey,

Hon. Emil T. Neri,

Hon. Rafael C. Rodriguez Jr,

Hon. Pablo R. Palanca Jr,

Hon. Freddie O. Tejada,

Hon. Henry A. Liao,

Hon. Darwin T. Alaska,

Mun. Vice Mayor, Presiding Officer

SB Member

SB Member

SB Member

SB Member

SB Member

Hon. Ruin Q. Abin, SB Member Hon. Perlito A. Mendoza, SB Member

Hon. Lily P. Fabrigas, SB Member, Liga President

Hon. Gerald A. Oyao, SB Member, SK Mun. Fed. President

Absent:

None

RESOLUTION NO. 2010-031

ENACTING THE ZONING ORDINANCE OF THE MUNICIPALITY OF LINAPACAN, PALAWAN FOR CY 2010-2020

WHEREAS, R.A. 7160, otherwise known as the Local Government Code of 1991 (LGC) provides that local government units (LGUs) shall in conformity with existing laws, continue to prepare their respective comprehensive land use plan enacted thru zoning ordinance which shall be the primary & dominant bases for the future use of land resources;

WHEREAS, the Municipal Comprehensive Land Use Plan of Linapacan for CY 2010-2020 has been approved by this August Body thru Sangguniang Bayan Resolution No.2010-031;

WHEREAS, the implementation of the Municipal Comprehensive Land Use Plan for CY 2010-2020 requires thye enactment of regulatory measures to translate the planning goals & objectives into reality;

WHEREAS, the Municipal Zoning Ordinance is one such regulatory measures which is the important tool for the implementation of the Comprehensive Land Use Plan;

NOW THEREFORE, on motion of Hon. Darwin T. Alaska jointly seconded by Hon. Freddie O. Tejada & Hon. Rafael C. Rodriguez, be it;

RESOLVED, as it is hereby resolved to enact the Zoning Ordinance of the municipality of Linapacan, Palawan for CY 2010-2020;

RESOLVED FURTHER, that a copy of this resolution be forwarded to Hon. Bienvenido R. Cabiguen, Municipal Mayor and copies hereof be furnished the Municipal Planning & Development Office and the Sangguniang Panlalawigan thru the Hon. Vice Mayor & Presiding Officer for their information & appropriate action.



CARRIED UNANIMOUSLY.

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

CARMEN SUSTARES
Secretary to the Sanggunian

ATTESTED:

ANGEL M. REY Municipal Vice Mayor

APPROVED:

BIENVENIDO R. CABIGUEN Municipal Mayor



MESSAGE OF THE MAYOR

Comprehensive Land Use planning as management tool of local territories is a function of the LGU pursuant to its status as a political unit. Thus, the Local Government Code of 1991, the legal basis for municipal planning of every municipality, requires that every municipality must formulate its Municipal Comprehensive Land Use Plan which shall serve as the basis in enacting a Municipal Zoning Ordinance.

Traditionally, we view planning, particularly, land use planning as a technocratic activity that must be left to those who are technically capable of doing the job. But as chief executives of our local territories, we must not be too preoccupied with how to produce the plan documents alone. Of equal importance are considerations about why we ought to plan and how our plans will be implemented. We must therefore look at this document, as our bible in development that will guide whatever efforts and undertakings we must do to fully provide a better quality of life to our people.

I would like to commend the Office of the Municipal Planning and Development Coordinator for spearheading the preparation and updating of this Municipal Comprehensive Land Use Plan. I am also grateful to our Sangguniang Bayan for their support and cooperation to my development agenda which is strongly manifested by their enactment of our Municipal Zoning Ordinance. This Municipal Zoning Ordinance embody, among others, the regulations affecting uses allowed or disallowed in each zone, and the conditions and deviations legally allowed from the requirements of the ordinance.

Thank you and mabuhay!

HON. BIENVINIDO K. CABIGUEN
Municipal Mayor



ACKNOWLEDGMENT

The preparation of this Municipal Comprehensive Land Use Plan was made easier by the assistance and guidance of the following agencies, departments and organizations and their staff:

Office of the Municipal Mayor

Office of the Municipal Vice Mayor

Office of the Sangguniang Bayan

Office of the Municipal Budget Officer

Office of the Municipal Engineer

Office of the Municipal Agriculturist

Office of the Municipal Assessor

Office of the Municipal Social Welfare & Development Officer

Office of the Municipal Accountant

The Punong Barangays and members of the Sangguniang Barangay

Special thanks and appreciation is given to our counterparts in the PPDO, the ever capable technical staff of the Plans and Programs Division, headed by Ms. NINFA B. RUBIO, who have always been generous and accommodating to us;

We also would like to convey our sincere appreciation to those whose names may not appear in the list but have contributed in the completion of this document.

CLARO AGANTA

Municipal Planning & Devt. Coord.

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GLOSSARY OF TERMS

Agricultural land. Land devoted to, or suitable for, cultivation of the soil, planting of crops, growing of trees, raising of livestock, poultry, fish or aquaculture production, including the harvesting of such farm products, and other farm activities and practices by persons whether natural or juridical and not classified by law as mineral land, forest land, residential land, commercial land, or industrial land (RA 8435).

Agricultural sector. Engaged in the cultivation of the soil, planting of crops, growing of fruit trees, raising of livestock, poultry, or fish, including the harvesting and marketing of such farm products, and other farm activities and practices.

Agroforestry area. Area allotted for sustainable land management systems characterized by an integrated production of agricultural crops, trees, and forest plants and/or animals and the application of management practices which are compatible with the cultural patterns of the local community (Draft National Land Use Act (NaLUA), NLUC, 1995).

Aquaculture. Fishery operations involving all form of raising and culturing fish and other fishery species in fresh, brackish and marine areas (RA 8550).

Aquatic resources. Includes fish, all other aquatic flora and fauna and other living resources of the aquatic environment, including but not limited to salt and corals (RA 8550).

Critical watershed. Drainage area of a river system that supports existing and proposed hydroelectric power and irrigation works needing immediate rehabilitation because of extensive denudation It is closed for logging until it is fully rehabilitated (PD 705).

Cropland. Land used primarily for the production of adapted, cultivated, close growing fruits or nut crops for harvest, alone or in association with sod crops (NPFP 1992).

Dipterocarp forest. Dominated by trees of the dipterocarp species such as red lauan, white lauaan, tanguile, tiaong, almon, bagtikan, and mayapis of the Philippine mahogany group, apitong and the yakals (PD 705).

Ecotourism. A form of sustainable tourism within a given natural and heritage area, Community participation, protection and management of natural resources culture and indigenous knowledge systems and practices, environmental education and ethics, as well as economic benefits are fostered and pursued for the enrichment of host communities and satisfaction of visitors.

Education, primary. The first stage of compulsory, formal education usually corresponding to the first six or seven elementary grades including the preschool program.

Education, secondary. The stage of formal education after the primary level, usually corresponding to four years of high school.

Education, teritary. Refers to post-secondary schooling, including higher education leading to a degree in a specific profession or discipline.

Fish cage. Stationary or floating enclosures made of nets or screens sewn or fastened together and installed in the water with opening at the surface or covered and held in place by wooden/bamboo posts or various types of anchors and floats (RA 8850).

Fisherles. Activities relating to the act or business of fishing, culturing, preserving, processing, marketing, developing, conserving and managing aquatic resources and fisheries areas including the privilege to fish and take the aquatic resources thereof (RA 8550).

Fishery refuge and sanctuary. A designated area where fishing or other forms of activities, which may damage the ecosystem of the area, is prohibited and where human access maybe restricted (RA 8550).

Fisheries sector. Engaged in the production, growing, harvesting, processing, marketing, developing, conserving, and managing of aquatic resources and fisheries areas (RA 8435).

Fishery products. Includes not only finfish but also mollusk, crustaceans, echinoderms, marine mammals, and all other species of aquatic living resources in any form (RA 8550).

Fishing. Taking of fishery species from their wild state or habitat, with or without fishing vessels (RA 8550).

Fishing, commercial. The taking of fishery species by passive or active gear for trade, business or profit beyond subsistence or sports fishing.

Fishing, municipal. Fishing within the municipal waters using fishing vessels of three gross tons or less, or fishing not requiring the use of fishing vessels (RA 8550).

Fishing boats. Boats permitted to operate for specific duration in areas beyond the municipal waters for demersal or pelagic fishery resources (adopted from RA 8550).

Fishing grounds. Areas in any body of water where fish and other aquatic resources congregate and become target of capture (RA 8435).

Fish pen. Artificial closure constructed within the body of water for culturing fish and fishery/aquatic resources made up of poles closely arranged in an enclosure with wooden materials, screen or nylon to prevent escape of fish (RA 8550).

Food security. Policy objective, plan and strategy of meeting the food requirements of the present and future generation of Filipinos in a substantial quantity, ensuring the availability and affordability of food to all, either through local production or importation, or both, based on the country's existing and potential resource endowment and related national development objectives, strategies and policies. However, sufficiency in rice and white corn should be pursued (RA 8435).

Food self-sufficiency. Ability to meet food requirements, specifically rice and corn, of the country's population through local production (Cabinet Cluster Plenary, 1998).

Forestland. Land of the public domain comprising of public forests, permanent/established forest reserves and forest reservations (DENR DAO No. 15 s 1995 and PD 705) lands of the public domain which have been legally designated for multiple uses such as production forest, agroforestry, rangeland forestland reservations, inland water bodies, protection forest, resettlements and military reservations (NaLUA NLUC 1995).

Forest product. Refers to timber, pulpwood, firewood, bark, tree top, resin, gum, wood, oil, honey, beeswax, nipa, rattan, or other forest growth such as grass, shrub, and flowering plant, the associated water, fish, game, scenic, historical, recreational, and geologic resources in forestlands (PD 705).

Forest reservation. Forestland that have been reserved by the President of the Philippines for any specific purpose or purposes (PD 705).

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Game refuge or bird sanctuary. Refers to forest land designated for the protection of game animals, birds and fish and IS thus closed to hunting and fishing in order that the excess population may flow and restock surrounding areas (PD 705).

Geographic Information System (GIS). A computer-based technology which integrates textual or attribute data and geographic information from various sources into a system which make it possible to store, retrieve, analyze, manipulate, and present such data or information for different users' purposes.

Grassland. Land with natural grass cover without tree or very few isolated trees (NFPP 1993-2022, NLUC, 1992).

Grazing/pasture lands. Portion of the public domain set aside in view of the suitability of topographic and vegetation, for the raising of livestock (DENR DAO No. 15, s 1995 PO 1559, and PD 705).

Grld. An interconnected system in which high voltage, high capacity backbone lines overlay and are connected with network of lower voltages.

Industrial development areas. Areas found suitable for the location of manufacturing/processing or any other industrial establishment where the support facilities required are available or could be feasibly put up. These areas can be in the form of ecozones such as industrial estates, export processing zones, free trade zones, Regional Agri-Industrial Growth Centers, Growth Networks/ Corridors (RGCs/GNs/GCs), and Provincial Industrial Centers, (PICs) and in other feasible areas where infrastructure facilities and services allow economic/industrial activities. Industrial establishments may therefore involve the production or processing of the following. (a) agricultural inputs; (b) agricultural product which include marine and forest production; (c) mineral and natural resources; (d) building materials; (e) consumers goods; (n traditional handicraft; (g) intermediate products/spare parts (component parts): and(h) capital goods such as machinery and equipment (DTI 1998).

Infrastructure. Any structure necessary to support urban development normally provided by government or public utility companies, e.g. roads, water supply, drainage.

Inland fishery. Freshwater fishery and brackish water fishponds (RA 8550).

Irrigable land. Land whose marked characteristics justify the operation of an Irrigation system (RA 8435).

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Irrigated land. Land serviced by natural irrigation or man-made irrigation facilities. These include lands where water is not readily available as existing irrigation facilities need rehabilitation or upgrading or where irrigation water is not available year-round (RA 8435).

Kaingin. A portion of the forest land, whether occupied or not, which is subjected to shifting and/or permanent slash-and-burn cultivation having little or no provision to prevent soil erosion (PD 705).

Lake. Inland body of water, an expanded part of river, a reservoir formed by a dam, or a lake basin intermittently or formally covered by water (RA 8550).

Land reclassification. Process of allocating the desired alienable or disposable land of the public domain to specific uses such as agricultural, residential, industrial or commercial (PPFP Training Program and Learning Materials, NLUC, 1995).

Land use conversion. Process of changing the current use of piece of land into some other use (NaLUA, 1995).

Land use. The manner of utilizing the land, including its allocation, development and management (RA 8435).

Land use plan. A document containing a set of policies embodying the community-desired pattern of population distribution and proposal for the future allocation of land to the various land-using activities in accordance with the social and economic activities of the people. Through maps and similar illustrations, it identifies the location, character, and extent of the areas' land resources to be used for different purposes and includes the process and the criteria employed in the determination of land uses (RA 8435).

Livestock. Farm animals (i.e. cattle, carabao, swine and goat) kept or raised for consumption, work or leisure. In general, poultry is considered a distinct group of farm animals (NSCB TWG on Livestock and Poultry Production, Sept 1998).

Livestock and poultry production. Raising of animals for production of meat, milk, and eggs (NSCB 1998).

Livestock, commercial farm. Livestock with at least 21 head of adults; at least 41 head of young animals (NSCB,1998).

Mangrove. A community of intertidal plants including all species of trees, shrubs, vines and herbs found on coasts, swamps, or border of swamps (RA 8550).

Municipal waters. Include not only streams, lakes, inland bodies of water and tidal waters within the municipality which are not included within the protected areas as defined under RA 7586, but also marine waters included between two lines drawn perpendicular to the general coastline from points where the boundary lines of the municipality touch the sea at low tide and third line parallel with the coastline including offshore islands and 15 kilometers from such coastline Where two municipalities are so situated on opposite shores that there is less than 30 kilometers of marine waters between them, the third line shall be equally distant from opposite shore of the respective municipalities.

National park. Refers to a forest reservation essentially of natural wilderness character where settlement, occupancy or any form of exploitation is prohibited except in conformity with approved management plan and set aside as such exclusively to conserve the area or preserve the scenery, the natural and historic objects, wild animals and plants therein and to provide enjoyment of these features in such areas (RA7586).

Network of Protected Areas for Agriculture Agro-Industrial Development (NPAAAD). Agricultural areas identified by the DA in coordination with NAMRIA to ensure the efficient utilization of land for agriculture and agro-industrial development and promote sustainable growth The NPAAAD covers' (a) all irrigated areas, irrigable lands already covered by irrigation projects with firm funding commitments; all alluvial plain land highly suitable for agriculture whether irrigated or not; (b) agro-industrial croplands or lands presently planted to industrial crops that support the viability of the agricultural infrastructure and (Agro-based enterprises; and (c) highlands, or areas located at an elevation of 500 meters or above and have the potential of growing semi-temperate and high-value crops of which will result in serious environmental degradation, and mangrove cireas and fish sanctuaries (RA 8453).

Population. Total number of individuals in a territory or a locality living at a specific period of time with an agreed definition of residence.

Population growth rate. Rate of increase of population either geometrically or exponentially, depending whether time is regarded as discrete or continuous Normally given as an annual rate.

Port. A shelter harbor where marine terminal facilities are provided, consisting of piers or wharves where ships berth/dock while loading or unloading cargo, transit sheds and other storage areas where ships may discharge incoming cargo, and warehouses where goods may be stored for longer periods while awaiting distribution or loading.

Poultry. A collective term of all the domestic birds of economic service to man; also used to refer to the dressed carcass of birds such as chicken (native, game fowl, layer, and broiler) and ducks (NSCB, 1998).

Production forest. Includes natural and artificially regenerated forests, and areas below 50 percent slope or less than 100 meters (DENR DAO 15,s, 1995); forestland managed primarily for the production of limber and other tree product (Maul, 1995); includes the residual dipterocarp forests, mangrove and pine forests, forests available for logging, rangelands for grazing, areas under the Industrial Forest Plantation management, areas for Community Forestry Program; Integrated Social Forestry areas (agroforestry), watersheds (not yet proclaimed as watershed reserve, multiple-use zones and buffer zones under the NIPAS Act; and other forest land for special land uses (NPFP, 1992).

Production land use. Direct and indirect utilization of land to generate outputs usually from the following activities' agricultural, fish farming or aquaculture, timber or agroforestry, grazing, and pasture, mining, industry and tourism (NPFP, 1992).

Protected landscapes/seascapes. Areas of national significance characterized by the harmonious interaction of man and land while providing opportunities for public enjoyment through recreation and tourism within the normal lifestyle and economic activity of these areas (RA7586).

Protected areas. Identified portion of land and water set aside by reason of their unique physical and biological diversity and protected against human exploitation (DENR DAO 15,s. 1995).

Public lands. Lands that not have been subject to private property rights or subject to sale or other modes of acquisition of concession, under the general laws and are devoted to public use (NaLUA, 1995) Also refers to the national domain not subjected to private rights devoted to public use. In some circles, public lands are habitually used in a limited sense to describe such lands subjected to sale or other modes of acquisition or concession under general laws; although generally synonymous with the lands of the public domains (DENR DAO 15,s. 1995).

Social Infrastructure. Services seeking to improve human capital such as those related to health, nutrition, education and housing.

Strategic Agriculture and Fisheries Development Zones (SAFDZ). Areas within the NPAAAD identified for production, agro-processing and marketing activities to help develop and modernize, with the support of government, the agriculture and fisheries sectors in environmentally and socio-culturally sound manner (RA 8435).

Telecommunications. Any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio optical or any electronic system.

Watershed. Is a land area drained by a stream or fixed body of water and its tributaries having a common outlet for surface run-off (PD 705).

Watershed reservation/watershed forest reserve. A forestland reservation established to protect or improve the conditions of the water yield thereof (PD 705).

Water supply. A general term for the sources of water for the public or private use. Also refers to the furnishing of good potable water under satisfactory pressure for domestic, commercial, industrial and public services, and an adequate quantity of water under reasonable pressure for fire fighting.

Wildlife sanctuary. Comprises an area that assures the natural conditions necessary to protect nationally significant wildlife species, groups of species, biotic communities or physical features of the environment where these may require specific human manipulation for their perpetuation (RA 7586).

I. INTRODUCTION

The MUNICIPAL COMPREHENSIVE LAND USE PLAN OF LINAPACAN comprises policies and broad spatial strategy for the long term development of the municipality. Linapacan is comprised of ten (10) barangays, of which nine (9) are considered rural barangays and one is considered urban due to its function as the town center or the Poblacion of the municipality. As a blueprint for the long-term development of the municipality, it sets out the urban structure for its future development with regard to achieving economic growth and efficiency and healthy environment for living. It also embodies policies for infrastructure and utilities development towards achieving physical and economic integration, as well as, policies for the distribution of population and for the location of employment and other critical economic activities at the municipal scale.

The CLUP has three volumes namely; Volume 1 – covering the Land Use Trends and Plan, Volume 2 – which discusses the results of sectoral studies/analysis that serve as basis in coming up with the Comprehensive Land Use Plan and Volume 3 – which contains the Municipal Zoning Ordinance of the Municipality.

The CLUP of Linapacan covers the period, 2010-2020. The plan is flexible to meet unforeseen changes in the scale and nature of growth of the municipality. Hence, it must be periodically subjected to review to meet new conditions.

1.1 GENERAL ASSUMPTIONS/PRINCIPLES UNDERLYING THE PLAN

The formulation of the plan is based on the following assumptions:

a. Population Growth

Population in the municipality will continue to grow slowly. However, the growth of population along coastal areas if left unmanaged will exert pressure in the fragile marine ecosystem of the island municipality.

b. Municipal Economy

It is assumed that the existing economic structure of the municipality will remain agricultural focusing on fisheries activities. To complement this, conservation and protection of the municipality's coastal environment is addressed through coastal zone development along with eco-tourism in potential areas of Linapacan. Efforts shall be made to provide the necessary infrastructure support upon which development will depend.

c. Socio-economic Development of Calamianes Island

Efforts are being pursued to accelerate the socio-economic development of Calamianes Island as a major island group of the Province. Linapacan is expected to substantially contribute to Calaminianes' overall goal of agritourism. Thus, this Plan considered the areas of complementation with the other towns in Calamianes towards achieving economic and physical integration in the island. It is also assumed that resources to support programs/projects proposed in the CLUPs of Calamianes Towns shall be equitably distributed for these municipalities to realize their individual contributions to its growth.

d. Plan Implementation

It is assumed that the public and private sectors will adhere to the general physical development directions and the proposals in this Plan as sustainable development in the municipality depends on these being done. While detailed feasibility studies are yet to be made on some of the proposed programs, it is assumed that the government (national, provincial and municipal) will ensure that the policies set forth in the Plan are given due consideration and that the financial requirements to implement this Plan will be made available at every phase of its implementation.

Consistent with the Provincial Development & Physical Framework Plan for 2009 – 2014, physical planning in the municipality shall proceed in the context of the following principles toward the attainment of the municipal development vision:

- Food security utilizing the principle of sustainable agricultural development;
- Environmental stability and ecological integrity through effective natural resource management; and
- Balancing demand of land using activities visà-vis preservation of ecosystems;
- Economic and physical integration through balanced dispersion of development areas and appropriate infrastructure systems;
- Equitable access to physical resources and natural resources through just distribution of the municipality's resources and by providing equal opportunities to all residents of the municipality in the use and acquisition of land and other resources;
- Private-public sector partnership by encouraging shared responsibility between the government and the private sector in the development and management of the municipality's physical resources.

1.2 GENERAL OBJECTIVES

The Municipal Comprehensive Land Use Plan provides a rational basis for the development of Linapacan in the next ten (10) years by defining the scope and limits for socio-economic development planning. It embodies a set of policies and a graphic translation of the desired spatial arrangement of land using activities in the municipality. The CLUP seeks to achieve the following main objectives:

- a. Effect a rational distribution of the municipal population;
- b. Facilitate access of the municipal population to basic economic opportunities and social services;
- c. Guide public and private investments to ensure sustainable use of the municipality's natural resources; and
- d. Enhance, safeguard and protect the quality of the environment.

This CLUP, therefore, is designed to show the desired direction and intensity of growth of Linapacan as a whole, as well as, of its barangays covering a long-term period, in this case from 2010 to 2020.

The direction and intensity of growth that the municipality seeks to promote represents a balance between the need for Linapacan to fulfill its functional role with respect to the provincial economy, on one hand, and the need to ensure sustained utilization of the physical resources of the municipality, on the other. Hence, it takes into account and seeks to contribute to the attainment of national development goals and targets.

1.3 ORGANIZATION OF THE PLAN

The CLUP Volume 1 document is composed of six major parts. The first part focuses on the general assumptions/principles underlying the Plan, its general objectives, organization of the CLUP document, and the limitations of the Plan.

The second part provides general information which is a brief description of the municipal history, human resource & physical features of the municipality, physical infrastructure and utilities, social services and economic structure.

The third part focuses on the existing land use and land use trends to include the general and urban land uses, existing use of coastal and marine resources, protected agricultural areas and land supply for urban expansion.

The fourth part of this document describes the municipalities potentials for development specifically; the comparative/competitive advantages and the development issues and concerns pertaining to land use and sectoral aspects.

The fifth part deals with the comprehensive land use plan. It includes discussion on the development vision, goals, objectives and strategies, development thrust/option and the land use plan. The land use policies are discussed in part six of this document while the proposed development programs and projects are presented in part seven of this report.

1.4 LIMITATIONS OF THE PLAN

The formulation of the CLUP is based on technical and sectoral studies supported with maps and other data/information. However, there are limitations identified in the formulation of the CLUP: unavailability of official base and thematic maps and inadequate and/or inconsistent data and information on municipality. In the case of unavailable official maps of Linapacan, information from official maps of the Department of Environment and Natural Resources (DENR) and the Department of Agriculture (DA) – Bureau of Soils and Water Management (BSWM) were digitized to come up with working maps on the municipality. In relation to this, the land area that was adopted for planning purposes was also based on the digitized information which approximates that of the DENR-Land Management Services data. On the inadequate data, appropriate estimation procedures were undertaken to derive the desired indicator/data from the same sources to describe present and project future trends of said indicator.

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II. GENERAL INFORMATION

2.1 Brief History of the Municipality

During the 16th century when the Spanish Government sent missionaries to spread Christianity in the Philippines, one of the places where the missionaries settled was an island between Paragua and Coron. It was

said that when the island, they along the shore, footsteps, which them to a hut woman resided. In her beauty they Reyna Capan, passing of time



they set foot on saw footprints they traced the eventually led where a beautiful appreciation of named the place which at the was changed to

Linapacan. The Spanish missionaries established a settlement, a church and a fort at Elli Island and Sitio Caseledan to protect them from the evading Moros.

Linapacan was then part of coron municipality. Because the seat of government was in Coron, which is about 4-hour sea craft ride transacting business became difficult. Hence, the passage of Republic Act No. 1020 signed into law on January 12, 1954 initiated and filed by Hon. Gaudencio E. Abordo, then representative of the province to the Congress of the Philippines. The law separated Linapacan from Coron and thereby created the municipality of Linapacan, consisting of fifty-two (52) islands and Islets compromising ten (10) barangays, covering an aggregate land area of 17,255 hectares. Of the ten barangays of the municipality four are island barangays, namely: Barangonan, Cabunlawan, Calibangbangan, Decabaitot, Nangalao and Pical, while the barangays of San Miguel, Maroyogroyog, New Colaylayan and San Nicolas are located in the main island of Linapacan.

The name Linapacan was changed into G.E. Abordo who was responsible for the creation of the municipality by virtue of Republic Act 6680 approved on November 4, 1988. However, the Legislative Body of the 1992 Administration resolved to retain the name Linapacan because there was a failure of holding a plebiscite. On May 21, 1994, a plebiscite was done wherein the people of the municipality favored to retain the name Linapacan as its official and legal name.

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2.2 Human Resources

2.2.1 Population Size and Growth

The population of Linapacan in 1990 was about 5,835. It increased to 9,198 in 2000 with an average annual growth rate of 4.6 percent between these periods. In year 2007, the municipality attained a population of 11,688 with an annual growth rate of 3.48 percent from 2000 to 2007. The growth rate in 1990 - 2000 is higher by 1.18 percentage point than the growth rate in 2000-2007.

Going down to barangay level, barangay San Miguel recorded the highest population size of 1,648 (28.24%), 2,564 (27.68%) and 3,638 or 31.13% of the municipal population in 1990, 2000 and 2007. On the other hand, barangay Decabaitot registered the lowest share of municipal population at 174 in 1990 (3%), 412 in 2000 (4.4%) and 497 in 2007 (4.25%).

Table 1: Total Population and Average Annual Growth Rates
1990, 2000 & 2007

	1990	2000	2007
Population	5,835	9,198	11,688
Growth Rate	part of the	4.82	3.48

Source: Municipal Planning & Devt. Office, 2009

2.2.2 Population Projection

Considering the average annual growth rate of 3.48 percent in 2000-2007, the municipality's population will have about 18,234 people in 2020. This is less than 1% of the provincial population which is expected to reach 12 million with an average annual growth rate of 2.42 percent by the year 2020.

Across barangays, by year 2020, barangay San Miguel will be having a total population of 5.675, followed by barangay Maroyog-royog with 2,296. Barangay Decabaitot will still have the lowest share of municipal population with a total of 775 persons.

2.2.5 Urban-Rural Population

The population in Linapacan is predominantly rural, comprising 70 percent of the total population in 2007 Census. The remaining 30% comprised the urban population situated in the central district of barangay San Miguel. Basically, most of the rural population was engaged in agricultural (fishing and farming) activities. Those that were in urban area are mostly in the agriculture sector also.

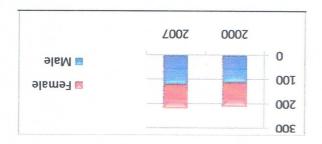




2.2.6 Sex Ratio

The ratio of males to females in a particular population is called its sex ratio. For Linapacan, the sex ratio is 111 males for every 100 females as of 2000, and it increased to 119 males for every 100 females in 2007. The predominance of males gradually decreases with age since females have greater life expectancies.

Figure 3: Male – Female Ratios, 2000 & 2007



2.2.7 Age Structure

More than half (52.28 percent) of the municipality's population belong to the economically productive group (ages 15-64 yrs. old). About 45.4 percent are ages 0-14 yrs. old and the remaining 2.32 percent are ages 65 and over as of 2007.

Table 3: Municipal Population By Age Group & Sex, 2007

9		POPULATION 2007							
Age	Boti	sexes	A	Aale	Fe	male			
Group	Number	% to Total	Number	% to Total	Number	% to Total			
All ages	11,688	100.00	6,144	100.00	5,544	100.00			
under 1	445	3.81	247	4.01	198	3.57			
1-4	1,493	12.77	756	12.31	737	13.29			
5-9	1,798	15.38	902	14.68	896	16.16			
10-14	1,571	13.44	787	12.80	784	14.14			
15-19	1,198	10.25	654	10.65	544	9.81			
20-24	1,022	8.74	529	8.60	493	8.89			
25-29	844	7.22	465	7.57	379	6.84			
30-34	696	5.96	369	6.00	328	5.92			
35-39	628	5.37	366	5.96	262	4.73			
40-44	546	4.67	291	4.74	255	4.60			
45-49	391	3.35	201	3.27	191	3.45			
50-54	332	2.84	182	2.96	150	2.71			
55-59	254	2.17	136	2.21	118	2.13			
60-64	198	1.70	104	1.70	94	1.70			
65-69	127	1.09	74	1.20	53	0.96			
70-74	62	0.53	34	0.56	28	0.51			
75-79	39	0.34	19	0.31	20	0.36			
80 & over	43	0.37	29	0.48	14	0.25			

Source: Municipal Planning & Devt. Office, 2009

2.2.8 Age Dependency Ratio

Age dependency ratio is the number of dependents (aged 0-14 and 65 and over) for every 100 persons in the productive age group (aged 15-64). In 2007, the municipality has about 91 dependents for every 100 persons in the productive age group. Of the 91 dependents, 87 belong to the young ages (under 15) while the remaining 4 consist of the elderly.

2.2.9 Ethnic Composition

In the 2000 census, it was revealed that the municipality has more than 10 dialects spoken by various ethnic groups. Majority comprised Cuyunon, with 60 percent of the total population. This was followed by Cebuano at 10 percent; and Agutaynon which constitutes around 6 percent of the municipality's population.

Table 4: Municipal Population By Mother Tongue & Sex, 2007

Mother Tongue	Both Sexes	Male	Female	%
Agutaynon/Agutayanon		-		toTotal
	667	347	320	6
Akeanon/Aklanon	5		4	0
Bikol/Bicol	88	54	34	1
Bisaya/Binisaya	69	46	23	1
Boholano	80	52	28	1
Cebuano	1,164	651	513	10
Caviteno-Chavacano	4	4	-	0
Cuyunon	6,999	3,600	3,399	60
Hiligaynon, Ilonggo	87	59	28	1
Ilocano	33	11	22	0
llongot	4	4	-	0
Kagayanen	6	4	3	0
Kalamianen	400	184	216	3
Kankanai/Kankaney	9	5	4	0
Kapampangan	3	1	1	0
Karay-a	3	1	1	0
Masbateño/Masbatenon	74	45	29	1
Pangasinan	11	10	1	0
Surigaonon	10	4	6	0
Tagalog	354	198	156	3
Tagbanwa	1,545	825	720	13
Waray	24	10	14	0
Other Local Ethnicity	41	22	19	0
Not Reported	9	6	3	0
Total	11,688	6,144	5,544	100

Source: Municipal Planning & Devt. Office, 2009

2.2.10 Population by Educational Attainment

In 2007, about 68 percent of the household population 5 years old and over in the municipality completed elementary education, and 13 percent reached high school level. While those holding college degrees constituted 1.4 percent of the population. Besides, around 10 percent of the total household population had no grade completed.

Table 5: Municipal Population 5 Years Old & Over By Highest Educational Attainment & Sex, 2007

Highest Educational	M	ale	Fer	Female		Both Sexes	
Attainment	No.	%	No.	%	No.	%	
No Grade completed	499	50.15	496	49.85	995	10.2	
Pre school	112	57.73	82	42.27	194	1.99	
Elementary	3,577	53.80	3,072	46.20	6,649	68.19	
1st-4th grade	1,642	45.90	1,357	44.17	2999		
5th-7th grade	1,935	54.10	1,715	55.83	3650	-	
High School	655	50.08	653	49.92	1,308	13.42	
Undergraduate	391	59.69	417	61.01	808		
Graduate	264	40.31	237	38.97	501		
Post Secondary	69	53.08	61	46.92	130	1.33	
Undergraduate	43	62.32	44	39.54	87		
Graduate	25	36.23	18	60.46	43		
College undergraduate	121	50.63	118	49.37	239	2.45	
Academic degree holder	50	36.23	88	63.77	138	1.42	
Post- Baccalaureate	-	-	-	-	-		
Not Stated	46	47.42	51	52.58	97	0.99	
TOTAL	5,129		4,621		9,750	100.00	

Source: Municipal Planning & Devt. Office, 2009

2.3 Physical Features

2.3.1 Geography, Location and Area

The municipality of Linapacan is located in the northern part of Palawan and its urban center lies about 119 degrees 52 minutes 254 seconds east longitude and 11 degrees 29 minutes 627 seconds north latitude. It is bounded by the Municipality of Coron in the north, Sulu Sea in the east, South China Sea in the west, and on the south by the municipalities of Taytay and El Nido.

It is approximately 165 nautical miles from the City of Puerto Princesa and 56.4 nautical miles from the municipalities of Taytay and El Nido. The municipality is politically subdivided into 10 barangays: 4 are situated in the main island and 6 are island barangays. The municipality has a total land area of 17.255 hectares.

2.3.2 Climate and Rainfall

The municipality of Linapacan has two distinct seasons, wet and dry. The rainy season is from the month of June and it will end in month of November. The month of July and August has received the highest rains. Dry season starts in the month of December and end at the month of May. The driest months are March to April.

2.3.3 Soil Types & Fertility

The soil of Linapacan particularly in the lowland areas has been found to be suitable for rice, root crops and tree crops. Soil in the plains which is made up of alluvial deposits generally lacks internal drainage, while soil of the uplands are residual soils formed from underlying bedrock with excessive external drainage. Other soil properties are swamps, marshes, beach sand, and rough mountain soil.

2.3.4 Topography

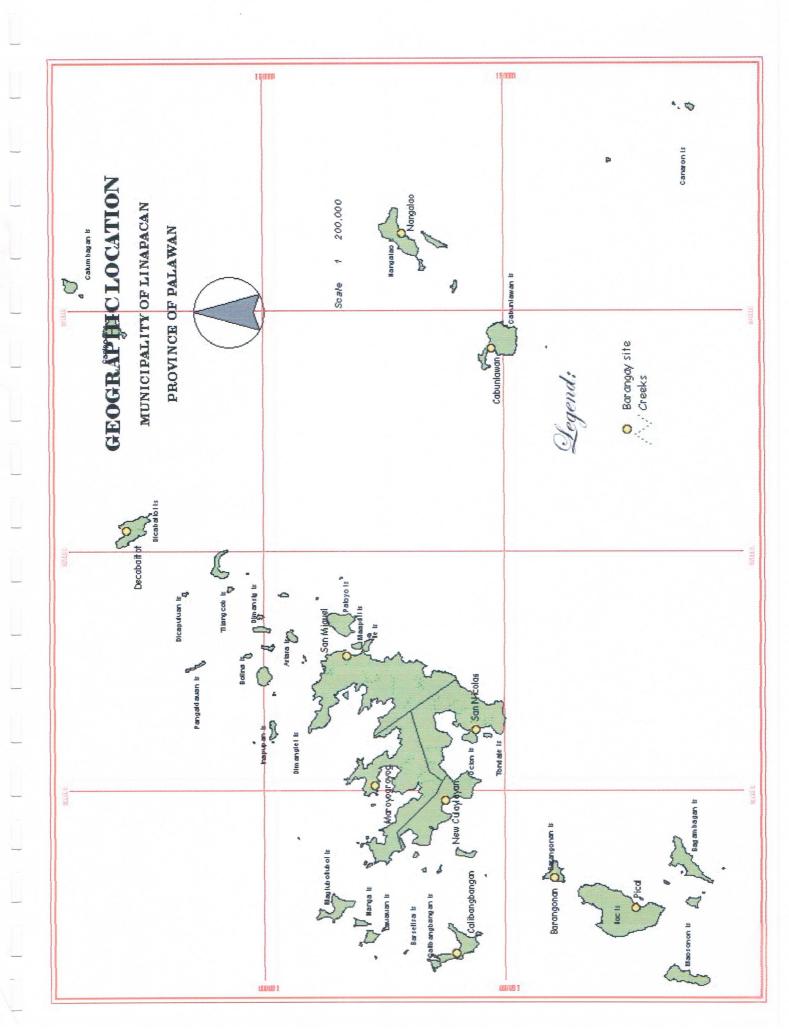
Generally, the terrain of the Municipality of Linapacan is rugged and mountainous with slopes from 0 to 30 percent and above. Flat lands are usually along the coasts, particularly of small islands and islets.

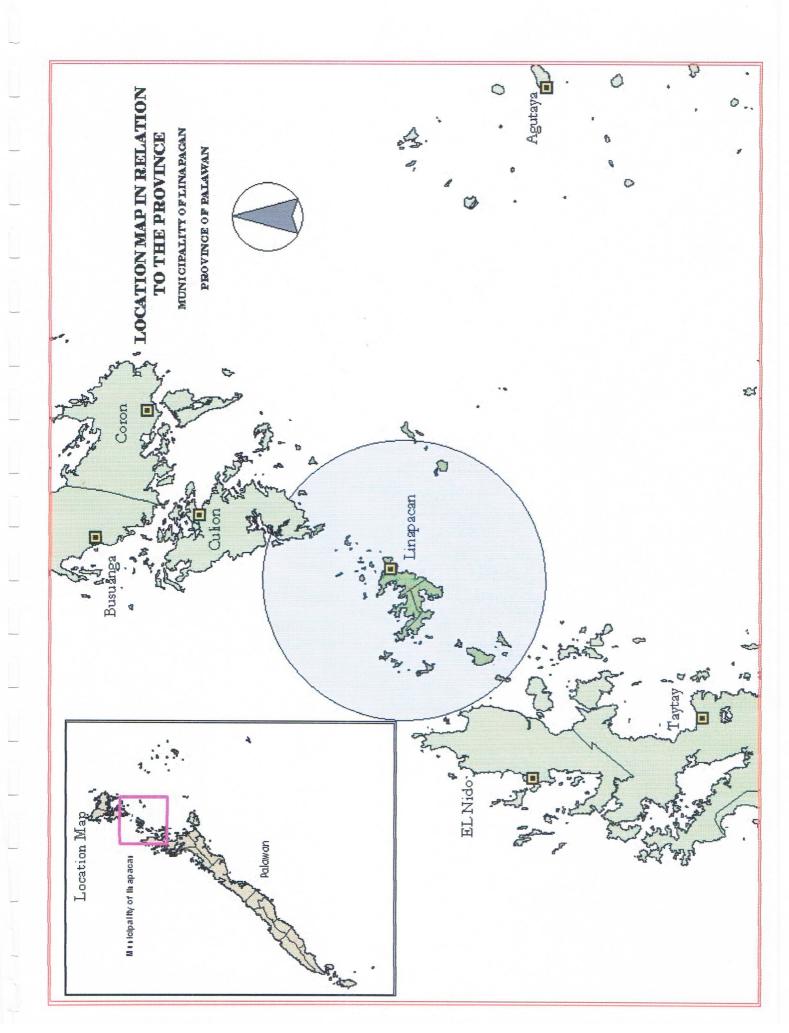
2.3.5 Mineral Resources

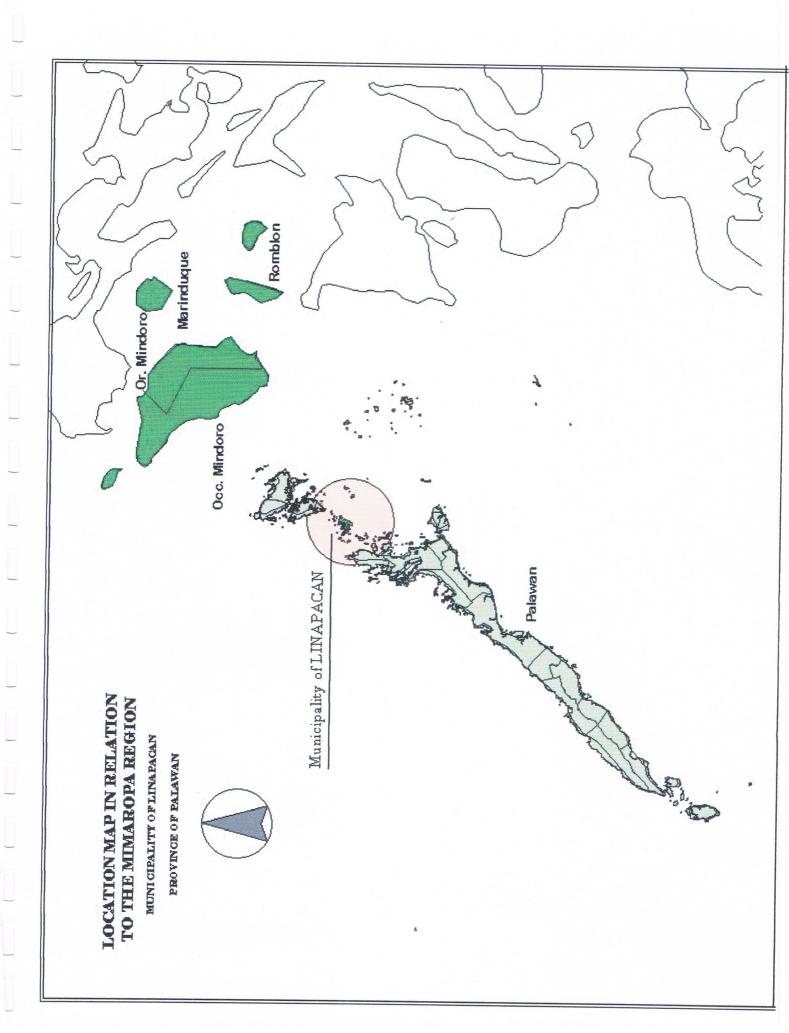
The municipality is well-known for its pebbles deposits.

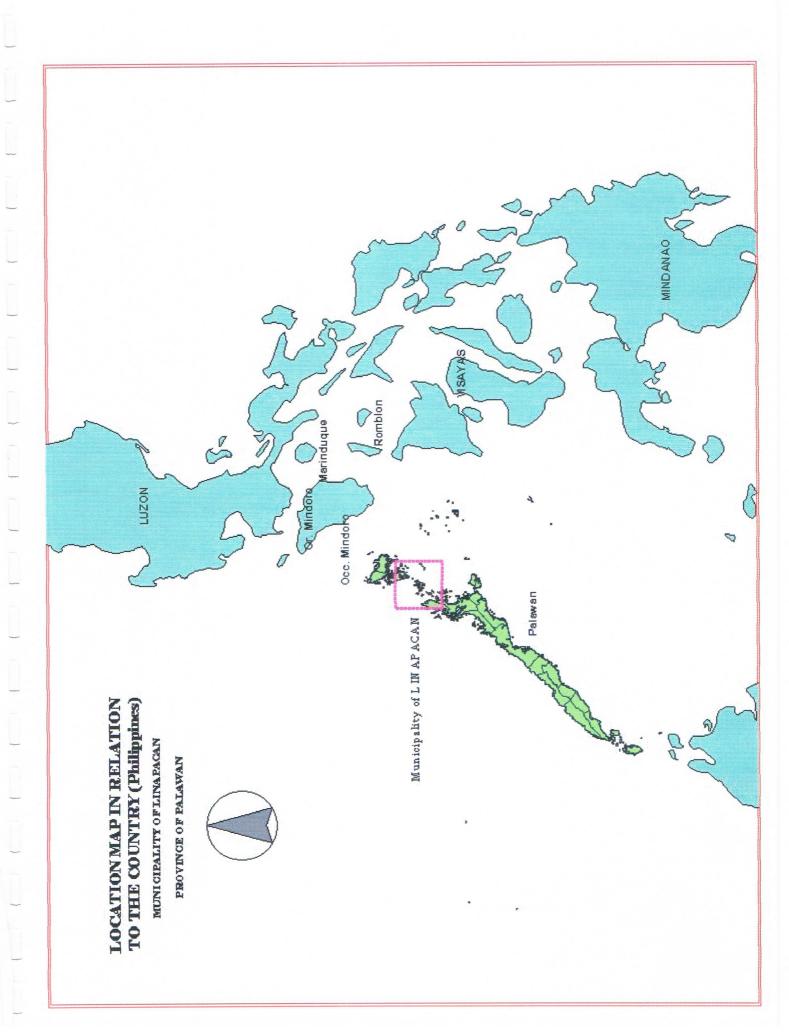
2.3.6 Water Resources

There is no surface water in the municipality. The source of their drinking water is mostly from springs and ground water source.









POLITICAL SUBDIVISION MAP Canaron La 3000 0 3000 6000 Meters (Urban - Rural Barangays) MUNICIPALITY OF LINAPAGAN PROVINCE OF PALAWAN 7: 300,000 Columbagan is Carloo (Carloo Urban Barangays Rural Barangays Decaball of Decabalibilis Thang cob is Bolina is Dignaria is Dicapuluan is Pengald auen is Barangonan Barangonan k

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Note:

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2.4 Infrastructure and Basic Services

Social infrastructures and basic social services are critical factors to consider in planning for the desired settlement pattern and hierarchy that would complement the overall physical and spatial development of the town. These basic amenities are still considered inadequate as gleaned from figures shown under the health, education, social welfare, and infrastructure sectors.

For Linapacan, access to safe water supply is available to only 70 percent (1,580) of the households in 2008. On communication services the municipality has one (1) main post office located in the Poblacion. Linapacan is also served with Cable TV. Globe and Smart Telephone Companies provide telephone services. Sources of news and information are made possible by television, transistor radio and daily papers.

The number of schools needing additional instructional rooms in the elementary level totaled to 4 for school year 2010 - 2011; while in the secondary level, 8 additional classrooms are needed for same school year.

Health personnel and facilities in the municipality are inadequate. At present, there is one RHU in the poblacion to serve the poblacion population including the neighboring barangays. Rural barangays are provided with limited health services such as promotive health care, immunization, nutrition and family planning education through its Barangay Health Stations manned by Barangay Health workers. Tertiary medical care services are provided by the adjoining municipality of Culion through its Culion Sanitarium Hospital and the District Hospital of the municipality of Coron.

In terms of road density, the municipality posted 0.016 km/sq.km. Only 9 barangays were energized in 2008 or 6,031 households served with 7-hours electricity from 5 pm up to 12 midnight.

Housing and Informal Settlements

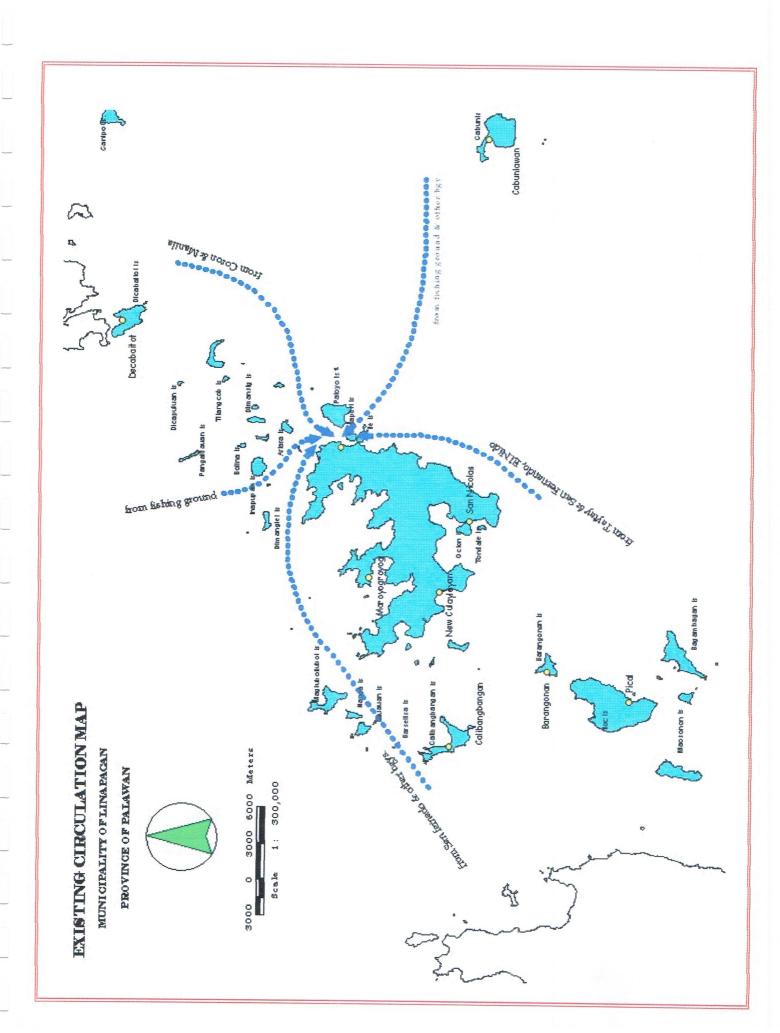
Housing is a permanent shelter for human habitation. Because shelter is necessary to everyone, the problem of providing adequate housing has long been a concern, not only of individuals but of governments as well. Thus, housing is inseparable from the social, economic, and political development of a place.

Linapacan is not spared from problems on informal settlements in danger zones, particularly along coastal zones characterized by

2.5

absence or inadequate basic amenities and facilities to meet basic human needs. Considered displaced and informal, these settlers pose problems that the municipality must address. The influx of seasonal fishermen, mostly from other towns and provinces, in search of better livelihood inevitably resulted to informal settlements and squatting problems in Linapacan specifically in barangay San Miguel and Nangalao.

At present, the demand for decent housing in this municipality remains unmet. The supply of houses has not been increasing and the cost of available housing are unaffordable, especially to low-income families who have no access to financing or credit. The number of doubled-up households in 2008 was estimated at 69 units. There were 106 units made of light and mixed materials and 1 unacceptable housing unit. The total housing backlog of the municipality totaled to 176 units indicating that there were more families living together in one dwelling unit.



PROVINCE OF PALAWAN 1: 300,000 MAP 11 Scale San Nicolas

EXISTING HEALTH FACILITIES

MUNICIPALITY OF LINAPACAN



Legend:

- Rural health unit
- Barangay health station

Calumbagan is

Barangonan Barangonan Is

Slope & Barangay site
Slope & 0.3
8-30
8-50
30-50 Legend:

Canaron Is

EXISTING EDUCATIONAL FACILITIES MUNICIPALITY OF LINAPACAN 3000 6000 Meters PROVINCE OF PALAWAN Nangalao Scale 1: 300,000 MAP 12 0 Elementary school Secondary school Legend: San Nicolas New Culaylayan Barangonan

2.6 The Economic Structure

2.6.1 Revenue Sources

Agriculture remains the largest sector and employer in the municipal economy. Recent estimates indicated that around 87% or 5,545 of the total households are engaged in fishing and farming activities. The services sector or the wage and salary workers constitute 13 percent.

Table 6: Major Agricultural Crops By Area & Production, 2007

		Area		Production		Product Market	
Major Crops	Barangay	Has.	% Total	Volume (MT)	Value (Million Php)	Local	Export
Upland Rice	2 barangays	62	1.32	93.00	1.67	Local	
Cashew	10 barangays	3,345	71.01	1,605.60	44.95		Manila
Coconut	9 barangays	920	19.53	3,220.00	38.64		Manila
Mango	8 barangays	120	2.55	180.00	6.30	Local	Manila
Banana	9 barangays	250	5.31	814.95	12.22	Local	Coron
Vegetable	10 barangays	13.40	0.28	13.94	.14	Local	
T	otal	4,710.4	100	5,836.97	103.05		

Source: Municipal Planning & Devt. Office, 2009

Table 6A: Existing Livestock & Poultry Farms & Production, 2007

		Total Area		Production		D 1
Туре	Barangay	(Has.)	Class	Volume (Heads)	Value (Php M)	Product Market
Livestock						
1. Swine	Municipal Wide	98	Backyard	2,440	3.66	Local
2.Goat	Municipal Wide	56	Backyard	730	.73	Local
3.Cattle	Municipal Wide	344	Backyard	926	14.190	Local
Poultry						
1.Chicken	Municipal Wide	2.0	Backyard	8,400	.67	Local
2. Duck	Municipal Wide	1.00	Backyard	1,300	.06	Local

Source: Municipal Planning & Devt. Office, 2009

2.6.2 Employment & Income

Based on the 2007 NSO Survey Result, there were 6,382 working age population in the municipality. Out of this, almost 65% were in the labor force, of which 98% were employed, higher by 9% compared to the provincial average employment rate of 89%.

The municipality is characterized primarily by an agricultural economy, the 2008 data of the municipal Local Government Performance Monitoring System (LGPMS) shows that employment in agriculture accounted for 5,545 individuals to include those engaged in fishing activities, and those in the government service totaled to 6,382 individuals.

The average family income in the municipality based on the 2007 CBMS Survey results was Php 92,000 per annum.

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III. EXISTING LAND USE AND LAND USE TRENDS

This section presents and describes the various land uses of the municipality and general characteristics of such uses that prevailed in the town. In terms of land use planning, the Housing and Land Use Regulatory Board (HLURB) has classified lands according to uses, viz: urban and general land uses. This classification shall be shown in subsequent discussions.

3.1 Existing Land Uses

The predominant land uses in Linapacan are forest & forest use categories, agricultural uses and residential. Relatively few commercial uses are found in the municipality. Most of the non-residential development is of a relatively low intensity, primarily serving area residents. Because of earlier limited planning guidelines, many older residences are found scattered throughout the municipality, non-contiguous to other developments.

3.1.1 General Land Uses

The general land use plan deals primarily with the non-urban large scale uses such as coastal fisheries, croplands, forests, pasture lands and swamplands with areas occupied by structures treated collectively as "built-up areas".

a. Forest

Forestland of the municipality is estimated at 5,895.15 hectares. These forestlands are generally located in the central part of the municipality. The forest area is further classified into two sub-groups: Production Forest and Protection Forest.

1. Production Forest

Production forests are forestlands within the 18 to 50 percent slope utilized for timber production and non-timber uses. These include the residual dipterocarp forest, range lands for grazing, mangrove areas, industrial forest plantations, agro-forestry and other forestlands. Production forest is also being utilized for cereal production, cultivation of coconuts and cultivation of mixed crops. A greater portion of production forest consists of cultivated area mixed with brushland/grassland. Production forest is estimated at 4,653.71 hectares or almost 79% of the total forestland.

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2. Protection Forest

Total protection forest in the municipality is estimated at 1,241.48 hectares or 21% of the total forestland. Protection Land Use refers to the rehabilitation, conservation, sustainable development. management of the following: areas declared as belonging to the National Integrated Protected Areas (NIPAS) System per R.A. 7586; areas outside the NIPAS but nonetheless require protection because of their distinctive physical features, anthropological significance, historical and educational value, and biological diversity; areas prone to natural hazards; areas covered by Ancestral Domain Claims; and security risk areas.

Protection areas also include the Core Zone identified in the Environmentally Critical Areas Network (ECAN) per R.A. 7611 or the Strategic Environmental Plan for Palawan. ECAN is a graded system of protection and development control over the whole province of Palawan. The delineation of ECAN zones is generally based on elevation, slope and vegetative cover.

The Core Zone is the area of maximum protection and shall be free of human disruption. This includes:

- Areas above 1,000 meters elevation
- Virgin forest or primary growth forest
- Areas with steep gradient, above 50% slope
- Critically threatened/endangered habitats and habitats of rare endangered species or habitat of, Palawan endemic species of flora and fauna
- Other areas which may be defined and designated as such by the PCSD

Exceptions may be granted to traditional uses of tribal communities for minimal and soft impact gathering of forest species for ceremonial and religious purposes.

The area identified under Core Zone is estimated at 728.44 hectares. (Please refer to ECAN Map)

b. Agriculture

Agricultural land use includes use of the land for crop cultivation, livestock & poultry raising, and fishery production, including activities performed in conjunction with such farming operations. The specific roles of agricultural land in physical planning can be described through the various production activities that take place in these areas.

Croplands

Data derived from map analysis employing map overlays of Present Land Use and Vegetation Map of the DA-Bureau of Soil and Water Management DA-BSWM shows that croplands cover an aggregate area of 4,653.71 hectares located in production forests. These areas are generally planted to cashew, mango, banana, coconut and other food crops.

Rice areas merely account for 1.32% of the total cropland or an aggregate total of 62 hectares.

Based on the analysis of the rice production and requirements of the municipal population from 2011 to 2020, the municipality will continue to import rice to feed its growing population.

c. Open Grassland/Pasture

The estimated area for open grassland in the municipality accounts for more or less 848 hectares. This is practically 4.92% of the town's total land area.

d. brushlands

The area categorized as brushland covers almost 3,815 hectares or more than 22% of the total municipal land area.

e. Coastal/Aquaculture areas

Coastal or aquaculture areas include areas utilized for coastal and inland fisheries. They cover areas used for fishponds, fish pens, floating cages and related fisheries projects. Coastal/Aquaculture areas in the municipality

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have an aggregate total of 1,735 hectares or more than 10% of the total municipal land area.

As delineated in the map, fishery production is undertaken mainly in the marine waters of North Bay, Cabunlawan Cove, Northwest Bay, South Bay, Agutayan Bay, Gui Bay, Cutang-cutang Bay, Nasoba, Bulawit Bay and Cidcid Bay.

Actual production is also being undertaken along coastal zones of Bagambagan Island, Inapupan Island, Ariara Island and Pangaldauan Island. Inapupan Island also serves as temporary shelter of fishermen where they docked and moored their fishing boats.

With a coastline that stretches approximately 370 kms and a 15 km.-limit towards the sea of municipal marine waters, municipal marine fishing area is estimated to be 5,500 sq. kms.

Data for the period 2007 shows total fishery production of 1,079 metric tons while total population demand for the same period based on annual per capita consumption of 24.07 kilograms was estimated at 24.07 metric tons showing a surplus of 797.67 metric tons.

Total population projection by 2020 is 18,234 persons. Using the annual per capita consumption of 24.07 kilograms, total annual fishery production required by that time would be about 440 metric tons. This means a need for protection and conservation of fishery production areas to sustain current yields that would address the fishery requirement of the population as well as for other economic activities.

f. <u>Built-up Areas</u>

A Built-up area is defined in the HLRB Guidelines as a contiguous grouping of ten or more structures. Built-up areas therefore are lands which underwent processing, meaning were used as base for dwelling units and infrastructure utilities/facilities. These are areas where concentrations of population are engaged in economic, political, cultural and social activities. In Linapacan, these settlements are generally small agriculture-based communities/barangays with population ranging from 700 to 3,500. The total built-up area of Linapacan as of 2007 was estimated at 90 hectares.

g. Other Uses

i. Dumpsite

The municipal dumpsite which is located in barangay San Miguel occupies a total of 1 hectare. This area will be converted to sanitary landfill during the planning period.

ii. Cemetery

The area currently occupied by the cemetery has total of about 1 hectare, situated in Maapdit Island which is part of barangay San Miguel.

Table 7: Existing General Land Uses

	Category	Area Utilization		
		Area (has.)	% to total	
1	Forest	5,895.18	34.17	
2	Production Forest	4653.708		
3	Protection Forest	1241.476		
4	Agriculture	4,868.37	28.21	
5	Open Grassland/Pasture	848.19	4.92	
6	Brushland	3,815.26	22.11	
7	Coastal/Aquaculture Areas	1,735.00	10.06	
8	Built-up/Settlements	90.00	0.52	
9	Other Uses	3.00	0.02	
10	Cemetery	1.00	-	
-	Dumpsite	2.00		
	Total	17,255.00	100.00	

Source: Municipal Planning & Devt. Office, 2009

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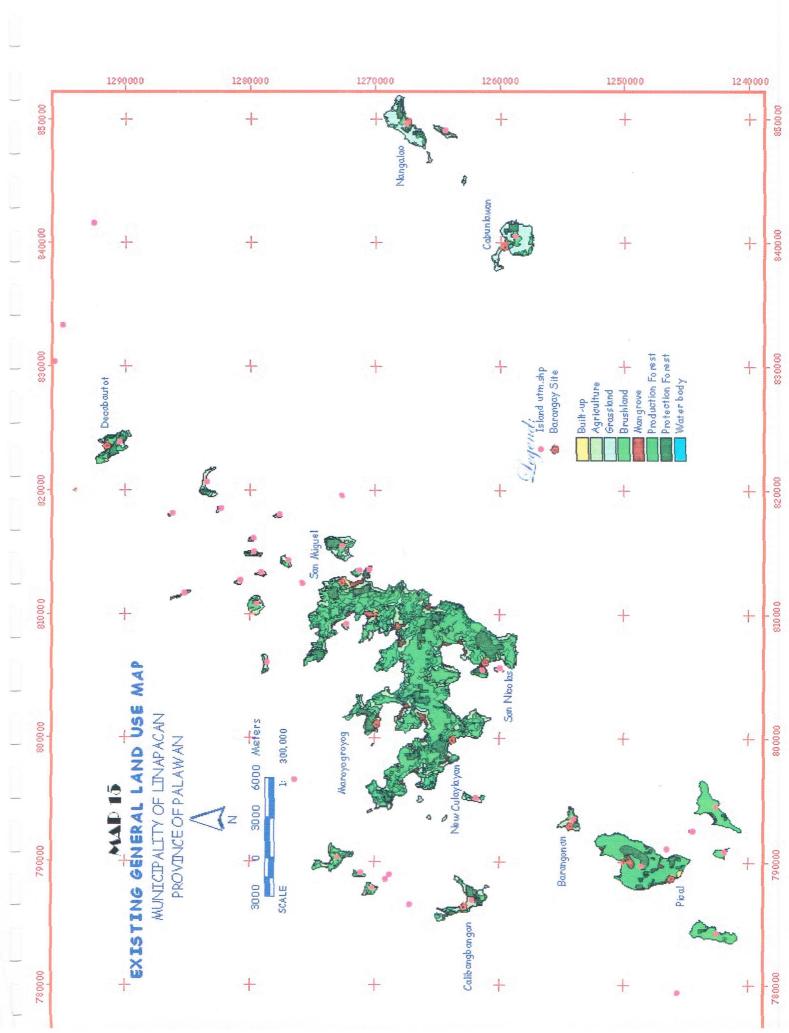
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3.1.2 Urban Land Uses

The existing urban land uses of the municipality presents the detailed classification of land uses in the Poblacion or barangay San Miguel. This barangay is identified as the municipality's urban area based on the new operational definition of urban areas in the Philippines of the National Statistics Office, which defines urban areas as:

- If the barangay has a population of 5,000 or more, then a barangay is considered urban; or
- If the barangay has at least 1 medium or 1 large establishment, a barangay is considered urban; or
- If the barangay has 5 or more small establishments and 5 or more facilities, then a barangay is considered urban.

Barangay San Miguel is the central district of the municipality where the Municipal Hall, Rural Health Unit and commercial establishments are located. It has a total population of 3.368 persons as of 2007.

The urban center of the municipality has a land area of 3,556.4 hectares. This is equivalent to 23% of Linapacan's total land area. The land uses in this urban center is still of mixed use, considering that Linapacan is predominantly an agricultural-base municipality. Thus, area allocated for urban uses is only about 1% of the total land area of barangay San Miguel.

a. Residential

Barangay San Miguel had 647 households as of 2007. Its corresponding household density is 24 hectare per household which is considered less dense based on urban density standard. Most of the residential abodes were constructed within the agricultural premises of the municipality. Majority of these structures were erected in 400-600 square meter lots including the perimeter fence. A total of 16.31 hectares or only 61% of the built-up area of barangay San Miguel is utilized for residential use.

b. Commercial

Commercial establishments occupy an aggregate total of 2 hectares which is roughly equivalent to 7.56% of the total urban area. Most of the commercial establishments are

accessibly located along the main road and within the vicinity of the public market.

c. Institutional

The area devoted for institutional use is approximately 5.11 hectares or less than 20% of the total urban area.

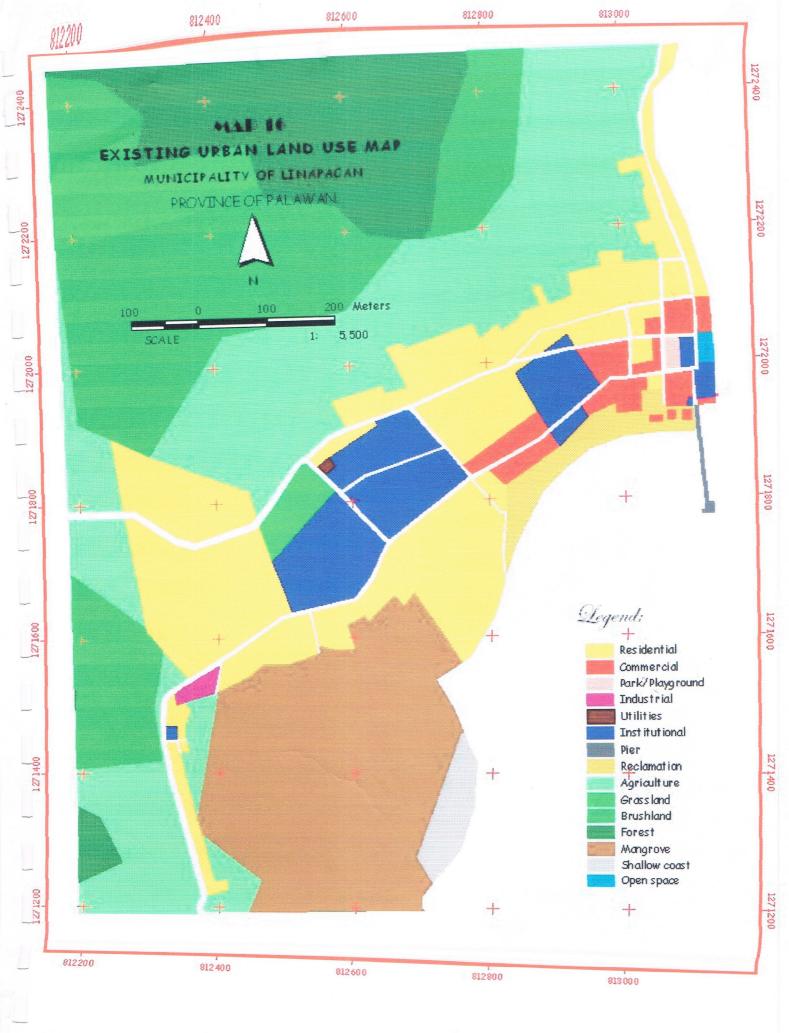
d. Infrastructure and Utilities

The total area occupied for infrastructure and utilities comprise 2.88 hectares or 10.83% of the total urban area. This space is generally occupied by the road network system.

Table 8: Existing Urban Land Uses

	Category	Area Utilization		
		Area (has.)	% to total	
1	Residential	16.31	1.34	
2	Commercial	2.01	7.56	
3	Institutional	5.11	19.22	
4	Parks & Open Spaces	0.10	0.38	
5	Industrial	0.18	0.68	
6	Infrastructure & Utilities	2.88	10.83	
	Total	26.59	100.00	

Source: Municipal Planning & Devt. Office, 2009



3.2 Existing Uses of Coastal and Marine Areas

A coastal zone is defined as the strip of land and its adjacent space (i.e., the water and submerged land) in which the use of the terrestrial ecosystem directly affects the river and the marine ecosystem, and vice versa. This zone represents the interface between land and sea, but concern and interests are concentrated more on the area where human activities are interlinked with both the land and the marine environments.

Coastal zone is legally defined to extend 1 km inland from the shoreline at high tide and seaward areas covering 200 – m isobaths. On the other hand, the Local Government Code (LGC) of 1991 and the Fisheries Code of 1998 state that the marine waters 15 km from the coasts' low water mark are under the local government units (LGUs) while the waters from 15 km to 200 nautical miles belong to the national jurisdiction.

Coastal zones are among the most exploited areas due to their rich resources. Since migration from inland areas to the coast is increasing, there is a sharp conflict between the need for immediate consumption (or use of coastal resources) and the need to ensure the long term supply of these resources.

3.3 Environmental Condition

Linapacan is one of the main clusters of the Calamian Group located at the northern end of Palawan province. The municipality is composed of a conglomeration of islands, islets, coral cays and immersed reef patches. The island municipality possesses beautiful white sandy beaches and lush growth of mangrove and coral reefs account for the high marine fish production of Linapacan. However, the municipality is faced with considerable ecological problems today.

Foremost among these is the encroachment of outsiders on the fish resource of the island municipality. The coral reefs are being decimated by the continued use of destructive fishing methods. In addition Linapacan is being subjected to slash and burn cultivation resulting in the usual soil erosion and siltation and the forest denudation.

3.4 Land Use Trends

Land use trends in the municipality were analyzed using the 1992 and 1998 LANDSAT data of the Palawan Council for Sustainable Development (PCSD). The Landsat data were classified into the following land cover classes: forest cover (primary forest, mossy forest, residual forest, marginal forest, karst/limestone), Mangrove areas, brushland, coconut plantation, grassland, paddy field, cropland, bare/rocky areas, mining area, built-up area, fishpond, lakes/water body.

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The data indicates that forest cover comprised the largest area while paddy fields had the least coverage. The forest cover showed an increasing trend from 1992 to 1998. The prominent land cover changes during this period were grassland to secondary forest, forest to grassland, and grassland to agriculture. These changes can be attributed to natural factors, including extreme climate events, population growth, changes in the economy, occurrence of floods due to heavy rains, cropping trends, indigenous agricultural practices, innovations of new technologies and implementation of government policies, etc. Each of these factors contributes with varying degrees to the observed land cover and land use change.

Table 9 shows the comparative land cover data of the municipality (1992 & 1998) while Map 12 presents the vegetative cover of the municipality.

Table 9: Comparative Land Cover Data, 1992 & 1998

CATEGORY	1992	1998	CHANGE
Forest Cover	4253	5283	1030
Primary Forest	854	2986	2132
Mossy Forest			
Residual Forest	2863	2297	-566
Marginal Forest			
Karst/Limestone	536		-536
Mangrove Areas	2798	375	-2423
Brushland	5	3709	3704
Coconut Plantation		772	772
Other Plantation	6712	2209	-4503
Grassland	5	1379	1374
Paddy Field	3	31	28
Cropland	68	57	-11
Bare/rocky Areas			
Mining Area			
Built-up Area		108	108
Lakes/Water Body			
Clouds/Shadow	13		-13
Total	13857	13923	66

Source: State of the Environment Report, PCSD, 2004

The vast majority of development in the town of Linapacan occurs in a relatively compact manner within the barangays. Practically, barangay San Miguel has the higher settlement concentration which follows street pattern forming more of ribbon type development.

Settlements in rural barangays exhibited similar pattern except that linear development is more distinct and dispersed settlement can be observed outside poblaciones of rural barangays. There are also settlements formed along coastal areas, mostly by migrant fisherfolks and their families.

In terms of built-up areas, residential units dominate build-up structures with minimal commercial establishments that are mostly wholescile and retail stores. These trends are expected to continue during the planning period.

3.5 Environmental Management

The environment of Linapacan, more particularly its coastal and marine resources, is one of its potentials - a potential that when utilized, developed and properly managed will work to its greatest advantage. The forests, the lands, and the seas of Linapacan are key/important elements in the municipality's economic growth. It is critical therefore, that these resources be conserved and protected to assure sustainable development.

The Strategic Environment Plan (SEP) for Palawan as embodied in Republic Act No. 7611 serves as the comprehensive framework for sustainable development of the province. It provides for the establishment of the Environmentally Critical Areas Network (ECAN). ECAN serves as the main strategy of the SEP in pursuance of its objectives.

ECAN is a graded system of protection and development control over the whole province of Palawan. The delineation of ECAN zones is generally based on elevation, slope and vegetative cover. Based on PCSD Resolution No. 05-250, the criteria and allowable uses for the different ECAN zones are as follows:

- a. <u>Core Zone</u>: This is the area of maximum protection and shall be free of human disruption. This includes:
- Areas above 1,000 meters elevation
- Virgin forest or primary growth forest
- Areas with steep gradient, above 50% slope
- Critically threatened/endangered habitats and habitats of rare endangered species or habitat of Palawan endemic species of flora and fauna
- Other areas which may be defined and designated as such by the PCSD

Exceptions may be granted to traditional uses of tribal communities for minimal and soft impact gathering of forest species for ceremonial and religious purposes. The area identified under Core Zone is estimated at 728.44 hectares.

- b. <u>Buffer Zone</u>: This zone is a protective barrier to the Core Zone. It is subdivided into three (3) functional zones: Restricted Use Area, Controlled Use Area and Traditional Use Area.
 - i. <u>Restricted Use Area:</u> This area generally surrounds the core zone and provides protective barrier. This includes the following areas:
 - Areas with elevation ranging from 500 1000 meters
 - Areas with slope ranging from 36% 50%
 - Critical watersheds which were identified, classified or declared as such by the government
 - In areas where none of the above criteria apply, a two-hundred (200)
 meter belt in the mainland and one hundred (100) meter belt in the
 islands surrounding the core zone shall apply
 - Areas with poor, stunted and sparse stands of semi-deciduous forest which has low regeneration capacity
 - Areas designated as biodiversity hotspots and highly threatened by human activities based on scientific studies

Limited and non-consumptive activities which shall include but not limited to gathering of wild honey, almaciga tapping, soft impact recreational activities (hiking, sight-seeing, bird watching, etc.) and research, sustainable activities of IPs and ecosystem restoration or rehabilitation. The area identified under Restricted Use Area is estimated at 1,349.58 hectares.

- ii. <u>Controlled Use Area:</u> This zone encircles and provides the outer barrier to the core and restricted area. This includes the following areas:
 - Areas with elevation ranging from 300 500 meters
 - Areas with slope ranging from 19% 35%
 - Areas within the criteria of restricted use zone where there is a community

Activities allowed in this area include strictly controlled mining and logging, which is not for profit (i.e. communal forest, CBFM, etc.) almaciga tapping, tourism development, research, grazing and gathering of honey, rattan and other minor forest products. The area identified under Controlled Use Area is estimated at 6,388.51 hectares.

- iii. <u>Traditional Use Area:</u> This includes the following areas:
 - Areas above 18% slope but below 300 meters elevation subjected earlier to deforestation but are largely stabilized or suitable to stable upland farming system.
 - Edges of intact forests where traditional land use is already stabilized or is being stabilized.

 Open, brushland or grassland areas that are still classified as timberland or public land with elevation below 300 meters.

Management and control shall be carried out with other supporting programs of the SEP, which may include, but not limited to, Upland Stabilization Program (USP), Catchment Management, Hillside Farming Reforestation, Integrated Social Forestry, Industrial Tree Plantation (ITP) and Community-Based Forest Management (CBFM). The area identified under Traditional Use Area is estimated at 5,705.09 hectares.

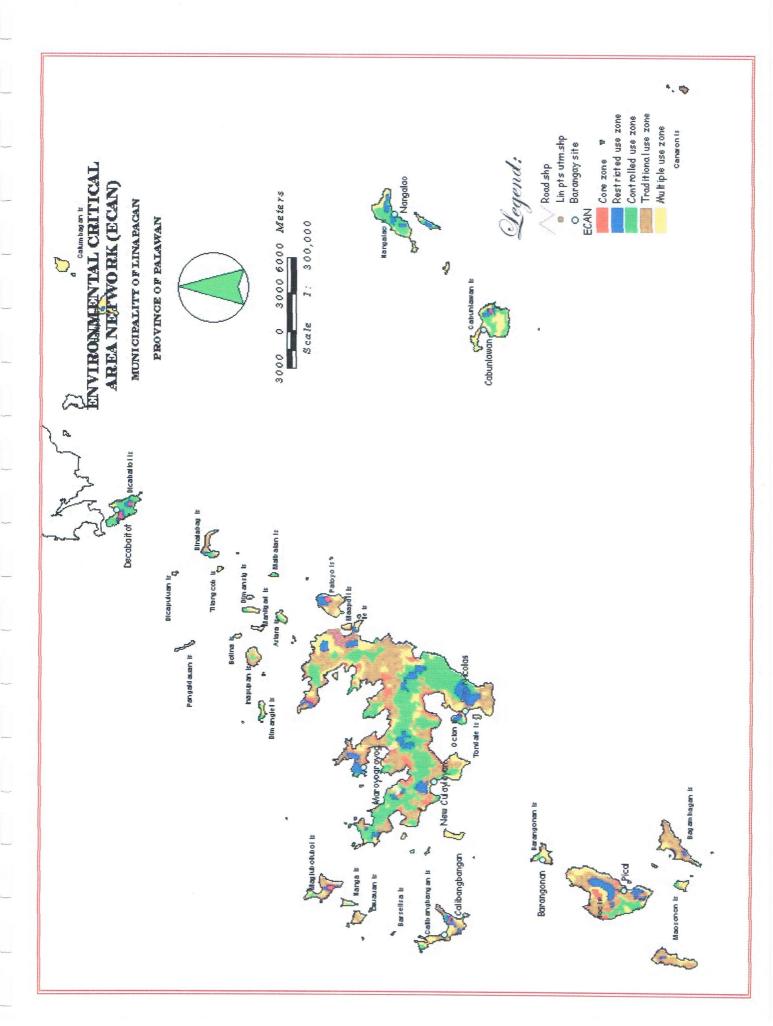
- c. <u>Multiple Use Zone</u>: The multiple use zone shall constitute any of the following:
 - Areas classified as Alienable and Disposable lands
 - Areas with slope 18% and below but not exceeding 300 meters in elevation
 - Built-up or settlement areas located in lowlands (less than 18% slope)

Management and control shall be strictly integrated with the other supporting programs of SEP and shall bein accordance with a land use plan endorsed by the local government and the community concerned for PCSD approval. Uses that maybe allowed include but not limited to, timber extraction with community-based forest management, grazing and pastures, agriculture, infrastructure and industrial development, recreation, education, research and other sustainable human activities. However, certain development endeavors may be subjected to the EIA system and to other pertinent laws and rules. The area identified under Multiple Use Zone is estimated at 3,083.39 hectares.

Table 10: Area of Environmental Critical Areas Network By Category

Category	Area (has.)	% to Total
1. Core Zone	728.44	4.22
2. Restricted Use Zone	1,349.58	7.82
3. Controlled Use Zone	6,388.51	37.02
4. Traditional Use Zone	5,705.09	33.06
5. Multiple Use Zone	3,083.39	17.87
Total	17,255.00	100.00

Source: Municipal Planning & Devt. Office, 2009



NETWORK OF PROTECTED AREA FOR AGRICULTURE L DEVELOPMENT MAP MUNICIPALITY OF LINAPACAN 3000 6000 Meters PROVINCE OF PALAWAN 1: 300,000 MAP 18 Scale 0 O B.A/Compact sustainable communities zone Conditionally Restricted from Conversion Moderately Restricted from Conversion 3000 NON AGRICULTURAL USE BUILT-UP AREAS Legend: NPAA San Nicolas New Culaylayan Barangonan

3.6 Network of Protected Areas for Agriculture and Agri-industrial Development (NPAAAD) & Strategic Agriculture & Fisheries Development Zones

The preservation of agricultural ecosystems must always be an important consideration in areas where fisheries and agricultural development are carried out such as in the municipality of Linapacan. This is to ensure the long-term sustainability of the agricultural sector, in particular, and the environment, in general.

The Agriculture and Fisheries Modernization Act (AFMA) of 1997 is an act prescribing 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, appropriating funds therefore and for other purposes.

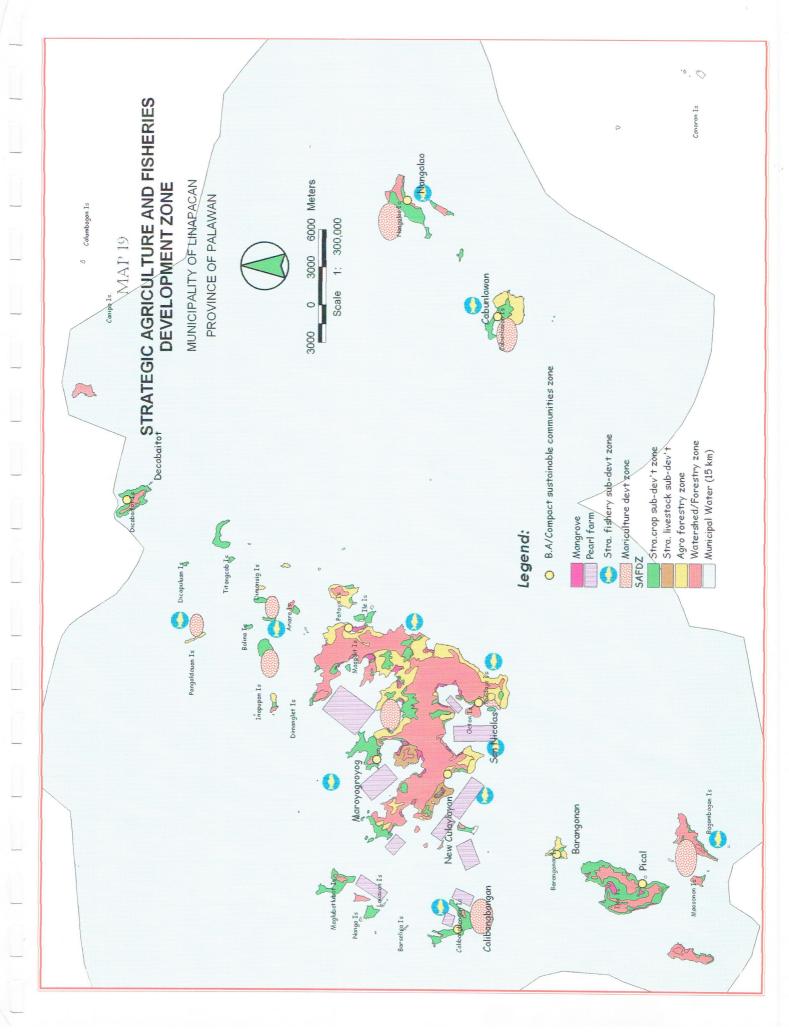
An outstanding feature of AFMA in relation to environmental sustainability is the identification and delineation of the Network of Protected Areas for Agriculture and Agro-Industrial Development (NPAAAD) and the Strategic Agriculture and Fishery Development Zones (SAFDZ).

The NPAAAD and SAFDZ shall serve as basis for the proper planning and strategic agriculture and fishery development and in the identification of suitable crops, livestock, and fishes that can be economically grown and commercially developed for local and international markets, without irreversible environmental and human health problems. The Network of Protected Areas for Agriculture and Agro-Industrial Development (NPAAAD) of the municipality is presented in Map 18 while the Strategic Agriculture and Fishery Development Zone (SAFDZ) Map is presented in Map 19.

Table 11: Area By Classification of the Network of Protected Areas for Agriculture & Agro-Industrial Development

Category	Area (has.)	% to Total
1. Highly Restricted from Conversion	-	-
2. Moderately Restricted from Conversion	672.30	3.90
3. Conditionally Restricted from Conversion	603.98	3.50
4. Non-agricultural use	15,978.72	92.60
TOTAL	17,255.00	100.00

Source: Municipal Planning & Devt. Office, 2009



3.7 Land Supply for Urban Expansion

Land supply is the land area available within a locality for urban expansion. In the case of Linapacan, after deducting the areas considered for protection and conservation (NPAAs, NIPAS, Environmentally Critical Areas -Core Zone, etc.) as well as the built-up areas from its total land area, the land supply for urban expansion is determined at 9,534.82 hectares.

The protected areas which cover the protection forest and ECAN Core Zone have and aggregate total of 1,241.476 hectares when subtracted to the municipality's total land area will result to a gross potential supply of urban land of 16,013.52 hectares.

The Gross Potential Supply for Urban Lands minus the municipality's existing build-up areas which account for 90 hectares, the production forest which totaled 4,653.71 hectares and the coastal/aquaculture areas which totaled to 1,735 hectares gave a Net Buildable Area or the Total Land Supply for Urban Use at 9,534.82 hectares. This area is more than adequate to meet the perceived development in the next 10 years which only requires a minimum of 27 hectares.

Table 12: Estimated Land Supply for Urban Expansion

Category	hectares	% to total
Total Municipal Land Area	17,255.00	
Less:		
1. Protected Areas/Protection Forest	1241.476	
2. Protected Agricultural Areas	-	-
Gross Potential Supply of Urban Land	16,013.52	92.81
Less:		-
1. Existing built-up area	90.00	0.52
2. Production forest	4653.71	26.97
Sub-total	4,743.71	
Total land supply for urban use	11,269.82	65.31

Source: Municipal Estimates, Office of the MPDC

IV. POTENTIALS FOR DEVELOPMENT

4.1 Comparative/Competitive Advantages

4.1.1 The Leading Economic Sector

Fisheries is an important and dominant player in the municipal economy. The fishery sector provides direct and indirect employment to more than 70% of the municipal workforce. Analysis of the existing conditions in the municipality showed that fisheries is the lead economic sector in Linapacan. In 2007, the municipality has a total fish production of 1,079 metric tons. Considering the standard nutritional requirement of 24.07 kilograms per person, it has a production efficiency of 92.32 kilograms or a surplus of 68.25 kilograms per person.

At present there are seven fishing grounds which can be further enhanced to increase the municipality's fish production. With this potential, Linapacan is capable of supplying not only the fish requirements of its neighboring municipalities but also other municipalities in the province and in the region.

4.1.2 <u>Untapped Natural Resources</u>

Although Linapacan is small and mountainous, it has potentials for development. Its white beaches can be developed as tourism areas for marine-related tourism activities. The Elli caves, coral reefs and Spanish fortress in barangay San Miguel are also potential tourist attractions.

4.1.3 Potential Industries

Linapacan is an archipelagic municipality with more or less 3,000 square kilometers of highly productive seas, the municipality is fortunate to have vast fishery resources at its disposal. The rich fishing grounds which provide the municipality with surplus production offer good opportunities for the development of the fishing industry.

Cashew production is another potential industry in the municipality. In 2007, about 3,345 hectares were planted with cashew at an average production of 0.5 ton per hectare or a total production of 1,605 tons.

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4.1.4 The Future Labor Force

The municipality has an almost 90 per cent labor force participation rate. The result of the analysis of existing conditions in the municipality showed that the municipality can provide the needed manpower requirements of the municipal economy. The future labor force can be absorbed by the municipality if its potential industries will be fully developed to generate employment.

4.1.5 Functional Role of the Municipality

The Provincial Development and Physical Framework Plan for 2009 – 2014 envisions Linapacan to become one of the production areas for sustainable resource – based development. The province shall support the promotion of agri-industrial development and fisheries development in the municipality particularly in cashew production and processing, seaweeds culture, fish and other marine products culture. Linapacan is also included as priority investment area for sustainable tourism development in the provincial plan.

4.2 Development Issues and Concerns

As a small island municipality, Linapacan is very dependent upon fisheries natural resources and needs to address urgently their conservation and management. Although the municipality is recognized for its productive marine ecosystem, this is not spared from the same issues and concerns besetting other fishing communities.

4.2.1 Priority Issues and Concerns

Just like any other area, the global concern on climate change is also foreseen as detrimental to the development of the municipality. The following issues were prioritized as needing urgent attention over the next ten years:

- 1. Adapting to climate change and potential rise of sea levels
- 2. Developing natural disaster preparedness of the communities
- 3. Preventing worsening water shortage
- 4. Protecting coastal and marine waters degradation
- 5. Managing and promoting sustainable tourism development

Moreover, Linapacan is undergoing various forms and extent of land degradation. Broadly defined, land degradation is any form of deterioration of the natural potential of land, which in turn leads to ecosystem and people's livelihood being affected. Changing weather patterns, increasing population are some of the factors that give rise to increasing natural resource degradation.

Majority of the people in Linapacan depend a lot on their land and marine resources with many people living in and relying on rural subsistence economy. Due to the relatively small size of Linapacan island, any disturbances to the land can also affect the surrounding marine environment and ultimately on livelihoods of families and communities.

4.2.2 Sectoral Issues and Concerns

1. Need for Increased Household Income and Productivity

Fisheries contribute significantly to the municipal economy and the major source of income and livelihood in Linapacan. However, this municipal fishery production is continuously declining due to habitat degradation and increasing number of people dependent on the coastal and marine waters of the municipality. The decline in municipal fisheries production can be attributed to the following factors:

- a. Continued increase in commercial and municipal fishing efforts due to migration to coastal areas and use of more efficient fishing gears;
- b. Generally slow economic development in the municipality providing few viable other sources of income to municipal fisher families and communities;
- c. Commercial fishing in municipal waters;
- d. Open access to fishery resources;
- e. Loss of naturally productive mangrove habitat to aquaculture and other land uses; and
- f. An overall lack of effective integrated coastal management program.

2. Need for Additional/Enhanced Basic Services

The existing supply of electricity and potable water in the municipality are still very inadequate to meet the current demand. The relatively high percentage of households in

the area not having access to Level III water has been reported to be the cause of high incidence of diarrhea, especially among children. Nutrition among these children is also affected, with poor nutrition levels being reported to be close to 22% of the municipality's child population.

Likewise, the municipality is in need of better roads, boat landings and piers to improve its transportation network. While water transportation is the most common and economical way of linking the municipality with its island barangays and communities, better road network is also critical to provide efficient circulation system within the Poblacion.

1. Social constraints

The municipality's social challenges are comprised of:

- Inadequacy of the existing social infrastructure such as classrooms and health facilities both in terms of quality and quantity, to meet the demands of the current and future population; and
- 2) Difficulty of area coverage and/or health care delivery due to insular characteristic which make it impossible to health personnel to reach some of the barangays and communities of the town particularly during rainy/typhoon season.

3. Physical Constraints

With forest & brushlands comprising about 60% of the total municipal land area, Linapacan has less than 40% of land available for agricultural production. On the other hand, Agricultural production in the coastal areas depends heavily on the condition of the forest areas. The denudation of the forest land poses as a hazard to the agricultural development of the area in the form of floods.

Forest denudation is mainly attributable to the extensive "kaingin" practices of the people in the uplands. To offset the forest denudation problem, there is a need to institute a program that calls for the proper attention directed to the affairs of the hinterland communities.

4. Access to information and Internet communication

Knowledge and awareness expand the choices and options that people have in contributing to sustainable development. The Internet is the best opportunity for Island people to gain information to make wise decisions, and to influence policies on key environmental issues such as climate change. Wide access to inexpensive Internet links for citizens of Linapacan will perhaps provide some of the most positive impacts on sustainable development over the long term. Access to information and exchange of experiences on diverse topics such as health, education, ecommerce, trade, tourism and culture will erode the centuries-old barriers of geographic and economic isolation which have impeded the progress of island municipalities like Linapacan.

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V. THE COMPREHENSIVE LAND USE PLAN

5.1 Development Vision

The development vision of the municipality encompasses all aspects of the municipality's development, addresses improvements in resources of the municipality (natural resources, human resources and material and financial resources) and brings out commitment of the residents for the development of Linapacan. Accordingly, it is envisioned that Linapacan will be developed into: "A major supplier of fish & other marine products in Palawan with sustainable environment and economy supported by a healthy citizenry, an adequate infrastructures, and a committed and responsive leaders."

5.2 Goals, and Objectives

Goals are the translation of an organization's vision into more concrete and measurable terms. They are simply clearer statements of visions that specify the actual accomplishments that need to be achieved if the vision is to become a reality. They are the end toward which design or action tends.

The following major goals constitute the basis for the Land Use Plan and development regulations for the municipality of Linapacan.

Goal	Objectives
To develop a sustainable fishing industry	 1.1 To establish fish sanctuaries and/or marine protected areas 1.2 To strictly implement municipal fishing ordinances 1.3 To promote investment in fishing industry 1.4 To promote grouper and sea cucumber culture
To develop accessible tourism destinations	 1.5 To establish functional trading links 2.1 To identify tourist attractions 2.2 To strengthen the Municipal Tourism Council 2.3 To promote investments in tourism industry

1.1 To provide health & nutrition services 1.2 To provide quality basic education 1.3 To enhance social welfare services 1.4 To develop low-cost housing program 1.5 To provide micro-financing assistance

C. INFRASTRUCTURE	C. INFRASTRUCTURE SECTOR					
Goal	Objectives					
1. To provide efficient and adequate infrastructure facilities and utilities to settlement and	1.1 To improve internal circulation in the municipality 1.2 To improve external accessibility of the municipality 1.3 To provide adequate medical/health facilities 1.4 To provide adequate educational facilities 1.5 To improve accessibility to potable water supply 1.6 To improve power supply 1.7 To establish adequate communication (acilitics)					
production	1.7 To establish adequate communication facilities1.8 To provide adequate welfare facilities					
areas						

D. ENVIRONMENT SEC	CTOR
Goal	Objectives
To conserve and protect the environment	 1.1 To maintain and improve watershed areas & the remaining forest cover 1.2 To protect mangrove forest 1.3 To adopt environment-friendly technologies 1.4 To control forest denudation brought about by extensive kaingin farming 1.5 To establish adequate waste management system

E.	INSTITUTIONAL SE	CTOR						
	Goal Objectives							
		1.1	To	provide	and	develop	adequate	human
1.	To strengthen	a		rces		•	•	
	service delivery 1.2 To provide adequate office facilities and equipment						uipment	
	& capabilities of	1.3	To	institutio	nalize	participa		opment
	various	F	olanı	ning			,	
	government 1.4 To adopt a transparent fiscal management system						system	
	offices 1.5 To implement the executive – legislative agenda					nda		
						ecial bodi		

5.3 Development thrust and strategy

5.3.1 Development Thrust

The development thrust of Linapacan is influenced by the presence of an extensive coastline and marine waters within its territorial jurisdiction. Linapacan is composed of 52 islands and islets and is surrounded by the China and Sulu seas. Due to this physical nature of the municipality, it is essential that coastal area development should be the main development thrust in the overall planning of the island.

In planning the coastal zone as part of the general development of the municipality, the compatibility of land uses within the coastal zone that will include uses both within the innermost (land) and the outermost (water) limits were considered.

Given this development thrust, Linapacan needs to protect its coastal areas and marine waters and provide the required support physical infrastructure and services for its sustainable development. The municipal government should promote and increase the level of awareness of its residents about the value of these precious resources and their benefits if used sustainably, as well as the consequences of destructive activities. When these rich and diverse ecosystems are degraded they no longer posses the same capacity to provide goods and services to the people that so much depend on them. Successful management of coastal and marine resources requires the involvement of all parties — especially the resource users — in policy development, and the planning and management of the coastal areas.

For marine and coastal development to be sustainable various tools and strategies should be formulated. They include MPAs where only non-consumptive uses may be allowed, multiple-use marine conservation areas where multiple uses are balanced through zoning and the establishment of 'no touch' fish sanctuaries, and Integrated Coastal Zone Management tools. The policy, legal and institutional frameworks that apply to coastal areas is a determining factor in whether sustainable development can be achieved.

5.3.2 Development Strategies

To pursue the preferred development thrust of coastal area development and guide the physical development of the municipality the following are the identified spatial strategies:

1. Promotion and Establishment of Mariculture Zones

For a sustainable production of marine fish and other products from the sea, mariculture parks and zones should be established in designated areas. The concept will rationalize the use of marine resources so that marine production would be more sustainable.

The government should regulate the number and sizes of cages and other structures used in the culture of the recommended species. This way, stocking densities can be regulated based on the capacity of the area.

Mariculture zones will be designed to produce fin fishes thru sea cage cultures such as groupers, red snappers, seaweeds farming, and other appropriate marine products.

These zones should be community-based marina type project in municipal waters with the involvement of municipal fisher folks and their organization within the duly designated fishery areas.

2. Promotion of Marine Protected Areas

Coastal dwellers have traditionally depended on coral reefs and associated shallow-water ecosystems. fishers are using a variety of traditional fishing gears, including fish traps, hook and line, set gill nets, and spears. With the exception of fish traps, these gears are generally not destructive to the coral reef environment. However, other methods cause great damage, including blast fishing, poisons and *muro-ami*.

The establishment of Marine Protected Areas in the waters of Linapacan will protect marine biodiversity and will allow the build-up of fish abundance. Marine protected areas should be planned and managed with local participation to sustainably conserve biodiversity and sustain local fisheries and tourism.

These locally managed MPAs will eventually provide small fisherfolk with sustainable means of livelihood, as these areas provide a spill-over effect and replenish municipal waters where local communities can fish.

particularly those within and along coastal zones, should be encouraged to develop adjacent to the already existing built-up areas of the municipality. This would help promote a compact settlement pattern and thus enhance the preservation of limited agricultural lands as well as minimize the need for expensive infrastructure expansions.

5.5.3 Circulation System

The circulation system is a major factor contributing to the formation of the physical structure of the town. It plays both reactive and proactive roles. It is reactive when it merely services development, that is, the circulation system is laid out to service activity areas that are already in existence. On the other hand, the circulation system can be used to induce future development in identified growth areas, in accordance with the preferred spatial strategy.

In comparison with existing conditions, traffic will increase incrementally with the implementation of the development strategy (coastal area development) and the growth of the urban center, requiring improvements to the circulation system. The specific circulation improvements required to support the new development envisioned in this land use plan are described below:

I) Inter-municipal Circulation

Inter-municipal circulation is by means of water transportation particularly in going to Culion, Coron and El Nido. From El Nido, residents take land transportation in going to the provincial capital, Puerto Princesa City. During bad weather, the people from the municipality are sometimes isolated in Linapacan.

II) Poblacion to Other Barangays

Access between the Poblacion and other barangays of the municipality is generally served by water transportation such as motorized boats and bancas.

III) Internal Circulation in Poblacion

San Miguel Circumferential Road provides internal mobility in the Poblacion with the following road sections:

a) Mabini street - serving the southern portion of the urban center;

- b) Mabini extension traversing the southwestern portion of the urban center. Almost 1 kilometer of this road section requires improvement.
- c) Mabini/Luna street serving the northern part of the urban center;
- d) Lagundi street passing through the eastern portion of barangay San Miguel; and
- e) Avila and Cadlaon streets going across the western side of barangay San Miguel.

5.5.4 Development/Production Areas

Development/production areas must be properly located not only to afford convenience and economy to local residents in the procurement of the goods they need. These areas also provide employment to a substantial portion of the labor force. Their location has tremendous impact on the volume and direction of daily traffic flow.

A. Mariculture Development Areas

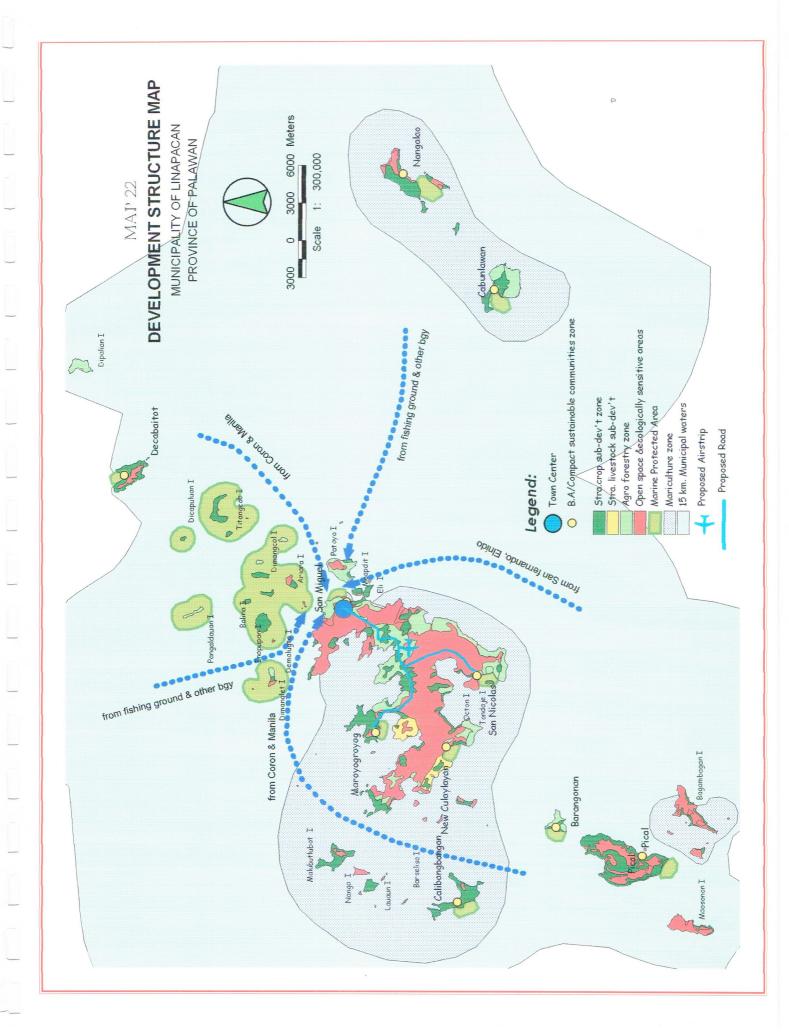
Seaweeds farming, fish culture (fish pens/cages) will be promoted in areas classified as mariculture development zones. This zone also covers the existing pearl farms in the municipality. These areas are generally located in the coastal and marine waters of barrangays Marroyogroyog, Calibangbangan, San Nicolas, Bagambangan Island, Cabunlawan Island and Nangalao Island. Map 23 shows the indicative location of proposed mariculture development areas.

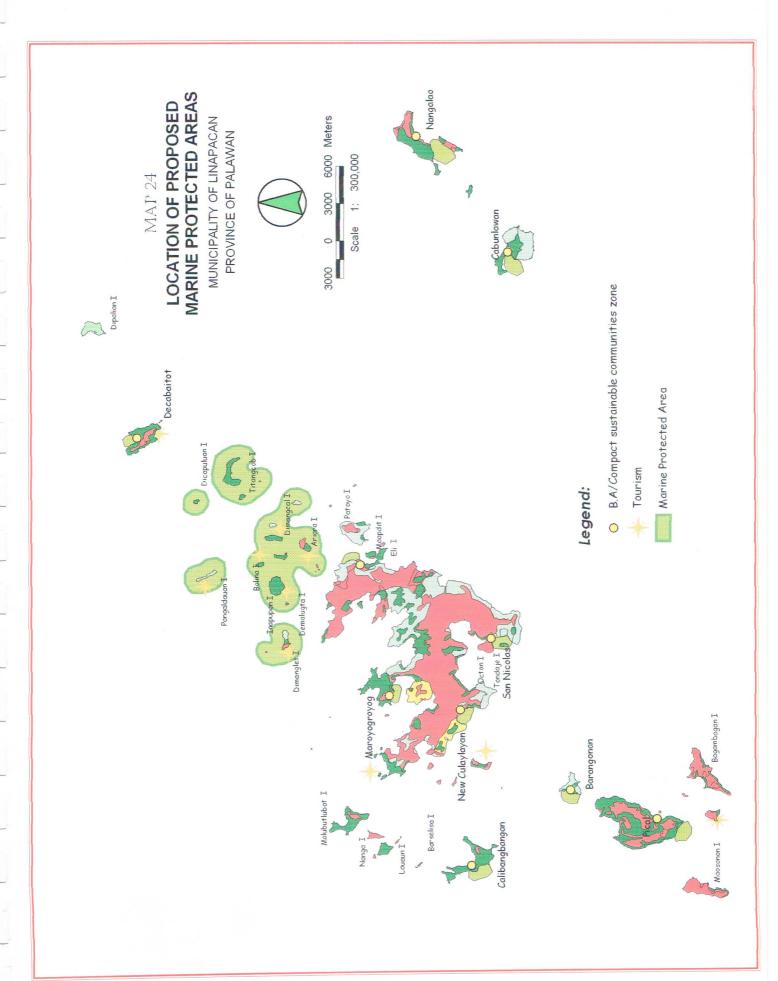
B. Marine Protected Areas

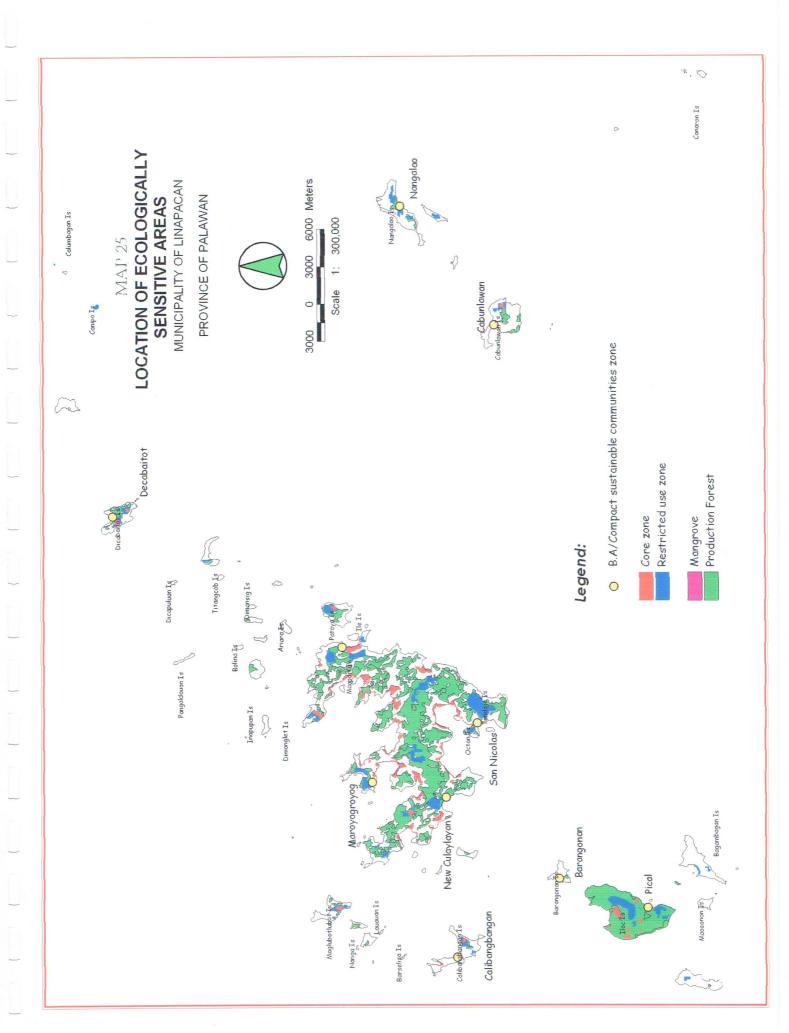
Marine Protected Areas will be established in municipal waters surrounding the small islets of Dimanglet, Inapupan, Bolina, Ariara, Dimansig, Titangcob, Pangaldauan, Dicapuluan, Binalabag and Malbatan. Aside from this, each barangay will also allocate a 2-4 hectare – area as marine protected zone in their respective barangays. This is indicated in map 24.

C. <u>Ecologically Sensitive Areas</u>

This will include areas covered under the Core Zone and Restricted Use under the Environmentally Critical Areas Network (ECAN) as well as the mangrove areas in the municipality as illustrated in map 25.







3. Promotion of Compact Sustainable Communities

New Settlements, more particularly those within and along coastal zones, should be encouraged to develop adjacent to the already existing built-up areas of the municipality. This would help promote a compact settlement pattern and thus enhance the preservation of limited agricultural lands as well as minimize the need for expensive infrastructure expansions. Compact settlement patterns ensure convenient access of the population to basic social services like health and education as well as places for livelihood and employment. It also enhances economic opportunities and allows maximum benefits from public infrastructure investments because of economies of scale and concentration. This municipal Comprehensive Land Use Plan needs to be complemented by more specific guidelines for the planning and design of neighborhoods in terms of: (1) Appropriate Scale; (2) Boundaries; (3) Land Use and Amenities; (4) Security and Safety; (5) Privacy; and (6) Diversity.

4. Protection of Open Spaces and Ecologically Sensitive Areas

In line with the municipality's development objective of sustainable communities, the conservation of public open spaces and ecologically sensitive areas need to be ensured. Areas that demand protection or those that must be kept in their open or natural state, and relatively free from human activities, are those that perform vital ecological functions or pose some form of hazard to human settlements. These include mangroves and areas with slopes of 18% and higher, watersheds, and forests. These protected areas are delineated and reflected in this Plan and in the Zoning Ordinance that need to be strictly enforced.

Map 20 illustrates the conceptual framework of the municipal overall development strategy.

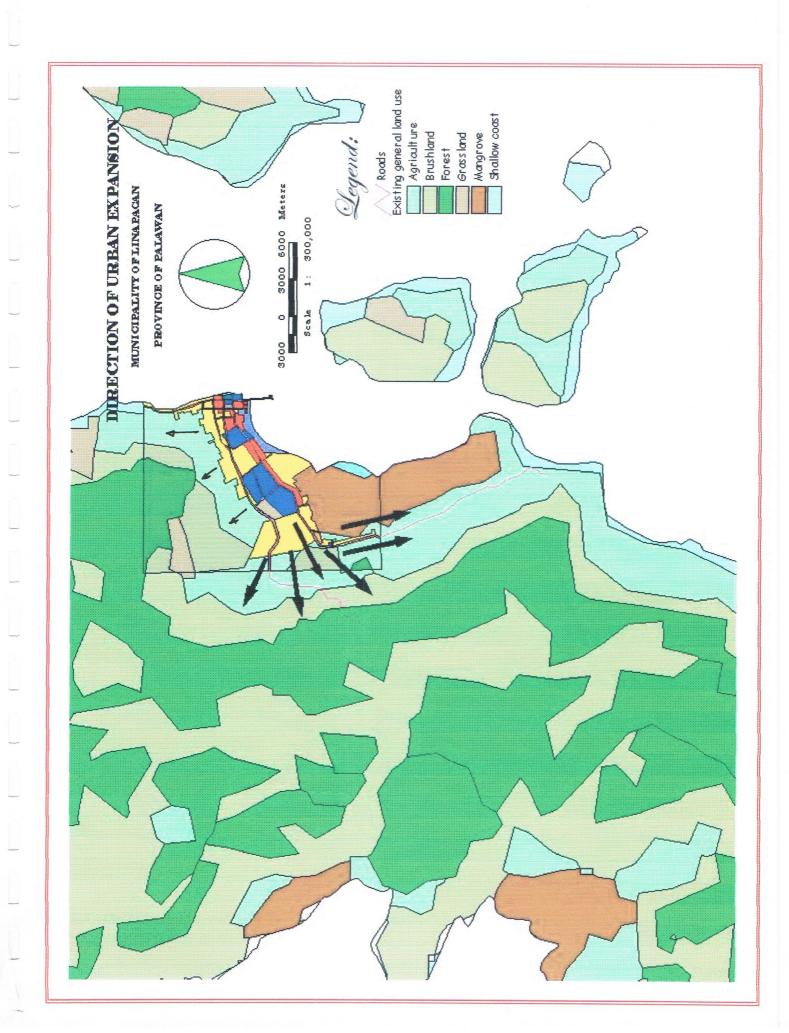
Decabailot MUNICIPAL DEVELOPMENT STRATEGY MUNICIPALITY OF LINAPACAN 3000 6000 Meters PROVINCE OF PALAWAN FRAMEWORK Scale 1: 300,000 MAP 20 0 Copalian I O B.A/Compact sustainable communities zone Open space decologically sensitive areas Stra.crop sub-dev't zone Stra. livestock sub-dev't Marine Protected Area Marine Protected Area Dicapuluan I Agro forestry zone Mariculture zone Legend: New Culaylayar Barangonan

5.4 Pattern of Future Urban Growth/Direction of Urban Expansion

Linapacan is composed of 52 islands and islets and is surrounded by the China and Sulu Seas. The town has a rugged mountainous terrain and about 69% of its land area is with slope 30 per cent and above. Due to these geographical features, the coastal zones are often seen as potential areas for urban expansion.

The development and promotion of mariculture activities in barangays Maroyogroyog and San Nicolas coupled with the presence of higher ranks of urban services in barangay San Miguel will continuously attract population in these barangays compared to other barangays of the municipality. Map 21 illustrates the direction of urban expansion in the built-up areas of the municipality.

The emerging urban form of Linapacan will be influenced by its overall development thrust and its development strategies in pursuit of maximizing the municipality's full potentials. It is foreseen that aside from the expansion of urban growth in the present urban center (barangay San Miguel) a radial type of development is expected to take place with barangay Maroyogroyog as one of the growth nodes to arise within the planning period.



5.5 The Structure Plan

The Structure Plan as illustrated in map 22 depicts the envisioned development concept or the visual outline or shape of the overall physical and development framework of the municipality. It contains the location of the following elements: Town Center, Residential Pattern, Circulation System, Development/Production Areas and Infrastructure Support Services.

5.5.1 Town Center

The town center of Linapacan is properly located in barangay San Miguel. Although barangay San Miguel still lacks the amenities of an urban center due to its agricultural economy and rural setting, the town center is the most important element of the municipal structure. It is the nerve center of the social and political life of Linapacan. It is the location of the municipal hall, the municipal port and the rural health unit. It is the place where the most important functions are located and from where municipal—level services are provided. The town center also performs a symbolic function. It embodies the distinctive image of the town with which residents identify themselves.

5.5.2 Residential Pattern

In practice, the residential pattern is spontaneously formed by private households and real estate developers. This sometimes gives rise to undesirable consequences. Individual households' private housing results in spontaneous settlements whose location and quality are hard to regulate. On the other hand, residential subdivisions are qualitatively better but they have a selective clientele and hence, they tend to create enclaves and exacerbate social segregation.

The primary concern of structuring residential patterns is the health and safety of the residents. This suggests that location of residential areas must be free from natural and man-made hazards to life and limb and must be one with a pleasant and healthful environment. The other thing is how to facilitate access by local residents to places of employment and municipal-level services as well as to community-level services. Presently, large residential lots and underutilized spaces contribute to the already rural nature of the Poblacion and other buil-up areas in the municipality.

A compact residential pattern will be adopted and promoted to ensure convenience of the residents in accessing basic social services like health and education. New Settlements, more

5.5.5 Infrastructure Support and Services

Infrastructure areas provide a vital link between and among the different land use areas as well as support the activities for living and those for making a living. Conceptually, infrastructures that support the former are classified as social infrastructure while those that support the latter are known as economic infrastructures. In reality, however, their functions overlap. Nevertheless, infrastructures may serve any or a combination of the following functions:

- 2) To support the realization of the desired urban form.
- 3) To fill backlogs in existing public services and utilities.
- To upgrade the quality of urban services to national or international standards.
- 5) To ensure access and equalize social and economic opportunities in all areas of the town.
- 6) To reduce vulnerability of people to natural and man-made disasters.
- 7) To support increased economic production or productivity in accordance with growth targets.
- 8) To rehabilitate degraded ecosystems and to maintain environmental integrity.

In addition to transport networks, the demand for other infrastructures and urban services will also increase during the planning period not only due to the increase in population and settlements but also to support the realization of the development strategy and the desired urban form. The required other infrastructure projects are specified as follows:

- I) Transportation Network: Linapacan has poor transportation system. Due to its insular characteristics, the municipality rely more on watercrafts for transportation both for internal and external circulation. For land transportation, the completion of San Miguel-Maroyogroyog Road is a necessity to improve internal circulation in the main island. On the other hand, the establishment of airstrip in the Poblacion will facilitate mobility of people and goods in the area.
- II) Power Supply: The present power supply in the municipality is only capable of providing a 7-hour electricity in the Poblacion. This is detrimental to the socio-economic development of the place. The provision of at least 12-hour electric supply in the Poblacion will be of great help to boost socio-economic development in the area. For the long term, the municipal

- government is proposing the establishment of a solar home system in its rural barangays.
- III) Potable Water Supply: Linapacan has an inadequate supply of potable water, only 70% of the total households have access to potable water supply. To augment its existing water system facilities, the municipal government proposes the improvement of the existing level II system in the Poblacion and the construction of one deep well in every barangay.
- IV) Improvement/expansion of the existing municipal cemetery in barangay San Miguel.
- V) Improvement of the existing Dumpsite into Sanitary Dumpsite in barangay San Miguel.

The location of proposed major infrastructure projects is presented in map 26.



5.5 The Land Use Plan

The future Land use plan of Linapacan specifies the features of the municipality's development thrust and preferred spatial strategy to design a land use pattern that implements the area's vision and goals. It is also guided by the details and policies governing coastal area development, residential development and basic facilities/services, ecological system and economic development and local governance and infrastructure support system.

5.5.1 The Urban Center or the Urban land Uses

Lands are appropriated for future urban and suburban development requiring a range of public services and facilities and including a balance of residential, commercial, industrial, institutional and recreation uses. These areas are expected to accommodate the majority of the growth anticipated to occur in the municipality of Linapacan over the next ten years.

The future urban lands are contiguous to existing developed areas where they can maximize existing investment in water systems, transportation networks, and other public facilities and services. A full range of public infrastructure services including drainage, water, roads and other transportation facilities, police and fire protection, public schools, parks, open space and other services are adequately planned to accommodate the growth as it occurs.

Land for commercial, industrial and institutional uses are planned for to provide for the economic and employment needs of the area and to insure that the area has an adequate tax base. Important natural resources within the urban center should be protected. The proposed urban land uses, are divided into the following categories:

a. Residential Land Requirement

Residential development should not be allowed to occur at rural densities (one unit per hectare or less) that would increase land consumption and prevent a compact level of development such that future residential land requirement was determined using the projected number of households and average residential lot of 300 square meters per household. These considerations yielded a residential land requirement of 34 hectares for the next 10 years or an increase of 18 hectares from the existing residential area. This additional residential land requirement will be taken from existing marginal agricultural areas or idle lands of barangay San Miguel.

b. Commercial Land Requirement

There is no significant increase in commercial area during the past 10 years. Likewise, it can also be noted that at present mixed commercial and residential use still exist in most areas considered as commercial use area. In view of this, commercial land requirement for the next ten years was estimated to be 8% of the proposed urban area or a total of 4 hectares or an increase of 2 hectares from the existing commercial area.

c. Institutional Land Requirement and Open Spaces

The institutional land requirement for the urban center was estimated at 7 hectares or an increase of almost 2 hectares from the existing institutional area. This area will accommodate the additional facilities for health, education, welfare services and protective services. The area for open space allocated in the urban center is only limited to functional open space such as municipal plaza, playgrounds and other similar uses. This area was estimated at 1 hectare or an increase of almost 0.90 hectare from the existing area. This increase is allocated for the proposed expansion or establishment of a new municipal park.

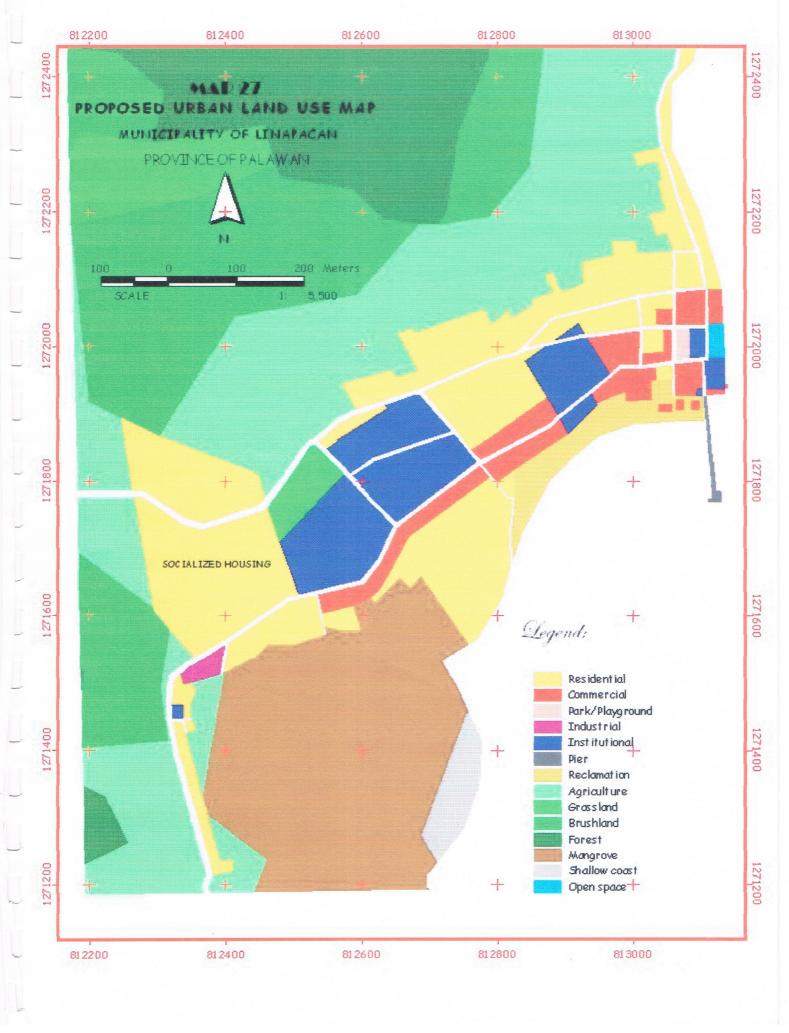
d. Area for Industrial & Infrastructure Purposes

A total of 1 hectare or 2% of the urban area is allocated for industrial use while the proposed area allocated for infrastructure and utilities is estimated at 3 hectares. Most of the area will be utilized for road construction purposes.

Table 13: Area Utilization of Proposed Urban Land Uses
By Category

	Category	Area Utilization		
		Area (has.)	% to total	
1	Residential	16.31	61.34	
2	Commercial	2.01	7.56	
3	Institutional	5.11	19.22	
4	Parks & Open Spaces	0.10	0.38	
5	Industrial	0.18	0.68	
6	Infrastructure & Utilities	2.88	10.83	
	Total	26.59	100.00	

Source: Municipal Estimates



5.5.2 The General Land Uses

The proposed general land use plan is categorized as follows:

a. Forest areas

The existing forest land (protection and production forest) will remain at 5,895.18 hectares.

b. Agricultural areas

The municipality's existing agricultural land will slightly decrease from 4,868.37 hectares to 4,754.37 hectares due to the expansion of the built-up area. The decrease is more or less equivalent to 144 hectares or 3 percent of the existing agricultural area.

c. Open Grassland/Pasture

Linapacan's existing grassland area will maintained at 848.9 hectares within the stipulated timeframe. It will serve as grazing or pasture land to compensate to the expected increase in animal meat demand owing to the locality's steadily growing population.

d. Brush lands

The area categorized as brush land which covers almost 3,815 hectares or more than 22% of the total municipal land area will remain.

e. Coastal/Aquaculture

The 1,735 hectares of coastal/aquaculture areas will be maintained to be utilized for mariculture purposes.

f. Settlement/Built-up Areas

The desired additional land allocated for the proposed expansion of the built-up area is approximately 110 hectares. Hence, Linapacan's built-up area will increase from 90 hectares to 200 hectares. An increase in the coverage of the built-up area automatically signifies a decrease in the hectarage of agricultural land. Simply stated, the municipality's idle agricultural areas will have to be reclassified in order to accommodate the demand for a wider built-up area.

g. Special Uses

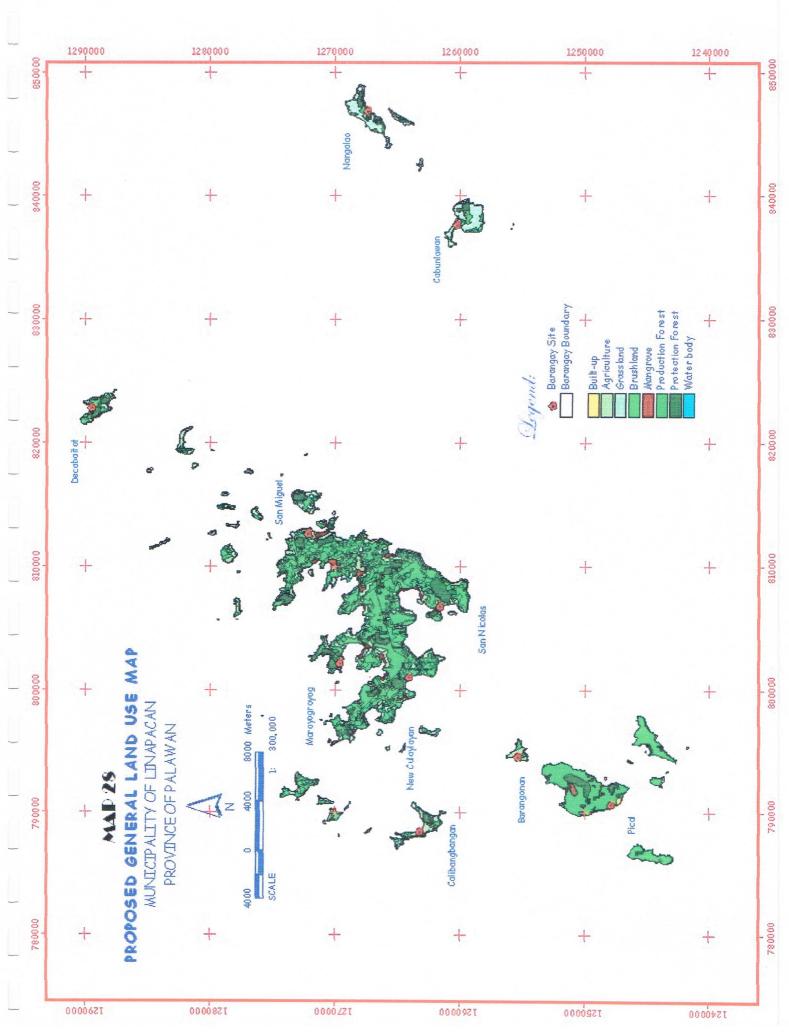
The existing area allocated for public cemetery in barangay San Miguel will be expanded to 4 hectares and the area allocated for dumpsite/sanitary land fill at 3 hectares.

Table 14: Area Utilization of Proposed General Land Uses

By Category

	Category	Area Util	ization
		Area (has.)	% to total
1	Forest	5,895.18	34.17
	Production Forest	4653.708	e Later designates de l'est des unité : «E les d'Après de Production des comment l'es
	Protection Forest	1241.476	
2	Agriculture	4,868.37	28.21
3	Open Grassland/Pasture	848.19	4.92
4	Brushland	3,815.26	22.11
5	Coastal/Aquaculture Areas	1,735.00	10.06
6	Built-up/Settlements	90.00	0.52
7	Other Uses	3.00	0.02
	Cernetery	1.00	MATERIAL MAT
	Dumpsite	2.00	
	Total	17,255.00	100.00

Source: Municipal Estimates



VI. LAND USE POLICIES

6.1 Conservation, Preservation of Coastal and Upland forest, Marine Resource and Inland Water bodies

Mangrove areas shall be preserved and shall include the core zone and restricted use zone under the ECAN as well as the designated Marine Protected Areas. The streams and creeks shall be included as protection sites. The areas shall be free from settlement formation for selected uses. DENR rules and regulations and other laws pertinent to protection of said areas shall be applied with corresponding penalties.

6.2 Local Government shall have the preferential right on the utilization of public lands

The local government shall have the preferential right to utilize islets and other government and public lands within the municipality of Linapacan in accordance with the existing rules and regulations.

6.3 Distribution of community services along hierarchical arrangement

Services that are essential in the day-to-day life of the people, require smaller population threshold, and need fewer people to maintain operation, should be located in residential neighborhoods or barangays. On the other hand, more specialized services that require bigger catchment areas should be in the downtown and in places central to a cluster of barangays.

6.4 Only light industrial activities which are non-hazardous and less poliutive shall be allowed in the municipality

The primary concern of this plan is the quality of human environment. Linapacan shall be maintained as a place conducive for human habitation. Thus, the residents of the municipality should be protected from industries discharging wastes that are hazardous to health.

6.5 Establishment of setbacks and buffer zones

6.5.1 On Marine Zone

Ensure protection of municipal shoreline from settlement encroachment and population discharge from domestic and other sources. Restore aesthetic value of municipal coast at the mainland. Setback prescribed under water code shall be strictly followed in coastal areas surrounding the locality.

6.5.2 On Major Access Road

The same shall be established on both sides of the major access roads provided by the DPWH, to provide room for expansion whenever necessary.

6.6 Promotion and rehabilitation of sustainable environments for settlement's Development

6.6.1 Urban Consolidation

Large spaces in urban areas are still available for expansion. Infilling will be encouraged to maximize existing facilities and services and to increase the level of urbanization. It will tend to increase urbanization level and will maximize utilization of support facilities. Likewise, development cost will be lesser since other functions are already in place.

6.6.2 Land Speculations

Areas identified for further urban development and the emerging of new ones (residential, commercial, industrial, institutional and mixed use development) shall be based on periodic projection (5 years) to minimize land speculations. Hence, this town plan should be updated accordingly.

6.6.3 Mix Use Development

The use of urban lands shall be made more efficient through mix use development and alternative zoning arrangements. Urban center shall optimize the efficient functional role it currently plays. Increasing densities of land for housing and other purposes will be encouraged within the areas' existing and potential utility and carrying capacities.

6.6.6 Prevention of Professional Squatting and Land Grabbing

For the prevention of professional squatting and land grabbing, local legislations must be advocated in accordance with prevailing issuances, and stiffer penalties be recommended for violations.

6.6.7 Disaster Mitigation

Disaster mitigation planning such as the formulation and periodic updating of the Municipal Disaster Management Plan shall be pursued, incorporating therein both structural and non-structural miligating measures against manmade and natural disasters.

6.7 Establishment of Quarry Site

Offshore quarrying was conducted to support construction activities. However, it resulted to destruction of mangrove forest. Proper area for such activities should be carefully identified to allow infrastructure development while maintaining coastal forest with proper regulation.

Table 15. INFRASTRUCTURE PROGRAMS AND PROJECTS

		TIME	FRAME	PROJECT	
PROJECT TITLE	DESCRIPTION	STARTING DATE	COMPLETION DATE	COST (Php M)	
ROADS & BRIDGES DEVELOPMENT 1.1 San Miguel-Maroyogroyog, New Colaylayan, San Miguel Road Project	Construction	2010	2011	48.000	
1.2 Municipal Roads and Bridges	Concreting of existing roads in the Poblacion	January 2011	December 2011	0.150	
1.3 Road & Bridges Maintenance	Regravelling & improvement of existing roads & bridges in the Poblacion	January 2010	December 2020	0.300	
1.4 Multi-Purpose Project	Concreting of pavement in the in the Maroyogroyog	January 2010	December 2010	0.250	
1.5 Timber Inventory Project	Conduct of timber inventory in affected areas for the construction of roads	January 2011	December 2012	0.050	
PORT DEVELOPMENT PROGRAM 2.1 Linapacan Port Project	Improvement	2011	2013	8.000	
2.2 San Nicolas Wharf/Fish Landing	Improvement	January 2012	December 2013	1.500	
2.3 Municipal Port Project	Maintenance	January 2011	December 2013	0.200	
AIRPORT DEVELOPMENT PROGRAM 3.1 Linapacan Airstrip Project	Construction	2014	2016	15.000	
4. POWER DEVELOPMENT PROGRAM 4.1 Power System Project	Improvement /expansion of power system	January 2011	2020	5.000	
4.2 Municipal Electrification Project	Maintenance	January 2010	December	1.500	
4.3 Barangay Electrification Project	Installation of lighting facilities major streets	2011	2020	2.000	
5. WATER SUPPLY DEVELOPMENT 5.1 Water Supply System Project	Upgrading of existing water supply system Maintenance of water supply in the Poblacion	2010	2012 2011	10.000	
6. PUBLIC FACILITIES & OTHER PROJECTS 6.1 Legislative Building 6.2 Public Market Project 6.3 Municipal Building Project	Construction Repair/Improvement Repair/maintenance	January 2011 January 2011 January 2011	December 2012 December 2012 December 2012	0.500	

Table 15. INFRASTRUCTURE PROGRAMS AND PROJECTS

		TIME	FRAME	PROJECT
PROJECT TITLE	DESCRIPTION	STARTING	COMPLETION	COST (Php 44)
		DATE	DATE	(Php M)
6.4 Barangay Hall Project				
6.4.1 Maroyogroyog	Completion	January 2011	December 2012	0.100
6.4.2 Nangalao	Completion		December 2012	
6.4.3 Barangonan	Completion		December 2012	
6.5 PNP Station Project	Completion of PNP Station building	January 2011	December 2012	0.500
7. DRAINAGE SYSTEM PROJECT	Maintenance	January 2012	December 2015	0.300
	Construction	January 2012	December 2015	2.000
	Purchase of 24" Molder	January 2012	December 2015	0.050
8. EROSION CONTROL PROJECT	Riprapping in front of the Municipal Dormitory	January 2012	December 2015	5.000
9. ENGINEERING EQUIPMENT PROJECT	Maintenance of heavy equipment	January 2010	December 2020	0.500
10. COMMUNITY DEVELOPMENT PROGRAM				
10.1 Municipal Gymnasium Project	Improvement	2014	2016	0.500
10.2 Municipal Plaza Project	Improvement	2014	2016	1.000
10.3 Municipal Park Project Phase II	Illumination/Lighting	2014	2016	0.500
11. MUNICIPAL SITE IMPROVEMENT PROJECT	Construction of perimeter fencing	January 2010	2011	10.000
Total Investment Requirement for Infra	astructure Development			120.800

Table 16. ECONOMIC PROGRAMS AND PROJECTS

		TIME	FRAME	PROJECT
PROJECT TITLE	DESCRIPTION	STARTING DATE	COMPLETION DATE	(Php M)
AGRICULTURE, FISHERY AND LIVESTOCK DEVELOPMENT				
1.1 Crop Intensification Program	Intensified crop production	January 2010	December 2010	1.500
1.2 Rural Agricultural Center Project	Maintenance and Improvement in the Poblacion	January 2010	December 2010	0.500
1.3 Cashew Processing Plant Project	Establishment of village level Cashe Processing Plant at Poblacion	July 2011	December 2012	1.500
1.4 Coconut and Cassava Industry Development Projects	Establishment of coconut & Plantation for at least 50 hectares	July 2010	December 2013	2.000
1.5 Seaweeds Farming Project	Identification of expansion areas Expansion of plantation areas	July 2010	December 2012	0.800
1.6 Marine Resources Protection Program 1.6.1 Coastal Law Enforcement	Provision for fuel and development Procurement of speedboat and communication facilities	January 2010 January 2011	December 2010 December 2011	3.000 1.500
1.7 Ice Plant and Cold Storage	Construction	January 2012	2012	8.000
LIVELIHOOD, ECONOMIC ENTERPRISE AND INDUSTRY DEVELOPMENT PROGRAM 2.1 Village Level Resource-Based Development Project	Establishment	2011	2012	10.000
2.2 Cooperative Development Program	Organize & strengthen cooperatives Strengthening the Municipal Cooperative Development	January 2010	December 2011	#####
2.3 Livelihood Assistance	Livelihood Assistance	January 2010	December 2020	1.500
TOURISM DEVELOPMENT PROGRAM 3.1 Tourism Information Center cum Tuluyan Project	Establishment and construction	January 2011	December 2011	1.500
3.2 Tourism Development and Promotion	Development of effective and promotion strategies	January 2010	December 2020	1.500
Total Investment Requ	irement for Economic Sector			33.329

Table 17. ENVIRONMENT PROGRAMS AND PROJECTS

		TIME	PROJECT	
PROJECT TITLE	DESCRIPTION	STARTING DATE	COMPLETION DATE	COST (Php M)
Solid Waste Management Program	Construction and maintenance of solid waste facilities	January 2011	December 2011	1.500
Reforestation Management Program	Tree planting on watershed area	January 2010	December 2020	0.350
ECAN Zoning Development Program	Delineation and management	January 2010	December 2011	0.300
Total Inve	estment Requirement for Environment S	ector		178.450

Table 18. SOCIAL SERVICES PROGRAMS AND PROJECTS

		TIME F	PROJECT	
PROJECT TITLE	DESCRIPTION	STARTING DATE	COMPLETION DATE	(Php M)
HEALTH SERVICES 1. HEALTH AND NUTRITION PROGRAM 1.1 Health Manpower Development Program	Trainings and seminars for health services providers	2011	2014	0.500
1.2 Nutrition Program	Provision of incentives for BEANS and other nutrition services	2011	2014	0.300
	Supplemental Feeding	2010	2020	0.200
1.3 BCCL (Busuanga-Coron-Culion- Linapacan) DHIP		2010	2020	0.250
1.4 Vaccination Program	Provision for vaccine	2010	2020	3.000
1.5 Kilusang Ligtas Malaria Program	Provision of anti-malarial drugs and esstential supplies	2010	2020	0.500
BARANGAY HEALTH STATION PROGRAM 2.1 Barangay Health Station	Construction of BHS in the bgys of Cabunlawan, Decabaitot, Calibangbangan, Pical, Maroyogroyog, New Colaylayan, & San Nicolas	2012	2018	1.440
2.2 Equipment Project	Provision of BHS Equipment	January 2012	December 2012	1.000
3. COMMUNICIATION & TRANSPORTATION FACILITIES PROJECTS 3.1 Sea Ambulance Project	Provision of 1 unit of sea ambulance	January 2012	December 2012	0.500
3.2 Land Ambulance Project	Provision of 1 unit of sea ambulance	January 2012	December 2012	0.600
3.3 Radio Communiciation Project	Procurement of 2 Way Radio (10 sht.) with Antenna	January 2012	December 2012	0.300
EDUCATION AND MANPOWER DEVELOPMEN	l I			
SCHOOL BUILDING PROGRAM 1.1 Elementary School Building Projects	Construction of 3 classrooms	2011	2014	5.400
	E/S bldg. in 9 barangays Construction of 2 classrooms in	2011	2014	0.650
	San Miguel E/S Consruction of 1 classroom in	2011	2014	0.350
	Barangonan Maintenance of E/S	2011	2014	0.600

Table 18. SOCIAL SERVICES PROGRAMS AND PROJECTS

PROJECT TITLE	DESCRIPTION	TIME FRAME		PROJECT
		STARTING DATE	COMPLETION DATE	COST (Php M)
1.2 San Miguel National High School	Construction of 2 classrooms	2011	2014	0.650
1.3 School Library Project	Construction of School Library	2011	2014	1.000
2. SCHOOL FACILITIES PROGRAM	Procurement of books and other reading materials	2011	2014	1.000
	Procurement of computer, tables, chair (Elementary & High School)	2011	2014	1.200
	Construction of new desk, table and repair of existing facilities	2011	2014	0.500
3. SCHOLARSHIP PROGRAM	Providing fund for the poor but deserving student	2011	2014	0.400
4. CAPACITY BUILDING FOR TEACHER	Conduct/attend Trainings &	2011	2014	0.300
5. TERTIARY EDUCATION	Establishment	2011	2014	2.000
6. TEACHER POOL PROGRAM	Deployment of Para-Teacher in various barangays	2011	2014	0.500
7. SPORT DEVELOPMENT	Training of athletes and join competition, and provision of equipment	2011	2014	0.350
WELFARE SERVICES 1. DEVELOPMENT PROGRAM FOR DIFFERENT SOCIAL WELFARE SECTOR	-			
1.1 Day Care Worker Program	Trainings and seminars for Day Care Workers Provision of incentives	2010	2020	0.080
1.2 Senior Citizen Center Project	Construction	January 2015	Decembe 2015	1.000
1.3 Women Center Project	Construction	January 2015	Decembe 2015	1.000
1.4 OSCA Development Program	Assistance to Senior Citizen	2010	2020	1.500
1.5 Emergency Assistance Program	Provision of emergengy/financial assistance to family in crisis situation	2010	2020	0.500
Nomen's Welfare Development Program (KALIPI)		2010	2020	0.100

Table 18. SOCIAL SERVICES PROGRAMS AND PROJECTS

DDQ 1507 7171 7	DESCRIPTION	TIME FRAME		PROJECT
PROJECT TITLE		STARTING DATE	COMPLETION DATE	COST (Php M)
1.7 Philhealth Project	Provision of assistance for contribution to Philhealth Insurance	2010	2020	0.600
1.8 Women Desk Project	Establishment	2010	2020	2.000
Program 1. 9 Livelihood and Capability Building Program	Conduct 6 trainings	2010	2015	1.000
1.10 day care services/facilities progr	Completion of day care center in: New Colaylayan San Nicolas	June 2012 March 2012	August 2012 April 2012	0.100 0.100
SOCIAL SECURITY SERVICES PROJECT	Provision for Peace and Order Cour Provision for PLEB Provision for Anti-Illegal Drugs Campaign	January 2010 January 2010 January 2010	December December December	0.250 0.300 0.500
EMPLOYMENT FACILITIES PROJECT	Provision to PESO	January 2010	December	0.500

Table 19. GOVERNANCE PROGRAMS AND PROJECTS

		TIME FRAME		PROJECT
PROJECT TITLE	DESCRIPTION	STARTING DATE	COMPLETION DATE	COST (Php M)
DEVELOPMENT PLANNING PROGRAM 1.1 Program Development	Documentation, preparation and packaging of Municipal Annual Annual Investment Plan, Medium Term Development Plan and the 20% development programs and	January 2010	December	0.650
1.2 Participatory Development	MDC Annual planning conference	January 2010	December	0.500
1.3 Community-Based Monitoring System (CBMS)	Collection, consolidation and processing of Human Index conducted at the barangay level Data validation at the barangay	January 2010	December	1.000
LOCAL GOVERNMENT PERFORMANCE MANAGEMENT SYSTEM (LGPMS)		January 2010	December 2015	1.200
3. KATARUNGANG PAMBARANGAY PROGRAM	Support to the operation of Lupon Members in 10 barangays	January 2010	December	0.300
4. LIGA NG MGA BARANGAY ENHANCEMENT PROGRAM	Aid to Liga ng mga Barangay	January 2010	December	0.250
5. MUNICIPAL REVENUE GENERATION PROGRAM	Increase collection of revenues	January 2010	December	0.300
6. REAL PROPERTY TAX ADMINISTRATION PROGRAM	Enhancement of Real Property Reco Management System	January 2010	December	0.300
7. ZONE MANAGEMENT PROJECT	Zonal Development Management	January 2010	December	0.650
8. COMPREHENSIVE LAND AND WATER USE PLAN (CLWUP)	Revision	January 2010	December	0.250
9. ASSESSMENT RECORD MANAGEMENT		January 2010	December	0.350
10. LAND AREA DELINEATION	Compliance of requirements for lifting Presidential Proclamation 219	January 2010	December	1.500
11. LAND TITLING PROJECT	Documentation & processing of necessary papers for the lifting of Presidential Proclamation No. 219 (Alienable & Disposable Land)	2010	2011	15.000
Toto	I al Investment Requirement for Governo	nce		22.250