

5. Physical/Infrastructure Resources

5.1 Transportation Network (Internal and External Linkages)

The municipality has the basic infrastructure facilities that are essential parameter of development. It has almost 159 kms. of roads, 17 permanent bridges and a public transport vehicles coming in and out the municipality from Metro Manila and from Laoag City.

Delfin Albano has four (04) major transportation routes as follows: The Delfin Albano – Tumauni route by crossing the Cagayan River thru the Delfin Albano – Tumauni Bridge leading to the Maharlika National Road, the Delfin Albano - Ilagan route to Gamu - Roxas road, the Delfin Albano - Mallig route to Santiago - Tuguegarao road and the Delfin Albano - Santo Tomas – Cabagan.

5.2 Social Services Facilities

The municipality has also vital infrastructures sporadically located within the municipality. There are five (5) separate structures for health centers and main rural heal unit at barangay Ragan Sur, Delfin Albano, Isabela. The municipality also has one (1) government hospital and three (3) private hospitals. In terms of early childhood development, the municipality has twenty three (23) Day Care Centers. For primary education, the municipality has a total of twenty (20) Elementary schools nineteen (19) of this are public while one (1) is private. A total of five (5) Secondary schools also operate in the municipality of which four (4) were public while one (1) was operated privately. On the other hand, of the 25,922 household in 2010, 90% has already access to safe drinking water while 75% has access to sanitary toilet.

6. Utilities

6.1 Power

Power requirement of the municipality is supplied by the Isabela Electric Cooperative, Inc. (ISELCO II) that comes from the National Power Corporation with a sub-station located at Cabagan, Isabela. Isabela Electric Cooperative II with office located at Ilagan, Isabela and a collection office in Delfin Albano, Isabela. As per data supplied by the ISELCO II, all the barangays have electricity except to far flung sitios.

Map IV-2 displays the power supply map of Delfin Albano. It can be seen in the map that the main power supply facility, which is ISELCO-II, is located in Barangay Ragan Sur. The network of ISELCO is then distributed all over the barangays in Delfin Albano.

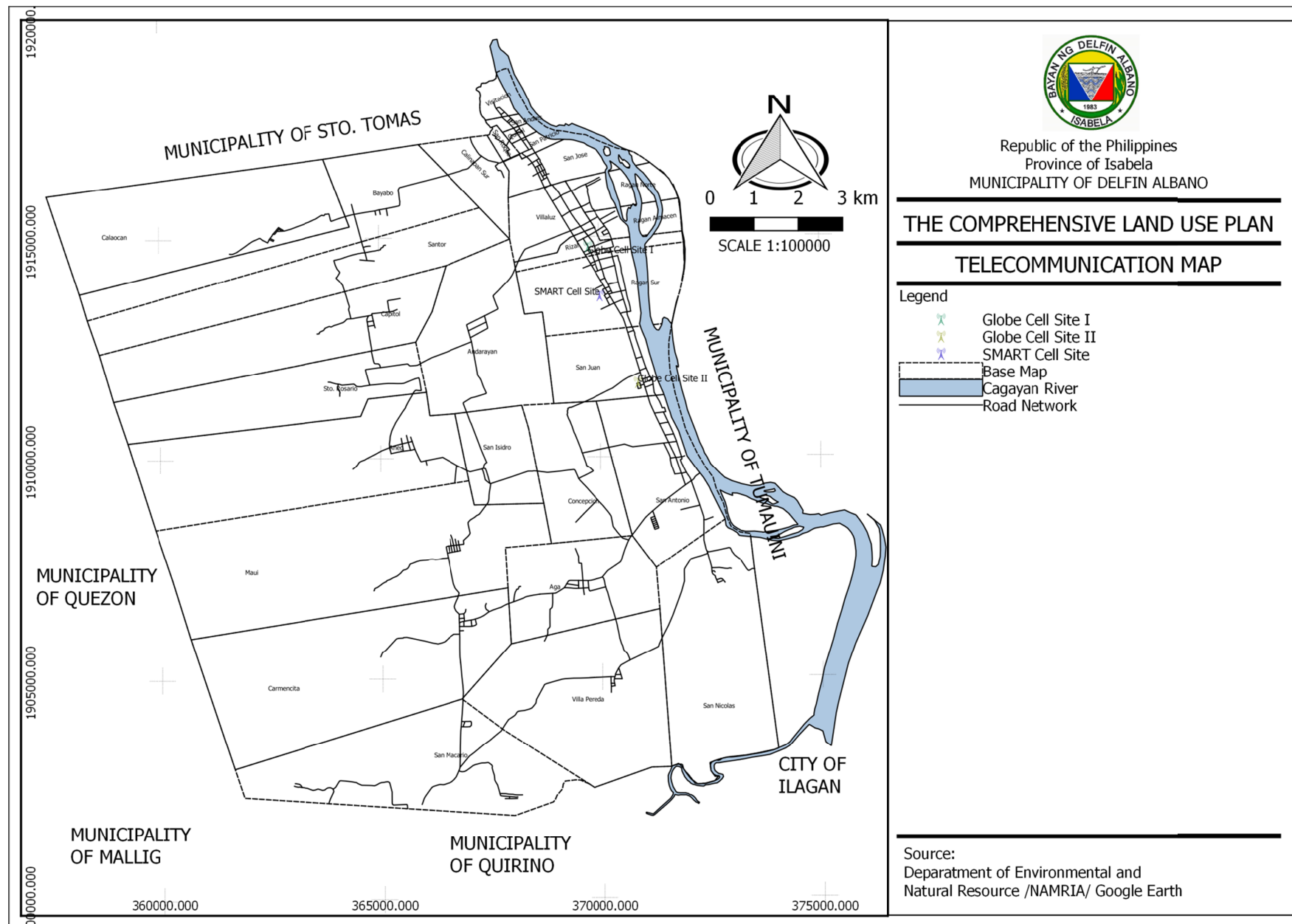
6.2 Water

The main source of water supply in Delfin Albano was made operational to cater the domestic water needs of 13 barangays located along the National and Provincial roads in the eastern portion of the municipality. Shallow and Deep wells are also used in other barangays as sources of potable and domestic water.

Level II artisan/deep wells with pumps are being consumed by 1,482 residents with an average consumption per hour of 5.06 cu.m per capita. Level III local waterworks system are being consumed by 4,451 residents with an average of 58.34 cu.m consumption per hour.

6.3 Communications

The Postal and Telecommunications Services are present and both house at the National Agency Building. There are also three (3) cell sites of Smart, Sun Cell and Globe Telecommunications which provide the fastest means of communication thru mobile/cellular phones. The presence of two (2) way radio transceivers of the PNP and the Mayor's Office also facilitates communication in the municipality and to the province.



There is a postal office, telegraph, telephone line, and one (1) cable provider. As mentioned above, there are three (3) cell sites which are owned by Smart, Sun Cellular, and Globe Telecommunications. Delfin Albano has all types of communication services facilities except for a radio station.

Waste Management

The municipality of Delfin Albano has just formulated its 10 year solid waste management plan. Embodied therein are the strategies and systems pertaining to proper solid waste disposal. Majority of the residents practice the traditional way of waste disposal which is composting aside from the open dumpsite of the municipality located at barangay Carmencita. Note: sanitary landfill on-going construction.

7. The Economic Structure

7.1 Agriculture

The municipality's total farm area is 7,585 hectares, which is approximately 39.83% of the total land area of the municipality. The basic crops grown are rice, corn, cassava and vegetables.

The municipality engages in rice production as its primary agricultural activity. Its fertile soils ablative rains and the presence of the Cagayan River , Mallig River and other water bodies such as small impounding projects serve as sources of irrigation has enabled the municipality to produce rice sufficient enough for the entire population. A total effective area of 5,897 hectares is devoted to rice production. Of this total rice land, only the rice fields at the eastern part of the municipality and those serviced by small water impounding projects (SWIP) are irrigated. The rest are rain fed rice land areas.

In 2016, total production for both irrigated and rain fed areas reached 33, 163 metric tons (M.T.) valued at P 563.771 million pesos.

Corn production is the secondary user of agricultural land in the municipality. A total of 2,605 hectares is planted corn. Total production in 2016 was 65,125 metric tons.



Delfin Albano is blessed for having a potential fishing ground, the Cagayan River and the Small Water Impounding Project, utilized as irrigation and fish culture. There are also fishermen in the locality, but they don't depend solely on fishing as their main source of livelihood. Resident living near Cagayan River usually engaged them in fishing. The usual catches are tilapia, carp, mullet, cat fish and other species. Their methods and materials used are fishnets, gillnets, cast nets and the hook and lire. There are some backyard and small fishpond in the municipality. Fishes caught are usually for home consumption and the surplus are sold to the market or at the neighborhood.

7.2 Forestry

Delfin Albano has a total land area of 19,095.23 hectares; of which 72.63% or 13,868.27 is alienable and disposable and only 27.37% or **5,226.96** hectares are forest lands. Out of the 5,226.96 hectares of forest lands, As shown in the table below Production Forest are divided into National Greening Program, Integrated Social Forestry, Sanitary Landfill, Socialized Integrated forest management Agreement, Eco- tourism overlay zone and rest are grazing lands or pasturelands

Sector	EXISTING		PROPOSED		DIFFERENCE (INCREASE/DECREASE)
	Area (Has.)	%	Area (Has.)	%	Area (Has.)
Production Forest	5226.96	100.00%	5205.96	99.60%	-21
-National Greening Program	584	11.17%	800.00	15.31%	216.00
-Integrated Social Forestry	171	3.27%	171.00	3.27%	0.00
-Sanitary Landfill	10	0.19%	15.00	0.29%	5.00
-Grazing Land	4411.96	84.41%	4,166.13	79.70%	-245.83
-Socialized Integrated Forest	50	0.96%	0.00	0.00%	-50.00

Management Agreement					
-Eo-Tourism Overlay Zone	0	0.00%	53.83	1.03%	53.83
Protection Forest	0	0.00%	21.00	0.40%	21.00
Total	5226.96	100.00%	5,226.96	199.60%	0.00

7.3 Commerce and Trade

The Public Markets found in Ragan Sur (Poblacion) and barangay San Antonio are the primary concentration of commerce in the municipality housing a variety of commercial activities. People from the barangays and even from other places sell their products in these markets.

Based on major types of business, the commercial establishments are classified as wholesale, retail and services.

Most of the business establishments in the municipality can be categorized as small enterprises, most of which are sari sari stores, based in the Poblacion and scattered in the different barangays.

Commercial areas are mostly located at the urban area, while the rest of commercial areas are scattered in the rural barangays. There are 6.0 hectares occupied by commercial establishments in the urban barangays. Mostly, the sari sari stores in the rural areas are attached to existing residential structures.

In 2016, there are 586 business establishments recorded in the municipality. It is dominated by wholesale and retail trade accounting to 73.2 percent. It can be noted that the list of business permits issued do not always tally with the number of establishments surveyed. Some business ventures engaged in services do not actually occupy business offices or stalls. They are either ambulant vendors or they do business activities in their respective homes.

7.4 Industry

There are 30 different industries recorded as of 2016. The most significant economic agro-industrial activity of the municipality in terms of income and labor are the 8 rice mills with 15 buying stations. These rice mills polish palay for household consumption and for transport to Manila to include its neighboring towns.

There are also 4 furniture making shops, 8 iron works, 7 bakeries and 2 hollow blocks making. With the exception of the existing rice mills, which promises to be a good source of income and livelihood, the existing industries within the municipality have manifested low performance in terms of job generation and as a complementary service to the growth of agricultural income.

Most of the industries are small-scale enterprises classified as micro-industries with a capitalization of only P150, 000 to 1.5 million pesos. These include the welding shops, vulcanizing shops, hollow blocks making, furniture making, candle making, tailoring etc. Such products mostly cater only to the local residents. The growth of these small scale industries are slow considering that the municipality depends mostly in farming and other related economic activities.

7.5 Tourism

The prominent tourist attraction of the municipality is the TAPJ Resort located in barangay Aga. It is a large resort equipped with facilities like cottages, swimming pools and conference halls and endowed with natural and man-made physical attributes. It is ideal for holding meetings, seminars, conferences and other events as well as for leisure and entertainment.

The potential eco tourist areas in the municipality include the Bird Sanctuary and Breeding grounds located in barangay Carmencita. Also on the western part of the municipality, there is a Mini Chocolate Hills and Table Hills. With its fascinating sight, it can be developed as picnic areas, camping areas or mountain climbing areas. Yet, since this kind of eco tourist spot is accompanied with possible threats to the environment such as pollution and contamination of wastes. Hence, necessary remedies to mitigate, if not to eliminate its possible negative effect, must be given due course at this early.

7.6 Economic Structure and Economic Driver

The structure of the local economy can be analyzed using any or combination of the following parameters: employment, value or volume of production, revenues and land utilization. This will provide an approximate view of the economy and establish the economic driver.

The economic activities are classified into three major sectors namely; primary, secondary and tertiary sector. The primary sectors include agriculture, forestry, fishery, mining and quarrying. The secondary sectors compose of manufacturing, electricity, gas, water supply and construction. The tertiary sectors include wholesale, retail, other businesses and services not included in the primary and secondary sectors.

The data used in the analysis were culled from the previous sectoral discussions reflecting the land utilization of each sectors.

Land Utilization by Major Sector		
Sector/Activity	Area	Percent
Primary	11,011 Has.	99.93
Secondary	1.5 has	0.05
Tertiary	6.0 has	0.01
Total	11,018.5 has	100.00

Based from the above table, using land utilization as the parameter, show that that the primary sector has the highest share accounting to 99.93 percent. The tertiary sector follows second with 0.05 percent and the last is the secondary sector with 0.01 percent. Considering that the share of the primary sector is more than 50 percent implies that the municipality is pre-dominantly rural.

8. Comparative/Competitive Advantages



A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis is a “matching” procedure, which means aligning internal factors with external factors for the primary purpose of formulating feasible strategies or courses of action. The SWOT is also an analytical technique that will serve as a guide to the following activities: generating the stakeholders’ vision for their locality, formulating the development framework, proposing development alternatives, and devising sectoral and land use strategies for the comprehensive land use and development plans. Strengths and weaknesses which are internal to the municipality are those which are within its power to control or solve while opportunities and threats which are external to the Municipality are those which it could utilize or minimize even though they are outside its circle of influence.

Internal strengths and weaknesses, and external opportunities and threats were identified in the SWOT analysis. Internal strengths and weaknesses are those factors that can be directly controlled by the people and the government of the municipality. Identified strengths and weaknesses are the following:

Strengths:

- Strategic Location for Agro-Industrialization
- Rich in Forest and Water Resources
- Strong Political Will
- Presence of potential Eco-Tourism Destinations
- Strong Collaboration Between Government, Private and Civil Society Organizations (CSOs)

Weaknesses

- Flood-Prone Area especially areas affected due to overflow of Cagayan River, soil erosion along the Cagayan riverbank and those areas flooded due to slow capacity of drainage
- Lack of Tertiary Schools
- Outdated Baseline Data

External opportunities and threats are those outside the scope of the Local Government Unit (LGU), thus, having no control on these factors. Identified external opportunities and threats are the following

Opportunities:

- Agro-Industrial leader within Northern Isabela
- Increasing Job Opportunities within Agro-Industry and Eco-Tourism
- Green Technology in Establishing Master Planned Communities

Threats

- Aggressive Investment Promotional Campaigns of Neighboring LGU's
- Development and Industrialization of neighboring LGUs

The TWG for CLUP updating produced the SWOT analysis which was also articulated in the 2nd workshop of 2016 and identified the municipality's development potentials and constraints. The potentials maybe said to articulate the strengths and opportunities while the constraints may be said to elucidate the weaknesses and threats. The potentials and constraints cover the political, social, economic, infrastructural, environmental, and land use sectors that reflect the totality of the municipality's current developmental situation.

Stable Political Leadership—Continuity of programs is ensured for the next three years. The local chief executive is a hands-on leader with a strong political will to enforce even unpopular policies.

Economic Activities

- Medium to high intensity of agricultural activities;
- Low intensity tourism and hospitality industry;
- Low intensity commercial activities;

Ideal Social Milieu

- Controlled peace and order situation;
- Availability of parks and recreational centers;
- Ready, coordinated and functional disaster risk reduction and management institution, and
- Strong presence of active private sectors/civil society government partners, among others.

Adequate and steady supply of electricity, water, and telephone lines (connectivity)

Empowered and Responsible Component Barangays

- It has a clear and transparent provision of local taxes (tax code), functional inter-agency committees (LDC, CDRPMC, etc.), enacted Environmental Code, among others.

9. Development Constraints: Priority Issues and Concerns

Priority issues of Delfin Albano include its perennial flooding, lack of essential data such as poverty level, number of indigents, and unemployment rate, among others, prevent the efficient implementation of programs, especially social programs, and outdated and insufficient data. The quality and quantity of data are considered as a priority concern because these data can be used for strategic planning.

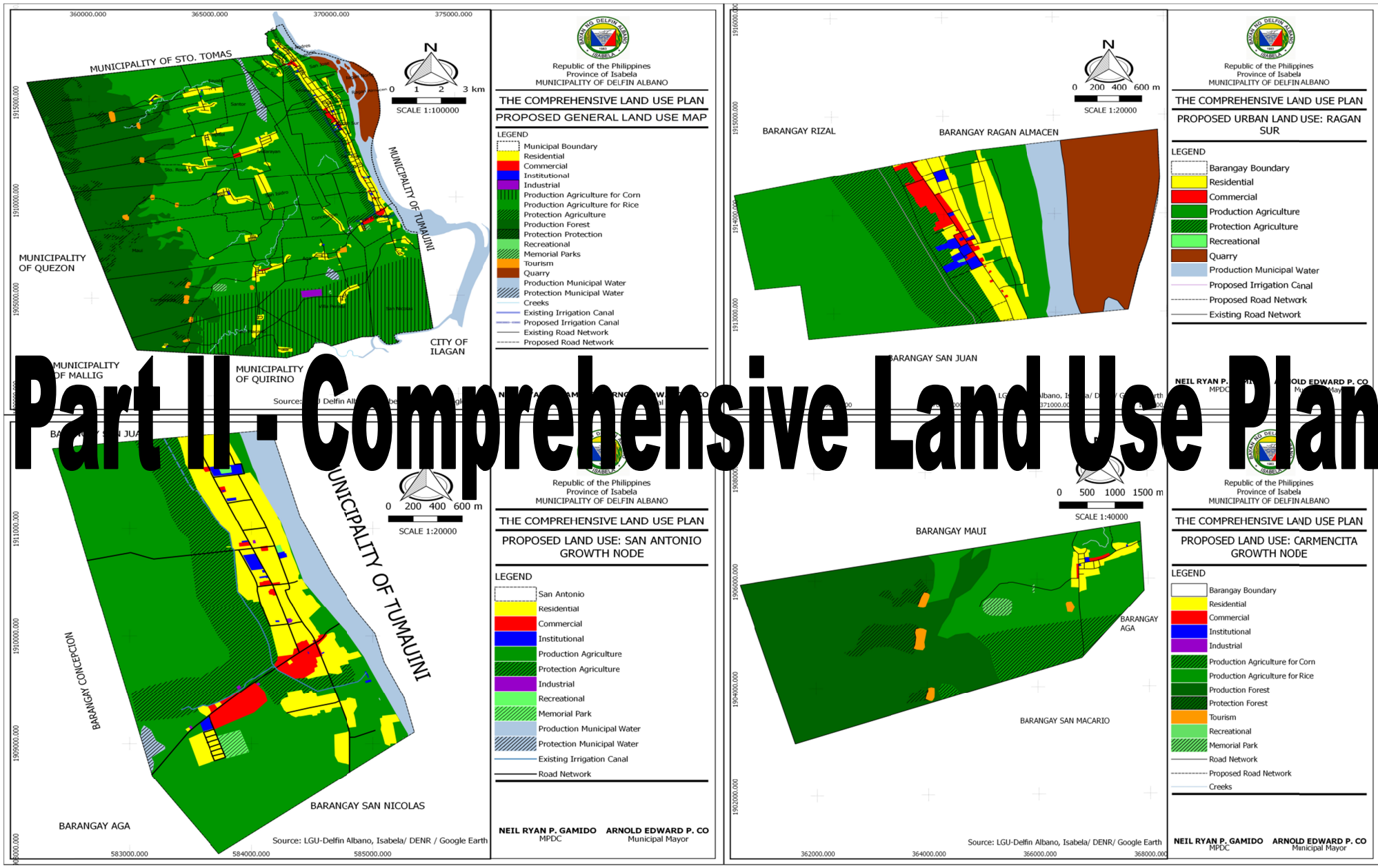
Table I-4 shows the priority matrix of development constraints to know which among the concerns should be prioritized first. The issues mentioned above are considered as urgent concerns, together with conversion issues and the establishment of a government-owned cemetery. Fragmented tourism approach, and advocacy programs are considered as less urgent concerns.

. Priority Matrix for Development Constraints

Priority Matrix	Important	Less Important
Urgent	<ul style="list-style-type: none"> • Perennial flooding due to soil erosion, overflow of Cagayan River, backflow issues, among others • Lack of essential data • Conversion issues within the boundaries of CLOAs • Establishment of government-owned or administered cemetery 	
Less Urgent	<ul style="list-style-type: none"> • Fragmented/Uncoordinated tourism approach • Advocacy programmes for local consumers to patronize local goods and services rather than neighboring municipalities 	

10. Functional Role of the Municipality

Delfin Albano has economic the potentials as the center of agro-industrial development in northern Isabela. It has vast agricultural land planted to rice, corn and cassava. It is one of the major supplier of rice, corn and cassava in the province of Isabela, and in the country. It can also become a major eco- tourism destination in northern Isabela.



PART II - COMPREHEHNSIVE LAND USE PLAN

1. VISION

By 2027: A Center of agro-industrial development in Northern Isabela with God-loving and empowered citizens living in a disaster-resilient community and ecologically-sound environment with integrated infrastructure support systems and vibrant economy led by responsive and transparent leadership.

2. MISSION

To improve the quality of life for all residents of Delfin Albano by maximizing opportunities for social and economic development in order to become the agro-industrial center in Northern Isabela while retaining an attractive, sustainable and secure environment.

3. VISION REALITY GAP MATRIX

WORKSHOP 1			WORKSHOP 2			WORKSHOP 3	
VISION ELEMENTS		SUCCESS INDICATORS	Current Reality	VISION-REALITY GAP	OBSERVED CONDITION	PROBLEM-SOLUTION FINDING ANALYSIS MATRIX	
Element	Descriptor					EXPLANATION	IMPLICATION
ENVT'L SECTOR	Disaster-Resilient	1. Fully equipped Municipal disaster operation center	70% equipped Municipal Operation Center	30%	Lacking equipment are identified and endorse for purchase	no fund available for the purchase	the Mun. Op.cen.cann ot fully respond to disasters and emergencies
		2. All barangays with fully equipped disaster operation center	All 29 barangays are not fully equipped	100%	Lacking equipment are identified and endorse for purchase	no fund available for the purchase	All 29 barangay cannot fully respond to disasters and emergencies
		3. Presence of flood control projects	Only 2 barangays out of 29 barangays have flood control(drainage system)	27 barangays	Majority of 29 barangays are not affected by flood	Limited resources and no space for drainage control system	The flood prone barangays will no longer experience flood

	Ecologically-Sound	1. Presence of fully operational sanitary landfill	There is no sanitary landfill constructed but area is already identified	100%	The area originally planned as open dump site is the same site for the sanitary landfill	The maintenance of sanitary landfill is expensive	The presence of sanitary landfill would surely support the full implementation of ESWMP
		2. Presence of operational Municipal MRF	1 Municipal MRF not operational	50%	Households are not practicing segregation at source;	Residents are not aware on the ESWMP	Constant practice of waste segregation would support the implementation of ESWMP
		3. All barangays with operational MRFs	All 29 barangays has no MRF	100%	Households are not practicing segregation at source;	Residents are not aware on the ESWMP; BSWMBs are not functional and barangay officials are not fully aware in their functions as per RA 9003	Improper solid waste management

		4. Presence of parks and greenbelts	0	100%	There is no identified are for the purpose	There is no identified are for the purpose	
		5. Protected watersheds	60%	40%	The Municipal Government maintained 2 NGPs(Brgy. Carmencita and Aneg); Private sectors maintained 3 Nurseries(Capitol, Sto. Rosario and Calaoacan)	Within the NGP areas there are mortalities due to inevitable circumstances	Decrease of water source
		6. Presence and maintained municipal nursery	1 from the Municipal Agriculture Office and 1 from barangay carmencita(NGP site)		Limited area of the existing Nursery	The maintenance of Nurseries requires additional work force and financial	Limited available seedlings produced/ propagated
		7. Presence and maintained Barangay nursery	0	29 barangays	Limited area for the purpose	The maintenance of Nurseries requires additional work force and financial	Limited available seedlings produced/ propagated

		8. Fully implemented Ecological Solid Waste Management Plan	40% implemented	60%	There is no solid waste controlled facilities constructed in the locality. The households used to have backyard composting in their own area	The residents do not practice waste segregation at source; Unavailability of funds; Inadequate personnel for the operation	The Solid waste management in the Municipality is not properly managed.
		9. Practice of organic farming	20% of the farmers practicing organic farming	80%	Lack of knowledge of Farmers regarding organic farming	The practice of the farmers are mainly Traditional farming; Organic farming are more expensive in terms of labor and farm activities	The agricultural produce are not safe and nutritious compared to the agricultural produce by organic farming

4. General Goals

This Plan has adopted the following goals which all political subdivision and administrative levels are supposed to carry in their respective physical development plans. The general goal of the Land Use Plan is adopted from the National Physical Framework Plan which is to “**achieve such a spatial arrangement and location of land use activities that would::**

a. Effect rational distribution of the population;

It is the rational urban development goal.. Encouraging the sustainable growth of large towns and complementing the growth of rural areas by adopting alternative urban development approaches.

This policy has for its major goal the harmonization of the rate of population growth and the capacity of the country for the development and rational utilization of natural resources thereby creating conditions conducive to the improvement of the level of welfare of the population. The setting of this broad goal is premised upon the realization and acceptance by the government of the importance of demographic factors in development planning and services.

b. Guarantee access by the population to basic services;

This goal aims to link consumption and production areas to achieve physical and economic integration through appropriate infrastructure systems.

This goal calls for a wider recognition of the fact that economic growth, if not properly handled, can increase the gap between rich and poor. Noting that income distribution has been worsening in a large number of developing countries, it urges policy-makers to recognize and exploit the synergies between basic social services, and between income-poverty reduction, social development and economic growth. And it explores ways in which governments can mobilize resources for basic services, using methods that they already have at their disposal.

c. Ensure optimum sustainable utilization of resources

Land is a finite resource. As the population grows and as the municipality moves towards development, a rational allocation of land resources is necessary. Resources are also sustainably utilized if food security is assured for all, when production processes are cost effective, when there is waste minimization and all forms of wasteful practices carefully avoided.

- d. Protect the integrity of the environment.** Observance of appropriate standards in natural resource management and balancing the demands of production with the need for preservation of ecosystems. This goal is attained when there is clear balance between the built and unbuilt environment, maximize use of renewable energy and high level of biodiversity in flora and fauna is maintained.

5. Municipal Goals, Objectives and Targets

The Municipal goals, objectives, targets and policy options based from the outputs of workshops conducted in the municipality are summarized in the following table, as follows;

POLICY OPTIONS	GOALS, OBJECTIVES & TARGETS	PPAs	LEGISLATION NEEDED
crafting of proposals and communications requesting funds for the purpose	To fully equipped the Mun. op. cen. In the year 2017 To fully respond the emergencies and disasters	Conduct trainings regarding proper use of diaster equipment and attend trainings regarding quick response	Adoption of appropriation ordinance to fund trainings and additional equipment
crafting of proposals and communications requesting funds for the purpose	To fully equipped all 29 barangays In the year 2017 To fully respond the emergencies and disasters	Conduct trainings regarding proper use of disaster equipment and attend trainings regarding quick response	Adoption of appropriation ordinance to fund trainings and additional equipment
crafting of proposals and communications requesting funds for the purpose	To construct drainage control systems to flood prone barangays	Drainage Control System	Adoption of appropriation ordinance to fund the construction of drainage control system
Create organizational structure to manned and manage the operation of the sanitary landfill	To construct sanitary landfill	Sanitary Landfill Constructed	Adopt measures and ordinances for the operation of the sanitary landfill

Create the permanent office of MENRO to manned the implementation of ESWMP	To fully implement the ESWMP of the Municipality	Construction of Municipal MRFs	Adopt measures and ordinances allocating funds for the implementation and construction of Municipal MRFs
Full implementation of ordinance of solid waste management and require all barangays to establish their own MRFs	To fully implement the ESWMP of the Municipality and the barangay	Construction of Barangay MRFs	SB resolution requiring all barangays to establish their own MRFs
Identify areas in accordance to CLUP	To establish tree parks and greenbelts	Identification of Sites; Conduct of tree planting;	SB resolution/ ordinance allocation funds for the identification of available site and conduct of tree planting for the said purpose
adopt measures to regarding the establishment of fire lines and forest protection		Establishment of fire lines, roads; Conduct weeding and tree planting activities; Application of organic fertilizers and pesticides	Adopt resolution requesting additional fund to proper agencies for the protection of the watersheds of the municipality

Improve the existing sites and provide personnel for the maintenance; Execute an agreement with the DENR for the provision of seedlings and assistance to the maintenance of the Nursery	To establish a more safer nursery; To propagate sufficient seedlings; To hire additional personnel	Rehabilitate the existing nurseries; Conduct seedling propagation; Hire additional personnel	Adopt resolution/ ordinance regarding the maintenance and operation of the nursery as well as the allocation of fund for the purpose
Construction of new sites and provide personnel for the maintenance; Execute an agreement with the DENR for the provision of seedlings and assistance to the maintenance of the Nursery	To establish new nurseries; To propagate sufficient seedlings; To hire additional personnel		
Organize work force for the implementation of ESWMP;	To fully implement the ESWMP	Conduct trainings and orientation regarding waste segregation and proper solid waste management	

Encourage farmers in the Municipality to patronize and practice organic farming	To practice organic farming	Conduct trainings and seminars regarding organic farming	Adopt measures supporting the implementation of organic farming in the Municipality
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6. THE LAND USE PLAN

6.1 Development thrust

In the same 3rd CLUP Stakeholders' Consultation, the participants articulated the vision of the municipality in the form of thrusts that will guide the pursuit of the spatio-sectoral development of the municipality within the ten-year (2018-2027) development period. The status of the thrusts was also discussed while later they were converted into development options. The identified development thrusts, namely, agro-industrial, commercial and eco-tourism development, were converted into the following options: (1) Option 1 – Agro-Industrial Development, (2) Option 2 –Agro-Industrial-Commercial Development, and (3) Option 3 – Agro-Industrial-Commercial-cum-Eco-Tourism Development. The three options were subjected to analysis and evaluation by the workshop participants in terms of implications and positive interventions. The workshop selected Option 3 – Agro-Industrial-Commercial-cum-Eco-Tourism Development as the overall development thrust of the Municipality of Delfin Albano for the next 10 years. The Consultants tasked to continue the formulation of the Comprehensive Land Use Plan later translated the development thrusts into a land suitability analysis that indicates the proper locations of the industrial, commercial and tourism activities that will be pursued in the municipality's development. Later, the land suitability map produced will serve as a guide in the formulation of the spatial strategy-cum-structure plan that will in turn serve as the more detailed spatial guideline in the formulation of the Comprehensive Land Use Plan.

Thrusts, Status, and Remarks of Targeted Development Fields of Delfin Albano

Thrusts	Status	Remarks
Agricultural Development	Diminishing agricultural lands	Protect and support the needs of farmers and remaining agricultural lands (irrigation, technology, access to financing, etc.)
Agro-Industrial Development	Delfin Albano has remained predominantly agricultural (almost 60%)	Promote agro-industrial parks as a ready facility for prospective investors
Eco-Tourism Development	Presence of a resort-hotel & restaurant Presence of potential eco-tourism destinations within Barangays San Antonio, San Juan and other western barangays (for river cruising, breathtaking farms, potential hiking trails and picnic grounds)	<ul style="list-style-type: none"> Coordinated tourism program is necessary
Commercial Development	Local consumers hardly patronize goods and services offered by the locality due to its proximity of Delfin Albano to the market area of its formerly mother town Tumauni	<ul style="list-style-type: none"> Weak SMEs Minimal presence of active cooperatives

1. Identified Development Thrusts/Goals

- Industrial – In accordance with the province and region's framework
- Commercial – Brought about by urbanization, helps in job creation
- Eco-Tourism – Untapped potential

2. Development Option

Option 1 – Agro-Industrial Development

Strategies/Options	E	Positive Intervention
Promotes agro- industrial parks as a ready facility for prospective investors	Ready Spaces/location fitted to the needs of investors	Promotion of agro-industrial parks thru trade missions, active participation in industrial activities, etc.
Efficient solid waste disposal program and other environmental programs	Endure Sustainable Development – based on United Nation's definition is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."	<ul style="list-style-type: none">• Ensure compliance of new companies as well as existing companies to environmental laws• Involve private companies in environmental programs and activities• MRF to every barangay as stated in the SWM Plan

Option 2 – Agro-Industrial-Commercial Development

Strategies/Options	E	Positive Intervention
All Strategies in Option 1	-	-
View existing commercial establishments as market of local products	<ul style="list-style-type: none"> • Development of SMEs • Job creation ,increase economic activity 	SME support thru: <ol style="list-style-type: none"> 1. Access to capital 2. Access to market 3. Entrepreneurship trainings and mentoring for SMEs outside TBIs Promotion and support to cooperatives (economies of scale) thru ICE, access to capital, recognition 4. programs, etc.

Option 3 – Agro-Industrial-Commercial-cum-Eco-Tourism Development

Strategies/Options	E	Positive Intervention
All Strategies in Options 1 and 2	-	-
Formulate a Tourism Master Plan	<ul style="list-style-type: none"> • Funding requirements • Will provide clear detailed activities, programs and projects 	Conduct workshop/hire consultant/etc.
Provide vacation/holiday packages in consideration with the eco-tourism-related activities/packages of the Province	<ul style="list-style-type: none"> • Tourism program complementation • Job creation, increase economic activity 	•

The land suitability analysis will now try to translate the development thrust of Eco-Industrial-Commercial-cum-Eco-Tourism Development for the municipality. In the analysis conducted, major physical geographic and environmental characteristics of Delfin Albano were examined, namely: geography and location, topography (slope, elevation, landforms, soils, and geology), geologic hazard (faulting, liquefaction, and landslide), groundwater and surface water, climate (rainfall, temperature, winds, humidity) and climatic hazards (air quality, storms, flooding), flora and fauna distribution, existing infrastructure and utilities, and economic activities.

Based on the primary determinants of land suitability, namely, slope, soil, elevation, geology and existing land use, most parts of Delfin Albano is generally suitable for both urban and rural land uses. However, since agricultural land uses should be secured foremost, rural development strategies were prioritized with some intensification of urban development in the existing urban barangays. More specifically, based on the major land use determinants of slope and elevation as stipulated in the Revised Forestry Code (PD 705) and the NIPAS Act (RA 7586), about 5% are above 18 percent in slope and below 1000 meters in elevation and are therefore legally and ecologically allowable for urban use.

Considering the above physical, environmental and socioeconomic conditions of the municipality, three land suitability categories may be delineated that can provide guidelines for formulating the physical strategy-cum- structure plan and the land use plan of the study area. Thus, as shown in Figure 1, the three land suitability categories are as follows:

1. Flash flood- and liquefaction–vulnerable areas on level to nearly level (0-8%) slopes suitable for regulated residential, commercial and agricultural uses
2. Less flood–vulnerable and non-liquefaction-vulnerable areas on level to nearly level (0-8%) slopes suitable for regulated commercial, industrial and agricultural uses
3. Non-flood- and non-liquefaction-vulnerable and river headwater areas on undulating to rolling (8-18%) slopes suitable for regulated tourism, low density residential, industrial and agricultural uses and recommended for vegetative measures

6.2 Development Strategies

This section enumerates the strategies and/or arrangements to be adopted in implementing the programs and projects identified for the spatio-sectoral development of Delfin Albano. In another sense, the strategies and arrangements are also aimed at achieving the planned uses of the municipality's land or spatial endowment as well as the socioeconomic goals implied in the discussion of the different components of the comprehensive land use plan. The strategies formulated are aimed to answer the SWOT analysis matrix mentioned in the first part of the CLUP and also, to answer specific sectoral problems.

Strategies to SWOT Analysis

After identifying the strengths, weaknesses, opportunities and threats relative to the Municipality of Delfin Albano, the SWOT analysis proceeds to matching up or combination of the four components that leads to the formulation of four types or groups of strategies, namely, SO, WO, ST and WT strategies. SO (Strengths-Opportunities) strategies are based on using the city's internal strengths to take advantage of external opportunities. WO (Weaknesses-Opportunities) strategies aim at improving internal weaknesses by taking advantage of external opportunities. ST (Strengths-Threats) strategies are based on using the city's strengths to avoid or reduce the impact of external threats. WT (Weaknesses-Threats) strategies are directed at overcoming internal weaknesses and avoiding environmental and other threats.

S-O Strategies

- Match local manpower skills with the required standards of industry (ICT, Industrial, etc.) through training, capability building
- Invite potential investors/aggressively promote the municipality to the target locators as the ideal investment location.
- Promote comprehensive eco-tourism package
- Take advantage of strong and active presence of private sectors and civil society in the promotion/conduct to projects and programs
- Adoption and mainstreaming green technology to government centers and new developments. as exemplified by Master Planned Communities

S-T Strategies

- Operationalization of investment code through political will to promote the municipality to investors
- Promote sustainable development in the management of local watershed

W-O Strategies

- Implement CBMS to identify unemployment rate, poverty rate, etc. to clearly identify the people who most need scarce government services and avoid free riders that will strain the municipality's resources

W-T Strategies

- Training/capability building of disadvantaged groups within the locality and empower them to become economic contributors and mainstream members of the labor force.

Strategies to Sectoral Problems

The strategies may be divided into those pertaining to the following: settlements, infrastructures, production areas, protection areas, health and well-being, sustainable livelihoods, physical protection and structural and technical measures. The Sangguniang Bayan's legislative agenda, additional functions of LGU departments and offices, and institutional arrangements for disaster-resilient governance are also discussed.

Strategies in Settlements

- Vulnerable settlements particularly where there is the presence of a significant number belonging to the vulnerable groups that cannot be relocated shall be an operational community-based disaster management plan. It shall ensure that women and other vulnerable groups are involved in the Hazard Vulnerability and Capacity Assessment (HVA) mapping and in the formulation of the disaster management planning as well as in the conduct of Damage Assessment and Needs Assessment (DANA) to ensure that their particular situation and specific needs are considered.
- Residential use shall enjoy priority over all other uses in the allocation of hazard-free areas.
- Development in hazard-prone areas shall be regulated, if restricted or discouraged.
- Hazard-exposed settlements, urban and rural shall be located to safe areas.

- Vulnerable settlements that cannot be relocated shall have an operational community-based disaster management plan.
- Multi-storey dwellings shall be sited in safe areas determined by scientific studies, and for evacuation purposes during floods.
- Development in environmentally sensitive areas such as steep slopes shall be limited.
- Regular monitoring and evaluation of structural quality of dwellings shall be established in the municipality.

Strategies on Infrastructures

- Infrastructures shall be properly sited and designed so as not to become source of anthropogenic hazard themselves.
- Infrastructures exposure to geo-hydrological hazards shall be minimized.
- Old structures shall be retrofitted for adaptive reuse to preserve their historical or heritage value.
- Civil works that assist nature to rehabilitate itself or to maintain its own integrity shall be established.

Strategies on Production Areas

- Industrial and commercial activities shall be properly located considering their potential traffic generation and pollution impact.
- Strict zoning regulations shall be enforced on livestock and piggery houses located in residential areas.
- Contour tillage and similar sustainable practices shall be strictly enforced among sloping land cultivators.
- The effects of agricultural chemical residues shall be monitored and regulated.
- Environmental impact rather than potential revenue shall be the primary consideration in granting permits for environment-sensitive activities.
- Tourism projects shall be evaluated equally for their income generation potential as well as for the environmental degradation, displacement of local residents, and moral corruption that usually accompany these projects.

Strategies on Protection Areas

- Liberal allocation of open space in heavily populated areas shall be used as a vulnerability-reduction measure.
- The maintenance of greenery in public and private shall be encouraged not only for amenity but also for its carbon sequestration function.
- Environmentally critical and hazardous areas shall be properly demarcated and buffered.
- The ecological function shall be paramount over economic and other considerations when allowing the use of protected areas.

Strategies on Health and Well-Being (Including Human Capital)

Access to minimum standards in disaster response as set forth in the Humanitarian Charter, including need of water, sanitation, nutrition, food, shelter, clothing, healthcare and others shall be provided with the following strategies to be emphasized:

- Physical ability to labor and good health maintained in normal times through adequate food and nutrition, hygiene and health care.
- Food supplies and nutritional status secured (e.g., through reserve stocks of grain and other staple foods managed by communities, with equitable distribution system during food crisis).
- Access assured to sufficient quantity and quality of water for domestic needs during crisis.
- Community structures and culture able to support self-confidence and can assist management of psychological consequences of disaster (trauma, PTSD).
- Community health care facilities and health workers, equipped and trained to respond to physical and mental health consequences of disasters and lesser hazard events, and supported by access to emergency health services, medicines, etc.

Strategies on Sustainable Livelihood

- High level of economic activity and employment particularly among the vulnerable groups (ensuring that women have sustainable livelihood and income by providing them with skills training and inputs).
- Equitable distribution of wealth and livelihood assets in community.
- Livelihood diversification (household and community level), including on-farm and off-farm activities in rural areas.
- Adoption of hazard-resistant agricultural practices (e.g., soil and water conservation methods, cropping patterns geared to low or variable rainfall, hazard-tolerant crops) for food security.
- Enterprises have business protection and continuity recovery plans by including risk-generated management particularly of micro-enterprises.
- Local trade and transport links with markets for products, labor and services protected against hazards and other external shocks.

Strategies on Physical Protection, Structural, and Technical Measures

- Community decisions and planning regarding built environment take potential natural hazard risks into account (including potential for increasing risks through interference with ecological, hydrological, geological systems) and vulnerabilities of different groups.
- Security of land-ownership/tenancy rights, low/minimal level of homelessness and landlessness.
- Safe locations: community members and facilities (homes, workplaces, public and social facilities) not exposed to hazards in high-risk areas and/or relocated away from unsafe sites.
- Structural mitigation measures (embankments, flood diversion channels, water harvesting tanks, etc.) in place to protect against major hazard threats, built using local, skills, materials and appropriate technologies as far as possible.
- Community capacities and skills to build, retrofit and maintain, structures (technical and organizational)
- Adoption of physical measures to protect items of domestic property (e.g., raised internal platforms and storage as flood mitigation measures, portable stoves) and productive assets (e.g., livestock shelters).
- Adoption of short-term protective measures against impending events (e.g., emergency protection of doors/windows from cyclone winds).
- Infrastructure and public facilities to support emergency management needs (e.g., shelters-secure evacuation and emergency supply routes). In appropriate cases, provide a separate center for women and their children at the maximum, or bath and toilet facilities and needed privacy for women, girl-children are provided for at the minimum. An emergency response for women and vulnerable groups shall be designed to include search and rescue operations, evacuation management and rehabilitation plans.
- Resilient and accessible critical facilities (e.g., health centers, hospitals, police and fire-stations – in terms of structural resilience back-up systems, etc.)
- Resilient transport/service infrastructure and connections (roads, paths, bridges, water supplies, sanitation, power lines, communications, etc.)

Regulatory Measures to incorporate in the SB's Legislative Agenda

Regulatory measures are also a necessary instrument of management in that they seek to prevent or preempt certain socially undesirable actions and behaviors that tend to nullify or neutralize the benefits that may accrue from the positive intervention measures. In the particular case of necessary regulations to implement this DRR/CCA, the city zoning ordinance has delineated hazard-prone areas as no-build zones in order to put future settlements permanently out of harm's way. Other specific regulations will be enacted through single-subject ordinances as the need arises.

The measures should strongly suggest to the Sangguniang Bayan to encourage land use applications of land use policies and land use planning in disaster management. It needs a strong and responsive political will, commitment and leadership. It is best done through customized adoption.

Activities to be added to Functions of Existing LGU Departments and Offices

Build capacities to efficiently manage all types of emergencies and disaster preparedness by designating each department head in the LGU a role and how to respond in the event of disaster. A working group should be organized to address functional committees and maximizing their tasks and functions in mainstreaming DRRM/CCA in the LGU systems and processes.

7.0 Land Use Pattern

7.1 Land Use Pattern and Land Use Trends



Ocular inspection s show that 11,011 hectares or 57.82 percent of the municipality is utilized for agriculture or cultivation of crops. Large tracts of open grasslands or grazing areas is also observed of about 6,540 hectares on the western section of the municipality Most of these grazing lands, however, are classified are forestlands under DENR classification. Built-up development which is basically residential, commercial, institutional represented 656 hectares or 3.44 percent of the total land use. These settlements are practically located along the roads particularly in major thorough fares, due to convenient mobility and high access to basic social services. Just like other municipalities, settlements tend to locate within the

urban centers typically called Poblacion (Ragan Sur) and barangay centers. The highlight of urban development in the locality is the Municipal Hall and public market triggering commercial development although limited to small eateries, small restaurants,

stores, and pasalubong centers. Another highlight of development is in barangay San Antonio that also triggers development of other commercial establishments in its surroundings. A significant development, include the construction of the Public Market after the construction of the bridge crossing the Cagayan River leading to Tumauni. The public market provides the everyday needs of the household population and serves as the trading center of agricultural products coming from the rural barangays.

Major support services including basic facilities were also dominantly located in the Poblacion. These services include government offices, schools, public market and the municipal hall building. It was noted that sparse development is still common within the rural areas except for the urbanizing rural barangays of San Juan, San Antonio, Andarayan, Carmencita and San Patricio. Barangays adjacent to the Poblacion were found to be the expansion of the urban poblacion. Physical developments are evident from San Antonio going to the Poblacion.

Generally, the development of Delfin Albano may be categorized as low density, gradually emerging into moderate density having the following character:

1. Existing residential development may be classified as low to moderate density with an average residential lot of approximately 250 square meters. Property easement is still prevalent, allowing spaces between adjoining properties and structures.
2. Conversion of agricultural lands into non-agriculture use are evident along the Highway and along the roads traversing barangay centers.
3. Outward development are manifested, combined with an increase in intensity of land uses within the Poblacion. Residential areas adjacent to the commercial centers are being upgraded into commercial. Mixed residential-commercial are preferred over agriculture in accessible locations.

Three barangays are considered urban due to its primacy in terms of exchange of goods and services and significant role in urban development. These are barangays Ragan Sur, San Juan and San Antonio.

Sub-urban development has gradually occurred in the barangays traversed by the roads. These type of development patterns are influenced by the improved road network, available socio-economic services, vast agricultural production and vibrant economic exchange. Sub-urban development was also observed in the western portion triggered by the presence of several Agro forestry projects and national greening programs.

There are conflicting land uses and development issues which should be addressed in the Zoning Ordinance as follows:

- Unregulated protection buffer along bodies of water and easement along roads;
- Not all protected areas (prime agricultural lands) are delineated on the ground thus creating boundary conflicts along perimeter lines with other non-prime agricultural lands viable for conversion;
- Vulnerability of the municipality to typhoons, floods and drought; and
- Settlements within hazard-prone areas (Flooding hazard).

7.2 Inventory of Existing Land Uses

The succeeding discussion shows the existing land uses of the 19, 095.23 hectares of the municipality's total land area. Computing from the map overlaying the Google Image to the LGU base map, the following uses were determined and quantified:

1. Agricultural Use:

The agricultural areas of the municipality account for 12,262.54 hectares (production and protection) or 64.21% of the total area. From the total area utilized for agriculture, 7,002 are ricelands distributed in thirteen (13) barangays and 4,009 hectares

of corn. Multi-cropped high value commercial crops and industrial crops like vegetables and shrubs are also located in some agricultural lands.

2. Built-Up Area:

At present, the built-up area covers 593.3 hectares or 3.11 percent of the total municipal land area. These land uses are residential, commercial, institutional and industrial. The largest portion of the built-up area is residential use covering 550.27 hectares. All areas located within the barangay proper are considered residential use intended for dwelling structures of local residents. Basic social support facilities including minor commercial establishment co-exist with residential use.

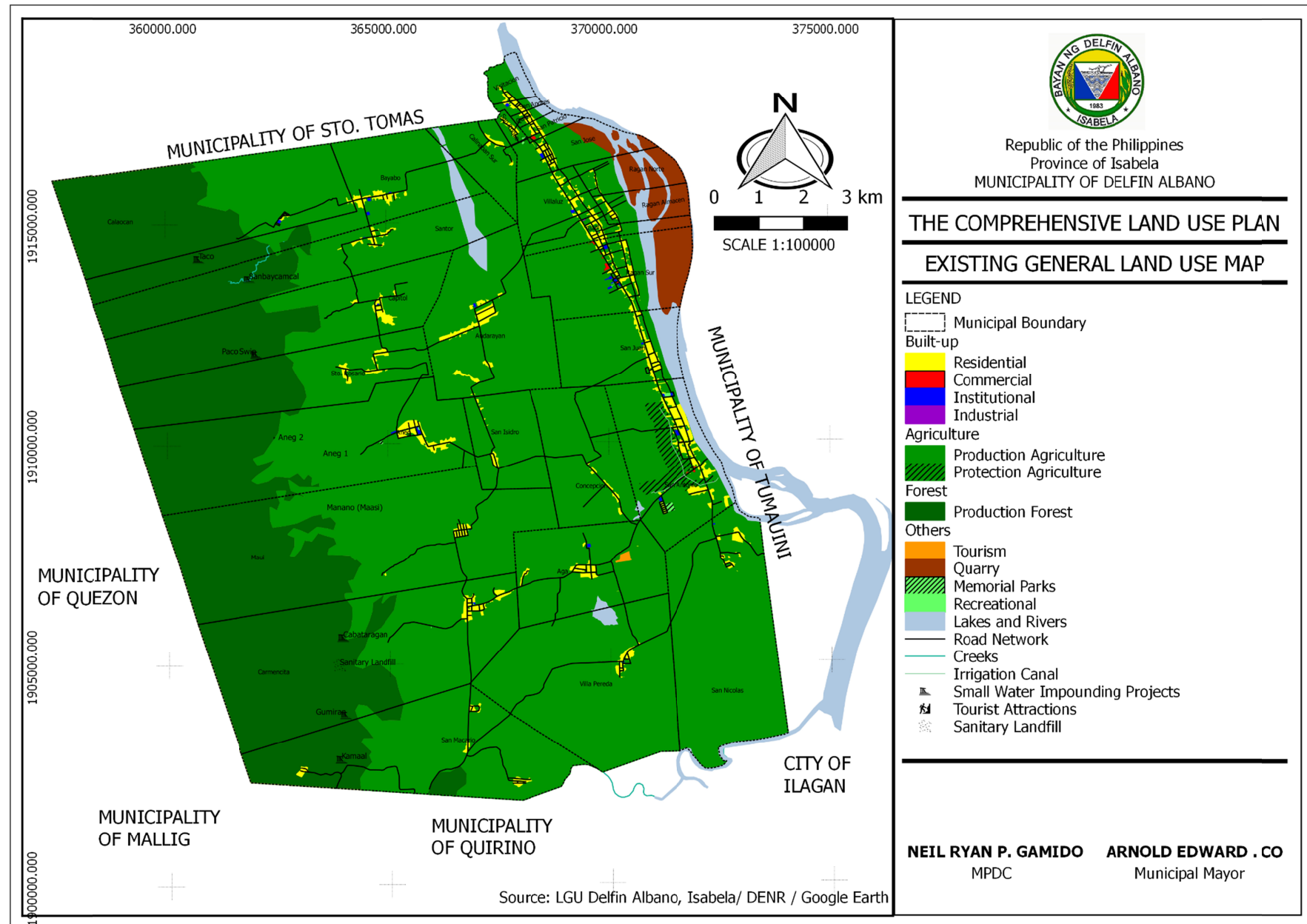
Institutional uses with 29.02 hectares to include schools, clinic and the municipal building and churches comprise 0.15 percent of the total area.

Commercial area to include the Public Market in San Antonio and commercial strips in Ragan Sur is merely 12.89 hectares or 0.07 percent of the total area.

Industrial use includes existing ricemills and agro-industries located at the different barangays occupied an area of 1.12 hectares or 0.01 percent of the total area.. Also included are handicrafts and other small scale industrial activities.

3. Other Uses

There are open grassland/idle lands or pastureland for grazing of ruminants. A total of 4,522.87 hectares or 23.69 percent of the total municipal land area. These areas are marginal lands which may be made part of the lands suitable for future urban expansion or for agro-forestry/.



Land Use	Area (Has.)	%
Residential	550.27	2.88%
Commercial	12.89	0.07%
Institutional	29.02	0.15%
Industrial	1.12	0.01%
Production Agriculture	12263.02	64.22%
Protection Agriculture	103.69	0.54%
Production Forest	5226.96	27.37%
Protection Forest	0	0.00%
Recreational	2.07	0.01%
Memorial Parks	7.9	0.04%
Quarry	337.9	1.77%
Tourism	6.6	0.03%
Roads	80.46	0.42%
Lakes	128.66	0.67%
River	344.67	1.81%
Total	19095.23	100.00%

7.3 Spatial Development Strategies

To determine the spatial development strategy in the proposed physical growth of the municipality for the next ten years 2017-2026, an assessment with the aid of the Scalogram method (listing of existing facilities in each barangay) was technically used as the tool for analysis. This method was to make an accounting of the existing socio-economic development of a certain cluster of barangays to include the existing critical infrastructures that supports the major social and economic activities of the population and its vicinity.

As a result, of the method used and after thorough evaluation of the barangays, it was determined that the urban barangays had the most number of socio-economic amenities and facilities. The Poblacion has the highest number of functions followed by San Antonio showing these two barangays are the major service centers as well as administrative seat for local governance. San Patricio, Andarayan and Carmencita comes next in the hierarchy of functions, which is partly due to the physical character of the area hence,

Considering the outcomes of the Scalogram Method for Spatial Strategies Determination, four (4) urban forms were identified that could convey a balanced physical development of the municipality and after-which were subjected to GAM analysis to come up with the most suitable physical or urban form that can achieve the development thrust and vision of the municipality, to wit:

1. Trend Extension

The existing pattern of development within the municipality shows the settlements are found concentrated along roadsides. Among the settlements found in the different barangay, the urban barangays of the Poblacion (Ragan Sur), have a relatively higher intensity of development. This is so because the urban core is the administrative center and the site of

various community facilities and services within the municipality. It is for this reason that in comparison with other existing settlements found, the Urban Core is the most developed. The existing rural settlements outside the urban are characterized by the presence of agricultural lands upon which the majority of the populations depend on for their livelihood and source of income.

2. Alternative II Linear Development

For the municipality, this spatial development capitalizes on the least demand for conversion of agricultural lands for urban expansion and the least danger of encroaching on protection lands settlements purposes.

However, settlements would tend to mushroom around these area. Demand for infrastructure in that area would accelerate, to the detriment of the Poblacion. Mobility, accessibility and visual amenity of these areas are most likely to deteriorate.

The linear alternative assumes a low urban population, since only the northern and southern barangay from the poblacion are expected to gain urban population. This alternative shall need new but compatible activities such as business services and social amenities as well as complementary employment and economic activities for the southern barangays to sustain the growth momentum of the municipality.

As a form of planned urban expansion, this development strategy will entail stricter applications of land use zoning such as the use of standards to minimize the ribbon-type development pattern along the highway. The ribbon-type development normally creates congestion and heavy demand for public infrastructure and the tendency to convert prime agricultural land to urban uses.

3. Alternative III Growth Node Area Development Strategy

This development strategy entails the identification of growth nodes to function as secondary growth centers. The area that is most suited for this purpose is barangay San Antonio, because of the availability of space for urban expansion entailing the least encroachment on prime agricultural lands and the existence of the Public Market, which is the economic driver in the area.

Also identified would be barangay Carmencita at the southwest portion of the municipality as this barangay has the existing facilities to perform as a sub-center and its potential for development. On the northern part would be barangay San Patricio and barangay Andarayan on the western part because of the presence of facilities and potential for development.

As per assessment conducted the Growth Node Development Strategy is the most appropriate form of Spatial Development Strategy, seconded by Trend Extension and the Linear Strip Development ranking as the least suitable urban form. Considering that the Growth Node development urban type of alternative spatial strategies had the highest mean of scores it was recommended as the spatial strategy to be adopted and applicable for the municipality.

7.4 The Preferred Spatial Development Strategy: Controlled Urban Linear-Nodal Development

The municipality shall developed a two-pronged spatial strategy that will be a combination of nodal and linear urban form to be named the Controlled Urban Linear-Nodal Development. This strategy is believed to bring balance of growth in the urban core at the same time equalizing the development throughout the municipality through the development of new growth centers.

The controlled urban linear development shall run along south and north of the urban poblacion going to San Antonio in the south and San Patricio in the north..

The nodal concept of development calls for the designation of a barangay (based on its sized and population, existing transport system and services, and potentials for development), as a growth point area to serve as the initial focus of community development activities and location or sites of socio-economic projects. Moreover, as functional areas or service centers for specific economic activities, the growth point will have priority in terms of investment inputs to enhance its capability of attracting people either as consumers or producers and at the same time foster the economic development of surrounding non-growth areas. Based from assessment and with the aid of Scalogram Method, it was determined that barangays San Antonio, San Patricio, Andarayan and Carmencita can act as the sub-centers or fulcrum for development for rural barangays adjacent or within their radii of influence. Hence, the San Antonio cluster in its future physical and socio-economic development encompasses its surrounding barangays in the south, the Carmencita cluster will serve the northwestern barangays, San Patricio will serve its adjoining barangays in the north and Andarayan will serve the western barangays.

It is envisioned that these growth point areas will gradually become self-reliant and self-sustaining communities as its residents will be mobilized as contributors and participants in attaining better life for themselves. Ultimately, these growth points will radiate development and stimulate the progress of outlying non-growth areas. In effect, they propel the overall growth of the entire municipality. The following must be effected to warrant the success of this objective:

1. The cooperation and active participation of barangay officials and residents in this growth points particularly in the decision-making process. Maximum progress depends on maximum participation, a situation in which all members of the community realize they have a stake in that progress and contribute to it.
2. Improvement/Construction/Maintenance of Support infrastructure and facilities:

- 2.1 Energization of unserved households
- 2.2 Improvement and maintenance of existing transportation network.
- 2.3 Availability of adequate and potable water supply.
- 2.4 Expansion and improvement of existing educational facilities.
- 2.5 Provision of adequate sports facilities
- 3. Availability of an extensive and intensive extension services.
- 4. Expansion in the operation of existing industries, in order to increase employment opportunities.
- 5. Availability of adequate space for future small-scale and medium-scale industries and cottage industries.

With the interaction of agency services coupled with the implementation of various infrastructure projects and participation of the community members in the decision making process, these growth points shall develop into self-reliant communities to serve as nuclei of community development among outlying non-growth barangays.

This shall entail the following policies:

- 1. Incentives will be provided to induce investors to locate in the growth node barangays. Infrastructure facilities such as transportation services will be improved and power and water supply will be adequately provided.
- 2. Industries will be directed to provide for effective and efficient anti-pollution devices in order to maintain public health standards and ecological balance.
- 3. Transportation network linking the growth points with the Urban Core and with other communities will be upgraded and maintained and transport utilities will be developed along these routes.

4. Power service coverage within the growth points will be expanded to include energization of all unserved household.
5. Sufficient irrigation supply will be provided to maximize agricultural production. Prime agricultural lands shall be preserved.
6. Educational facilities within the growth points will be improved. This will include the provision of adequate number of classrooms, textbook, desks and instructional materials.
7. Beautification and environmental sanitation will be promoted in the growth points. This will entail the establishment of mini-parks, construction of sanitary toilets facilities and better methods of solid and liquid waste disposal.
8. A Zoning Ordinance will be enacted and enforced with regards to the physical development of the municipality.

The spatial requirements of socio-economic projects implementable within the plan period will be provided in order to enhance the role of these barangays as growth nodal areas and the rural barangays within their radii be extensively serviced for them to minimize dependency on the major service center, the Poblacion.

7.5 Concept Structure

Spatially, the physical development of the municipality illustrates a linear-nodal growth pattern, with linear development along both sides of the Highway within the municipality. The Poblacion, will maintain its role as the primary urban center, but shall be expanded to include barangays adjacent to it. It will serve as the center for institutional, educational and commercial development. Functioning as the major growth center or major node, it shall be servicing barangays adjacent and proximate to its location specifically San Juan,,Rizal, San Jose, Ragan Norte and Ragan Almacen. This Clusters of barangays outside the urban center will form urban corridors. Considering the population growth trend, the emerging of the growth corridors will be practically influenced by the major roads connected to the urban core.

The structure plan depicts the emergence of four (4) minor growth nodes/corridors. These areas are linked by major roads and farm to market roads.

As described in the structure plan, the emerging four (4) growth node centers are cluster of barangays proximate with each other and have similarities in land uses, designated as follows:

1. The Southern Growth Corridor (San Antonio Cluster) – comprises the barangays of San Antonio, San Nicolas, Conception, Aga, and Villa Pereda. Its functional role will be commercial, tourism, industrial and agricultural development..
2. The Southwestern Growth Corridor (Carmencita Cluster) - comprises the barangays of Carmencita, San Mariano, Maui, Villa Pereda.. Its functional role will be agro forestry and eco-tourism development.
3. The Western Corridor Growth Center (Andarayan Cluster). This comprises barangay Andarayan, San Isidro, Aneg, Sto Rosario, Capitol. Its functional role will be agricultural development as well as agro forestry development.
4. Northern Growth Corridor (San Patricio Cluster) - This comprises San Patricio, San Jose, Calinaoan Sur, San Andres, Visitacion, Santor, Bayabo and Calaocan. Its functional role is commercial, agricultural and agro forestry. The development of the nodes/corridors is expected to radiate to their outlying skirts/barangays.

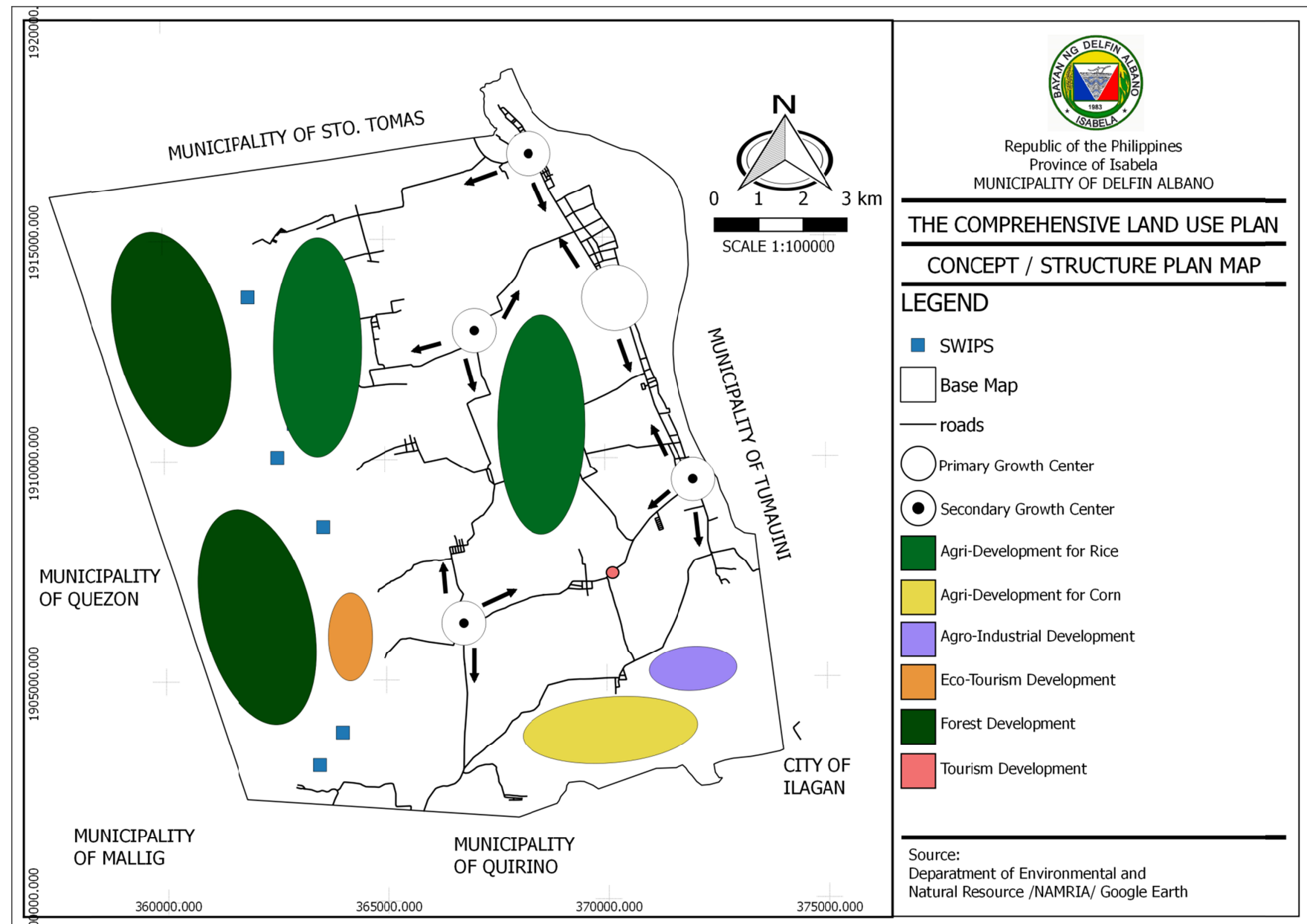
The urban area of Poblacion which already manifests high urban density, doesn't encourage further intensification of activities in support of its role as the administrative center and educational center. The presence of the Municipal Hall and support facilities is expected to influence the development of adjacent barangays nearest the poblacion, which is made part of the major urban center. It is expected to go southward towards barangays San Antonio since existing trends already manifests a commercial

development pattern along the highway. Barangays affected for commercial development are located between the Poblacion and San Antonio which will manifest linear type of development..

To support the municipality's vision of performing as an agro-industrial site of northern Isabela, a portion of barangay Villa Pereda shall be identified as the agro- industrial / industrial area of the municipality. Further, with a large water body, the banks along the Cagayan River, will become an eco-tourism site. Programs that can enhance the economic viability of the river as a tourism destination should be fully explored.

Barangay Carmencita will become the eco-tourism site where the mini chocolate hills, table hills and bird sanctuary and breeding grounds are located.

The area for agricultural development particularly for rice and corn, shall cover the large parts of the central portion of the municipality. This covers the barangays of Andarayan, San Isiro, Conception, Aga, Villa Pereda and San



Nicolas. It also include the western barangays such as San Macario, Carmencita, Maui, Aneg, Sto Rosario, Capitol, Santor, Bayabo and Calaoacan.

7.6 Land Supply and Demand Analysis

As of 2010, the municipality has a total population of 25,422. The survey conducted by the PSA in 2015 revealed a population of 26,614. This is expected to increase at an average annual growth rate (AAGR) of 0.92%. By year 2026, the population of the municipality would have grown already to projected urbanization, the need for additional areas to accommodate urban development while at the same time ensuring the protection of the prime population of 26,614 of which about 24 % is expected to comprise the urban population. The role of the municipality as an agro-industrial site in the northern part of the province, the abundance of agricultural lands for rice and corn, and the presence of ecologically forest areas, provide the key element in the formulation of the Land Use Plan. A change in land use configuration of the municipality is thus vital to ensure a defined spatial growth of the municipality.

Allocations of space were based on the standard space requirement but where the standard is not available and applicable, the specific role, potential and growth pattern of a particular area in the overall development of the municipality was considered.

Other than the use of existing and available information on regulatory and legal land status, the land use accounting method shall be utilized to determine how much area can be utilized for development, especially for urban functions. This method will indicate areas that are suitable for urban development and those which should be permanently protected.

Data or figures presented were secured from the concerned national government agencies that include the Department of Environment and Natural Resources, the Mines and Geosciences Bureau, the Bureau of Soils and Water Management. The use of Geographic Information System (GIS) for land use planning was utilized to compute for the approximate area.

7.7 Land Supply

Based on the legal land status, the whole municipality has a total land area of 19,043 hectares of which 13,718 hectares is alienable and disposable and 5,325 hectares is categorized as forestland.

Below are the identified areas that are not suitable for urban development:

1. Flood Susceptibility. There are 10 barangays in the municipality that are moderate and highly susceptible to flooding. Around 801.40 hectares are highly susceptible while 1,523.90 hectares are moderately susceptible to flooding. These portions of land are found in the barangays along the Cagayan River. Areas at high risk to flooding are usually the areas near or along the river of barangays Ragan Norte, Ragan Almacen, San Patricio, Quibal, San Andres, Visitacion, San Roque, San Nicolas, San Isidro and Calioan Sur. When the Cagayan River overflows, the barangays are exposed to low-moderate susceptibility flooding hazard. The other barangays farther from the river are also vulnerable to low to moderate susceptibility flooding.
2. Prime Agricultural Areas – These are the irrigated rice field areas of the rice-producing barangays having a total area of 7,002 hectares.
3. Forest - These are the areas on the western part of the municipality which was recently classified as forest under the Forest Land Use Plan covering an area of 5,325 hectares.
4. Protection Buffer per P.D. 1067 – This covers the 20-meter water body easement in rural barangays, 40 meters in forest area and 3-meter easement in urban barangays. For the municipality's 8-kilometer river system, a total area of 20 hectares is considered protection buffer.
5. Settlement Area. The existing settlement area of about 586 hectares are already occupied by dwelling structures, commercial establishments, big industrial establishments, institutional facilities and support social services are unbuildable

areas and should be excluded in the potential areas for urban development

Overlaying all thematic maps involving the above considerations, 13,148 hectares are not eligible urban expansion. This reflects that a total of 5,895 hectares or 30.95 % of the municipality's 19,043 hectares can be considered for urban expansion and development.

8. Detailing the Land Use Plan and Area Quantification

8.1 General Land Use Plan

The existing pattern of development within the municipality shows that settlements are found generally established along roadsides. Among all settlements found in the different barangays, the three urban core barangays, Ragan Sur and San Juan and the barangay of San Antonio have higher intensity of development. The existing rural settlements outside these urban areas are characterized by the presence of agricultural lands to include grazing areas and forestlands where the greater majority of the populations depend as their livelihood and source of income.

In line with the municipality's thrust for agro-industrialization, an agro industrial shall be identified.

In compliance to RA 9003, the existing controlled dump site will be upgraded to Sanitary Land Fill.

8.1.1 Residential Areas

The total settlement area for the whole municipality is 550.27 hectares comprising 2.88 percent of the municipality's land. This will increase to 938.44 hectares which are proposed for settlement uses purposely to accommodate future expansions on tangible

developments to support increase in the socio-economic activities of the populace and the increase in population. Most of the identified residential areas are expansion of existing ones especially along the road where settlements are found.

Settlements area are categorized as residential, commercial, institutional, parks and recreation and existing industrial uses like rice mills. Also to be included in this land use category are resorts and even socialized housing.

8.1.2 Agriculture

The total existing agricultural area is 12,366.71 hectares, both production (12,263.02 has.) and protection agriculture (103.64 has) This area is proposed to decrease to 11,427.2 has since some areas will be converted to built up areas. There is a decrease of 437.91 has. or a reduction of 3.54 percent of the existing agricultural area. However, the area of protection agriculture is increased.

Protection agriculture will cover a total land area of 437.91 hectares, which is 2.29 percent of the total agricultural area. Protection agriculture will include all irrigated and irrigable areas of the municipality.

Production agriculture covering an aggregate area of 11,495.16 hectares is 60.20 percent of total agricultural area. Production agriculture will cover agricultural areas without irrigation and marginal agricultural areas.

8.1.3 Forest

The municipality has an existing 704.09 hectares protection forest and 4,522.87 production forest. This will be broken down as follows; production forest with 4358.16 hectares and 868.8 hectares classified as protection forest. The municipality has already prepared a separate forest land use plan for this purpose.

8.1.4 Industrial Area

A portion of barangay Villa Pereda is identified as the Agro-Industrial site of the municipality. It has an area of 32.94 hectares or 0.17 percent of the total land area.

8.1.5 Open Grasslands

Under the forest land use plan, all the existing grasslands are reclassified as forest, hence all grasslands shall be converted to forest.

8.1.6 Water Uses:

1. Rivers and Creeks

The total area of water bodies is 473.33 hectares, broken down as follows; river with 344.67 hectares and lakes with 128.66 hectares.

8.1.7 Roads/Utilities

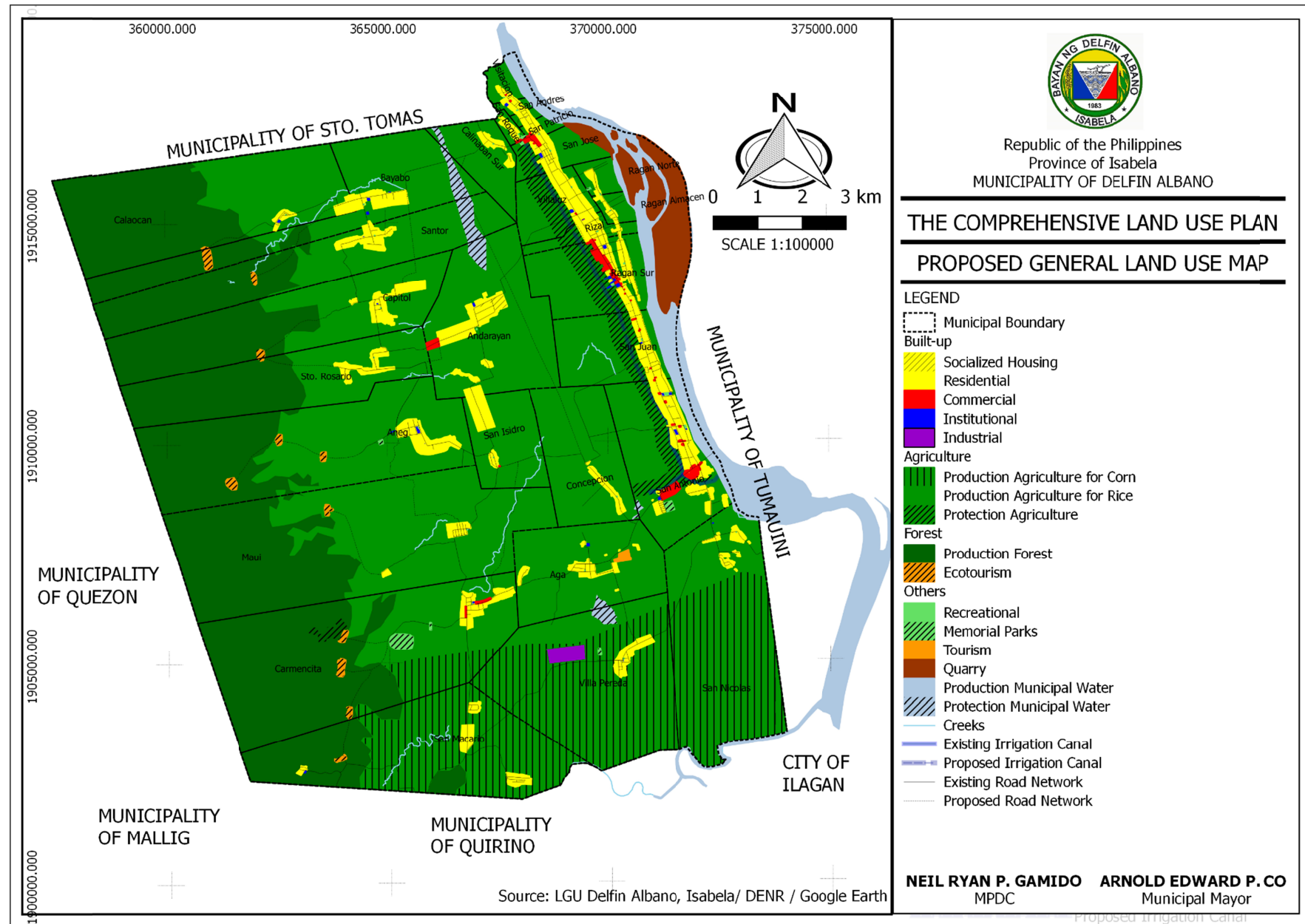
The area of roads and utilities will increase from 80.46 has. to 104.81 has. This is because there are additional proposed roads to be constructed within the municipality within the next ten years.

8.1.8 Others

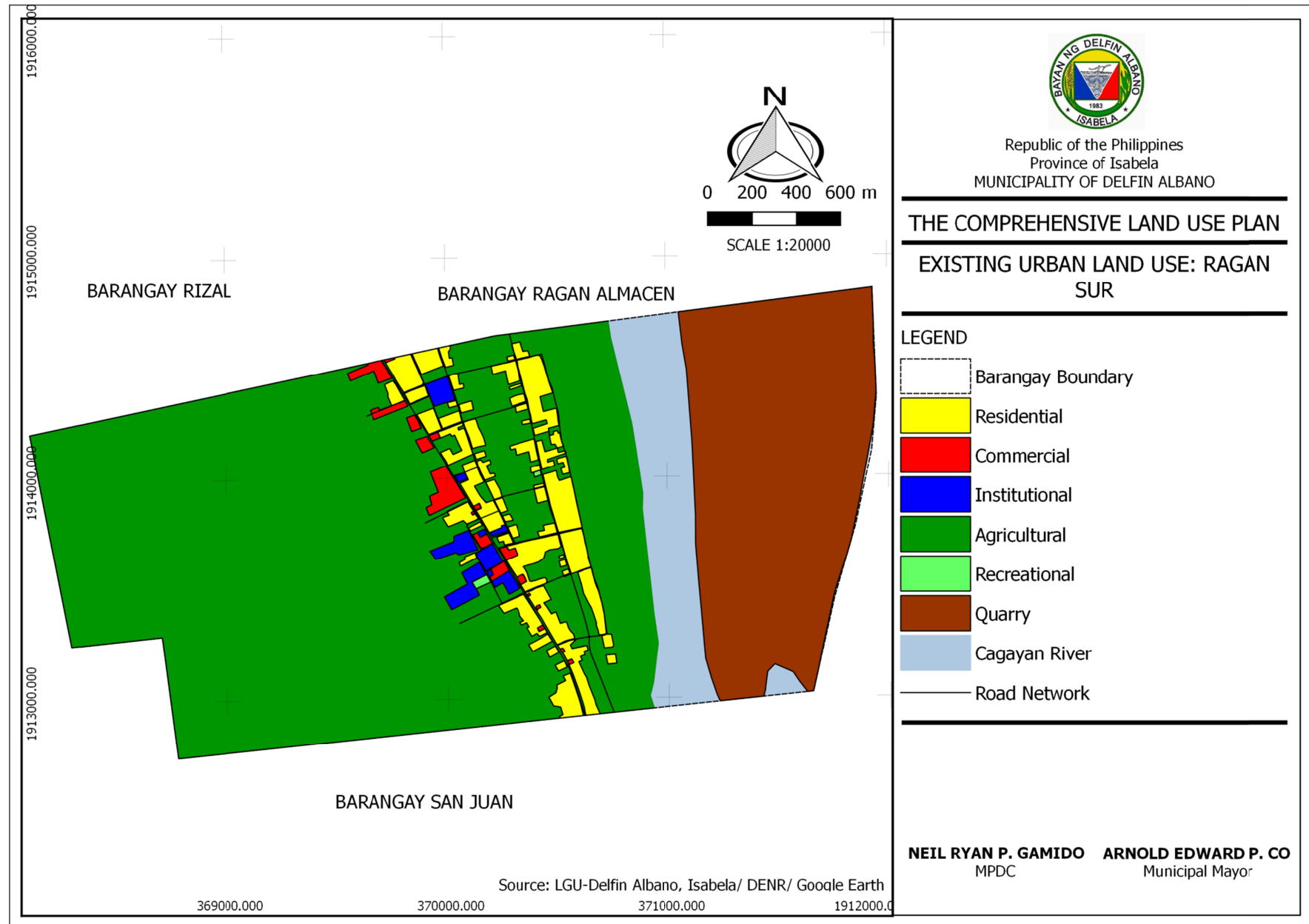
Tourism Areas. This includes the areas occupied by mini chocolate hills, table's hills, bird sanctuary and breeding grounds. It has a combined area of 60.43 hectares.

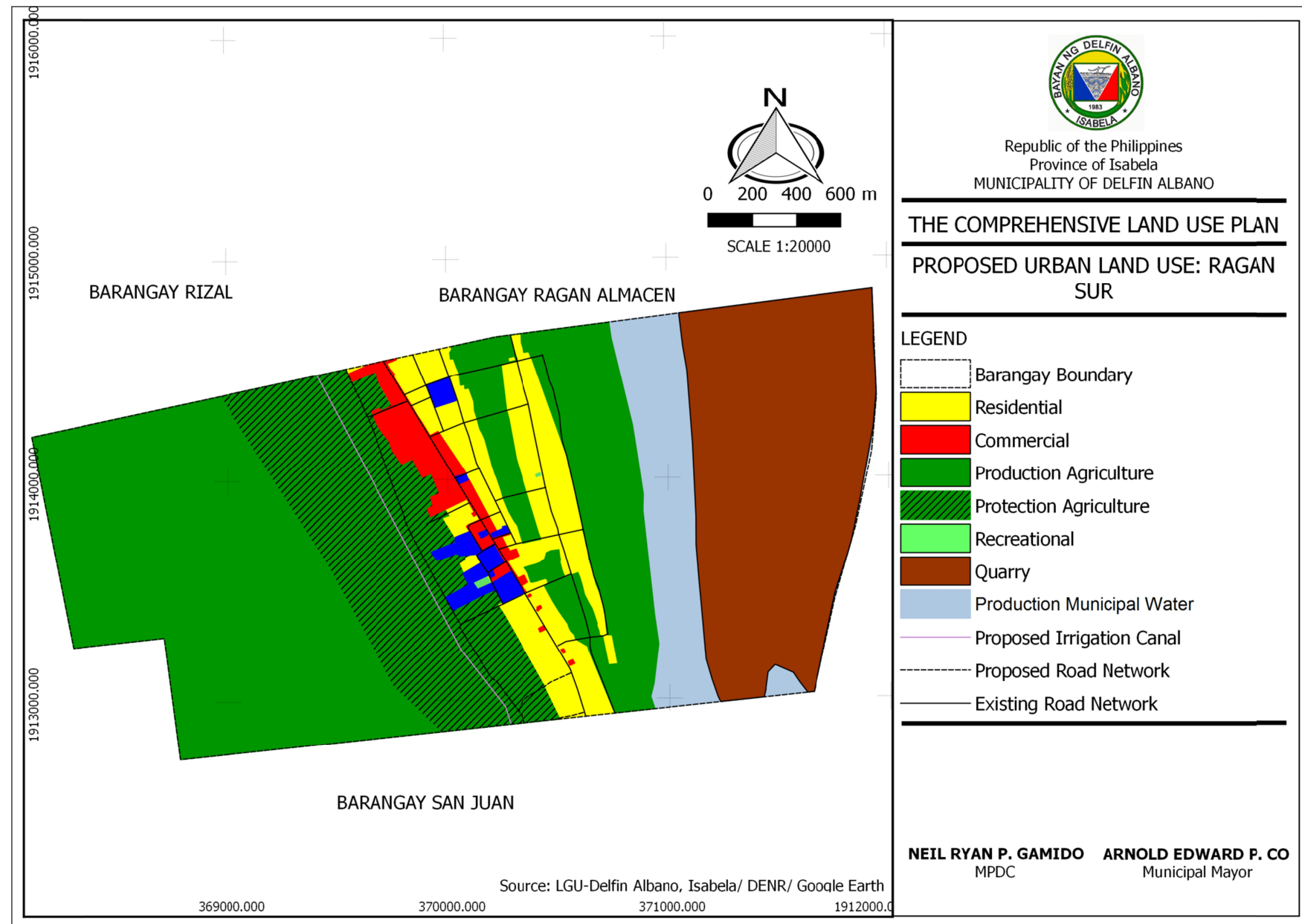
Cemeteries/memorial parks. It covers a total area of 26.09 hectares.

Recreational Areas. It covers an area of 2.07 hectares



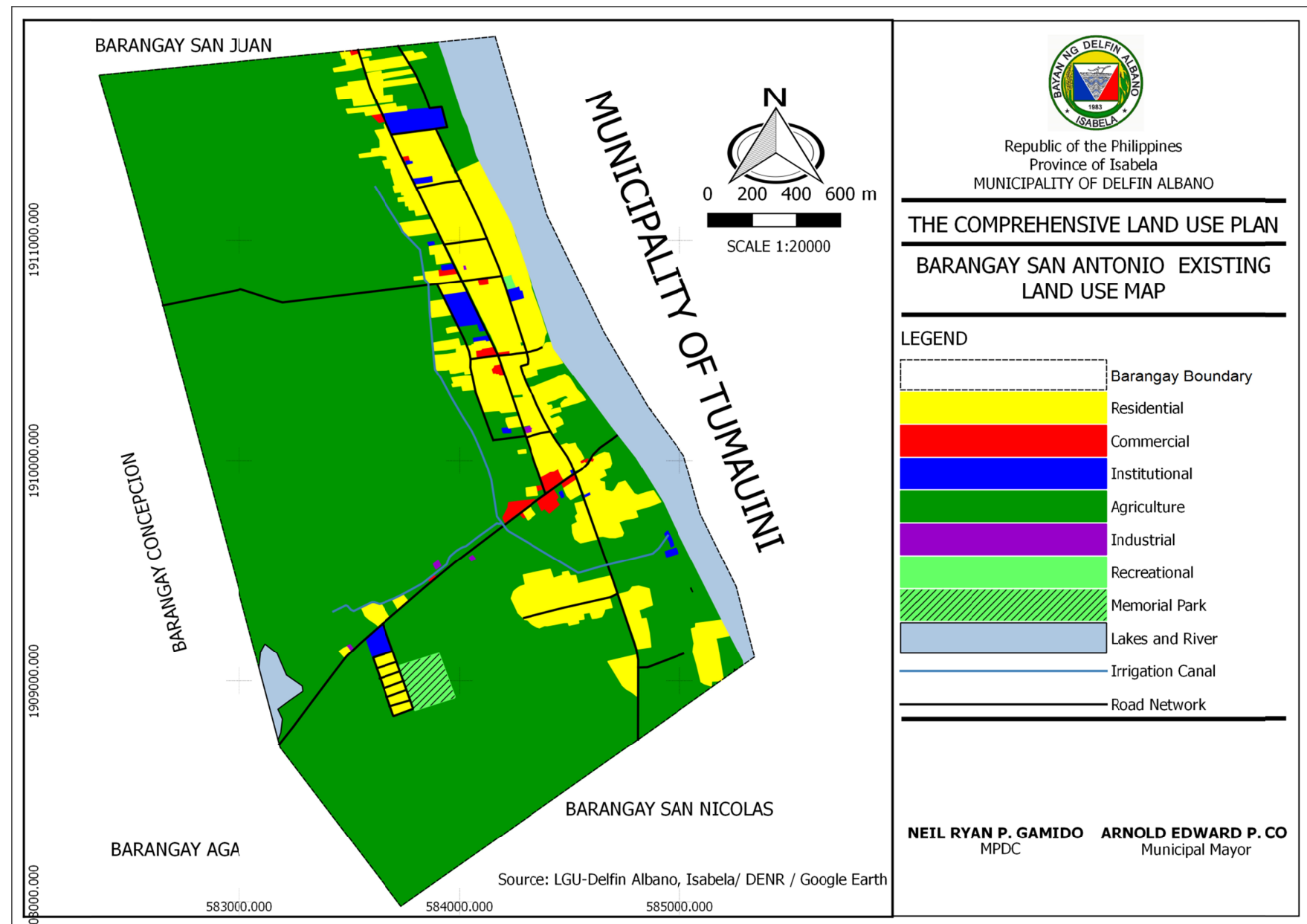
Sector	EXISTING		PROPOSED		DIFFERENCE (INCREASE/DECREASE)
	Area (Has.)	%	Area (Has.)	%	Area (Has.)
Residential	550.27	2.88%	938.49	4.91%	388.22
Commercial	12.89	0.07%	50.47	0.26%	37.58
Institutional	29.02	0.15%	30.46	0.16%	1.44
Industrial	1.12	0.01%	32.94	0.17%	31.82
Production Agriculture	12263.02	64.22%	11427.2	59.84%	-835.82
Protection Agriculture	103.69	0.54%	437.91	2.29%	334.22
Production Forest	5226.96	27.37%	5205.96	27.26%	-21.00
Protection Forest	0	0.00%	21	0.11%	21.00
Recreational	2.07	0.01%	2.07	0.01%	0.00
Memorial Parks	7.9	0.04%	26.09	0.14%	18.19
Quarry	337.9	1.77%	337.9	1.77%	0.00
Tourism	6.6	0.03%	6.6	0.03%	0.00
Roads	80.46	0.42%	104.81	0.55%	24.35
Lakes	128.66	0.67%	128.66	0.67%	0.00
River	344.67	1.81%	344.67	1.81%	0.00
Total	19095.23	100.00%	19095.23	100.00%	0.00

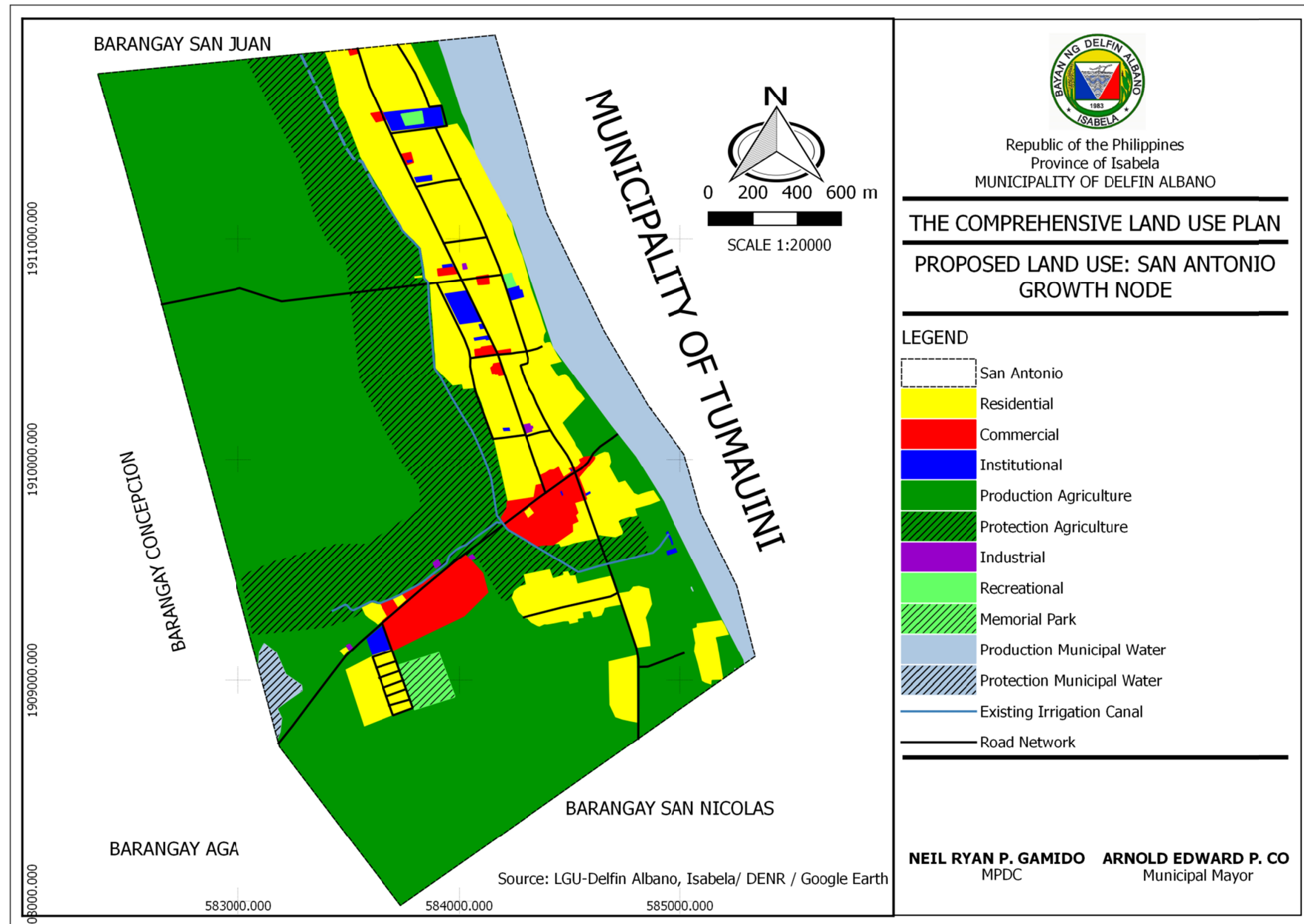




LAND USES	EXISTING LAND USE		PROPOSED LAND USE		DIFFERENCE
	Area (Has)	%	Area (Has)	%	Decrease/Increase
Residential	30.31	5.63%	52.18	8.79%	21.87
Commercial	5.82	0.98%	14.65	2.47%	8.83
Institutional	6.92	1.17%	6.92	1.17%	0
Industrial	0	0.00%	0	0.00%	0
Agriculture Production	370.11	62.88%	239.07	40.28%	-134.12
Agriculture Protection	0	0.00%	98.88	16.65%	98.88
Forest Production	0	0.00%	0	0.00%	0
Forest Protection	0	0.00%	0	0.00%	0
Grassland	0	0.00%	0	0.00%	0
Memorial Parks	0	0.00%	0	0.00%	0
Recreation	0.33	0.06%	0.33	0.06%	0
Quarry	127.31	21.45%	127.31	21.45%	0
Tourism	0	0.00%	0	0.00%	0
Roads/utilities	6.15	1.03%	7.62	1.28%	
Lakes	0	0.00%	0	0.00%	0
River	46.56	7.84%	46.56	7.84%	0
Total	593.52	100.00%	593.52	100.00%	0

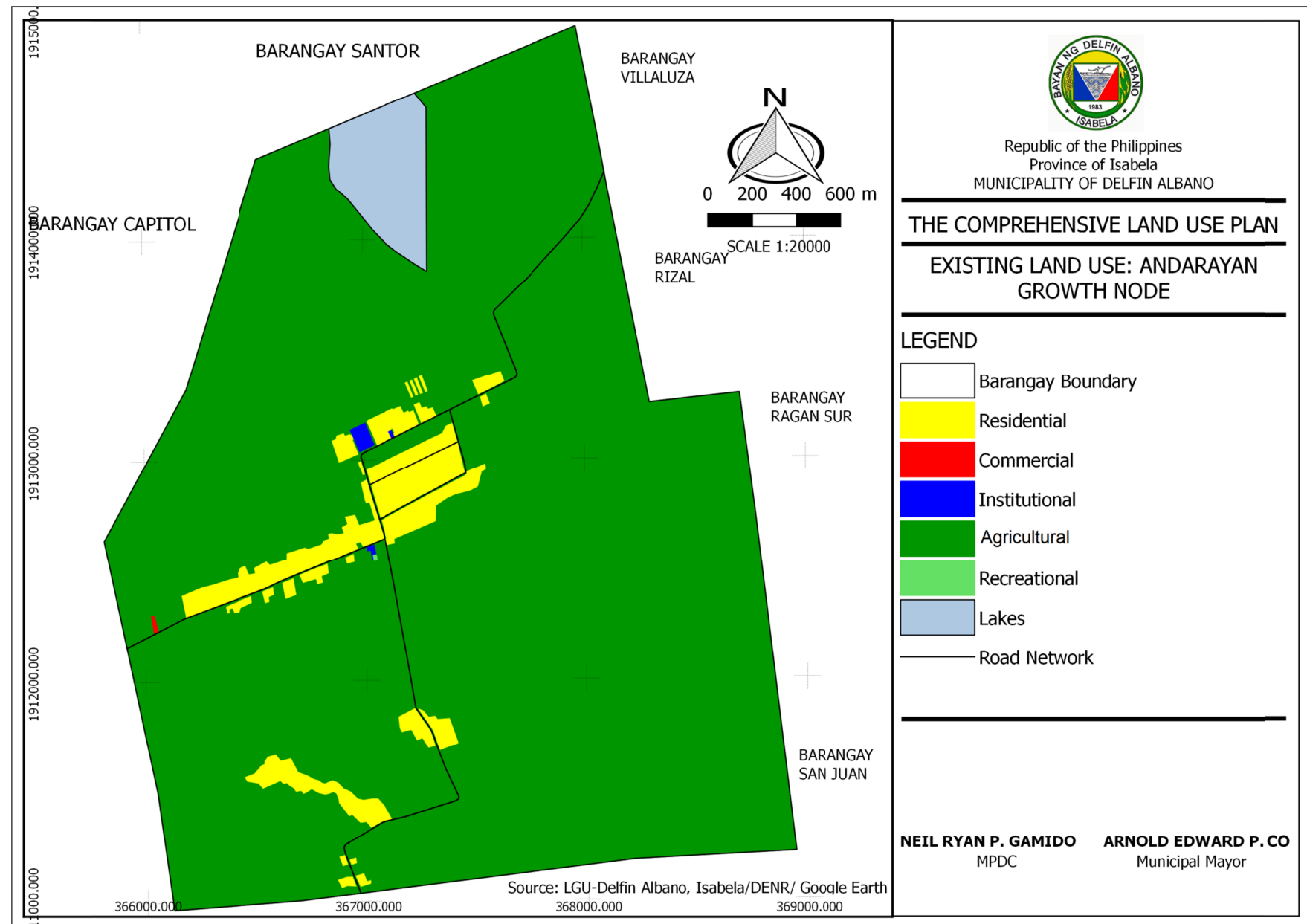
URBAN LAND USE PLAN- Ragan Sur

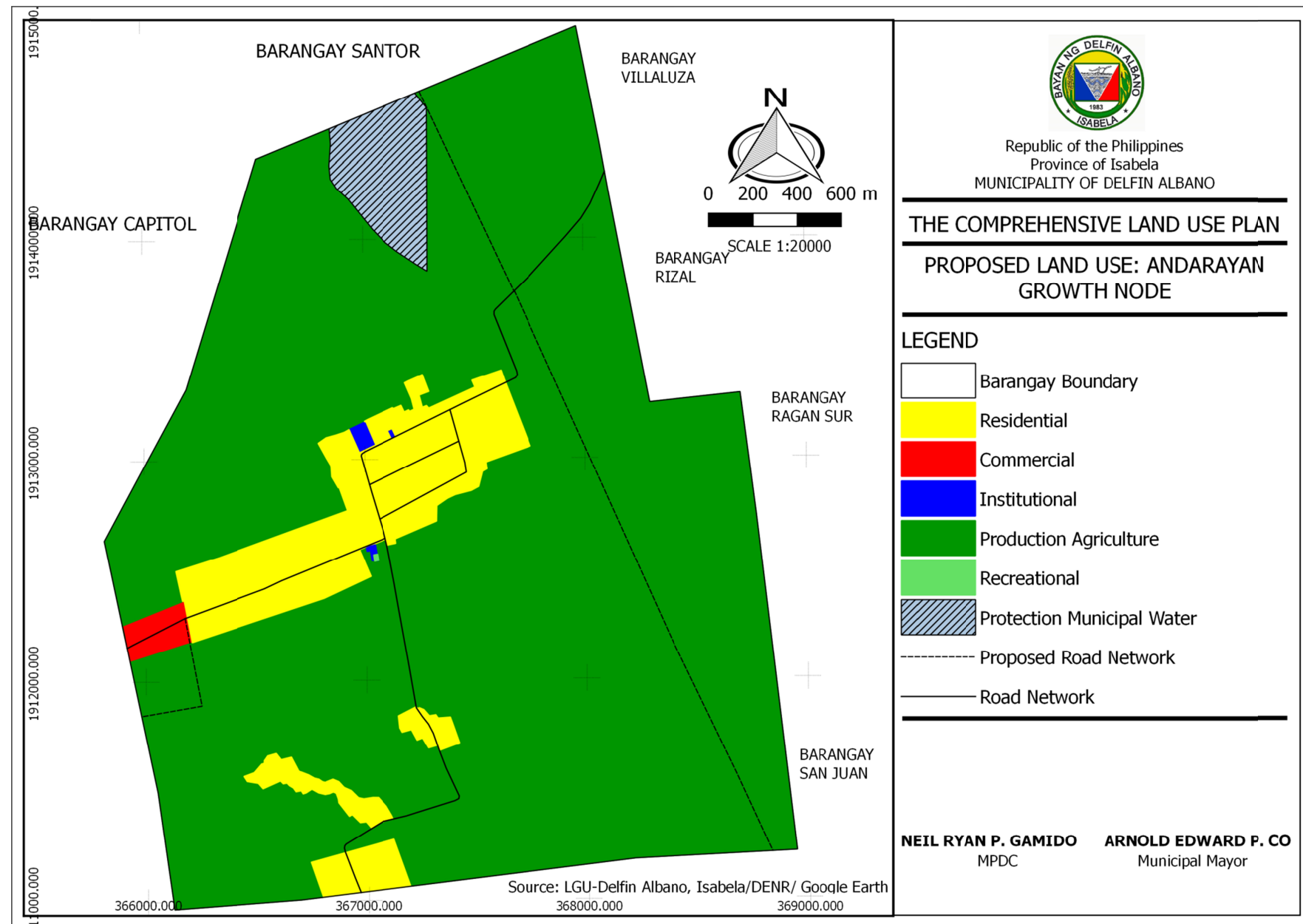




Land Uses	EXISTING LAND USE		PROPOSED		Difference
	Area (Has.)	%	Area (Has.)	%	Decrease/Increase
Residential	83.17	12.07%	121.3	17.60%	38.13
Commercial	3.47	0.50%	20.35	2.95%	16.88
Institutional	5.95	0.86%	5.95	0.86%	0
Industrial	0.3	0.04%	0.3	0.04%	0
Agriculture Production	524.11	76.06%	352.76	51.20%	-171.35
Agriculture Protection	0	0.00%	123.75	17.96%	123.75
Forest Production	0	0.00%	0	0.00%	0
Forest Protection	0	0.00%	0	0.00%	0
Grassland	0	0.00%	0	0.00%	0
Recreation	0.72	0.10%	0.72	0.10%	0
Memorial Parks	4.08	0.59%	4.08	0.59%	0
Quarry	0	0.00%	0	0.00%	0
Tourism	0	0.00%	0	0.00%	0
Roads/Utilities	7.41	1.07%	7.41	1.07%	0
Lakes	3.5	0.51%	3.5	0.51%	0
River	56.33	8.18%	56.33	8.18%	0
Total	689.04	100.00%	689.04	100.00%	0

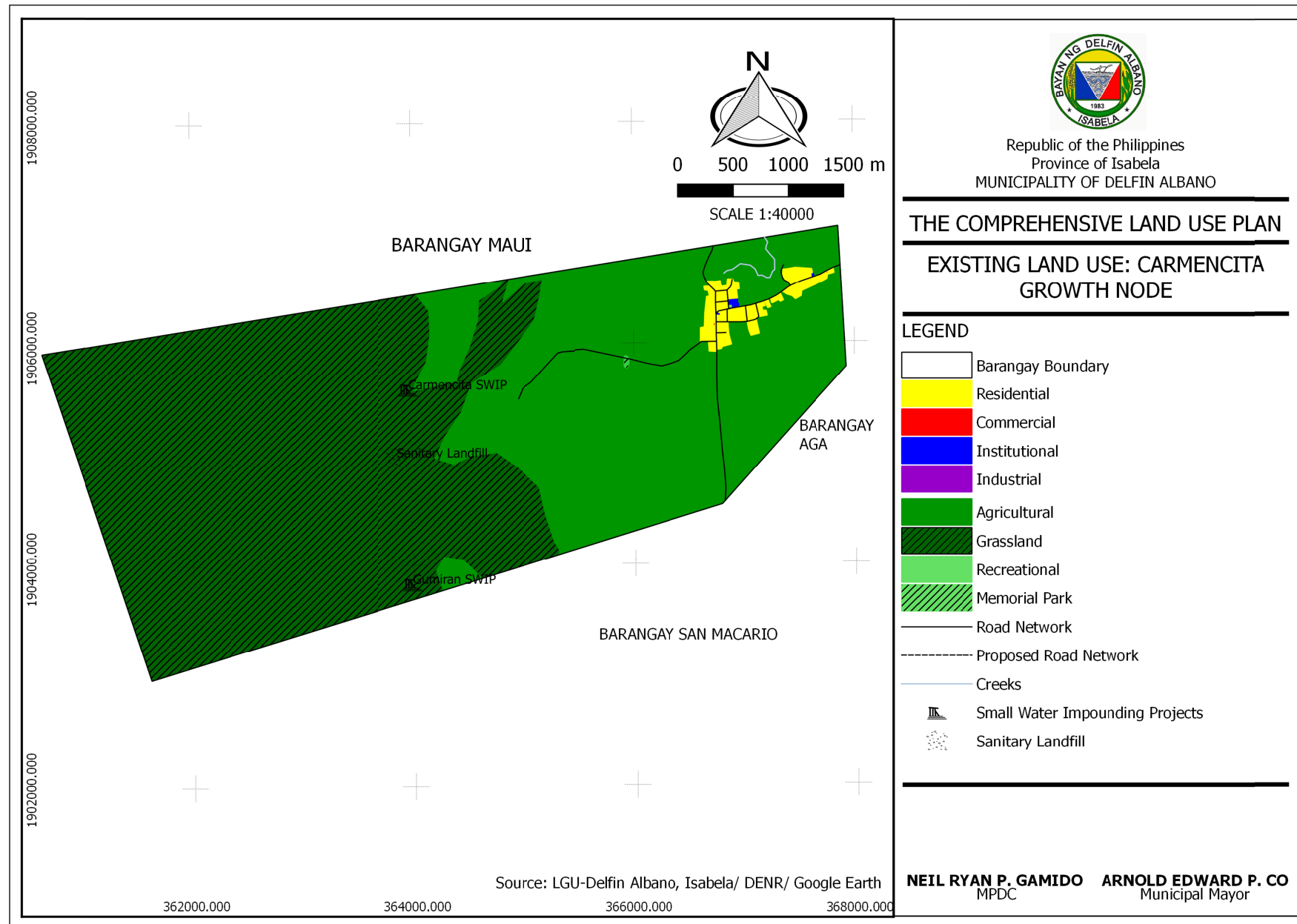
San Antonio Growth Node

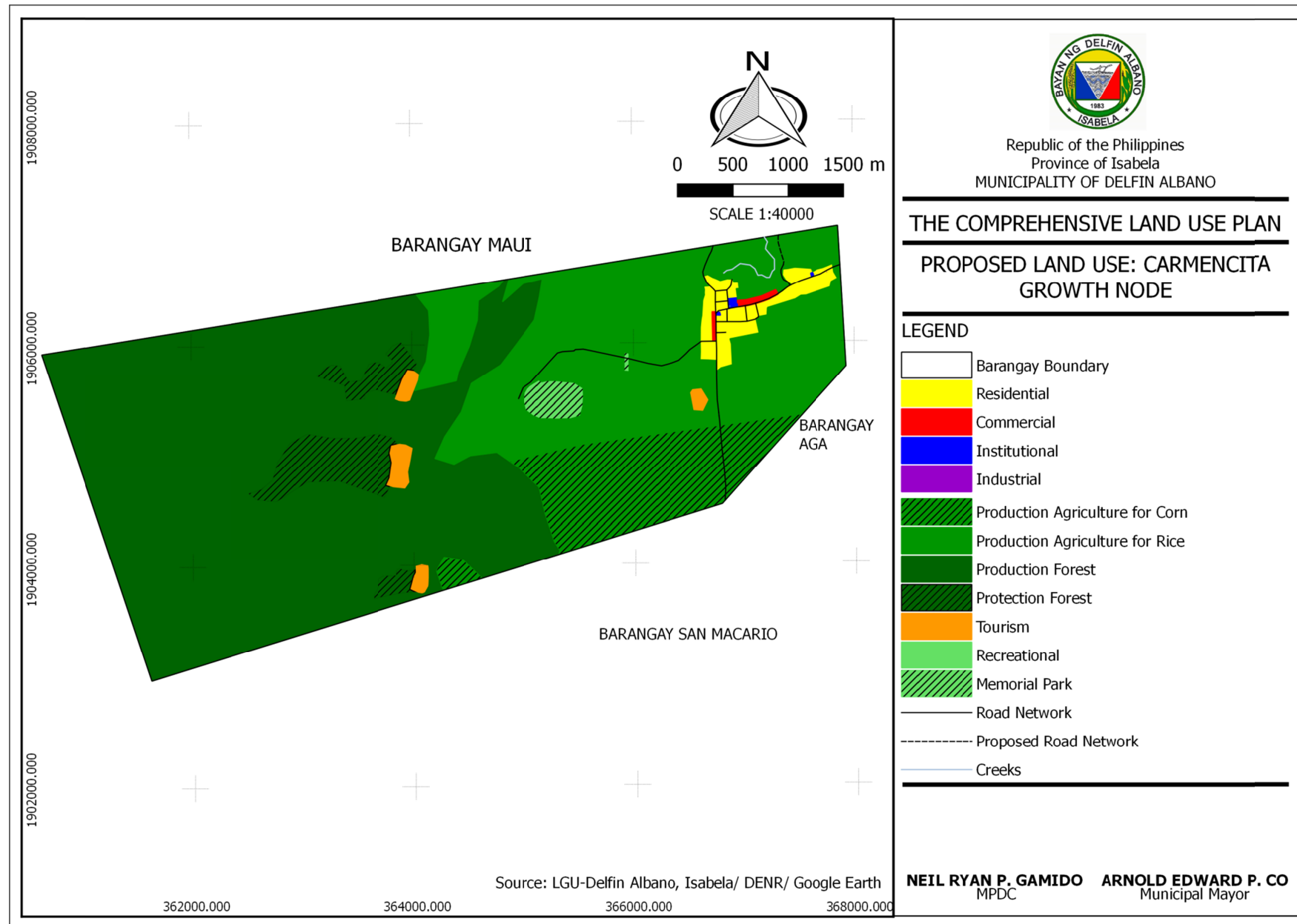




	EXISTING LAND USE		PROPOSED LAND USE		DIFFERENCE
Land Uses	Area (Has.)	%	Area (Has.)	%	DECREASE/INCREASE
Residential	44.05	5.06%	83.47	9.59%	39.42
Commercial	0.2	0.02%	5.32	0.61%	5.12
Institutional	1.24	0.14%	1.24	0.14%	0
Industrial	0	0.00%	0	0.00%	0
Agriculture Production	796.64	91.58%	753.83	86.66%	-42.81
Agriculture Protection	0	0.00%	0	0.00%	0
Forest Production	0	0.00%	0	0.00%	0
Forest Protection	0	0.00%	0	0.00%	0
Grassland	0	0.00%	0	0.00%	0
Memorial Parks	0	0.00%	0	0.00%	0
Recreation	0.06	0.01%	0.06	0.01%	0
Quarry	0	0.00%	0	0.00%	0
Tourism	0	0.00%	0	0.00%	0
Roads/Utilities	3.41	0.39%	5.09	0.58	1.68
Lakes	24.25	2.79%	24.25	2.79%	0
River	0	0.00%	0	0.00%	0
Total	869.85	100.00%	869.85	100.00%	0

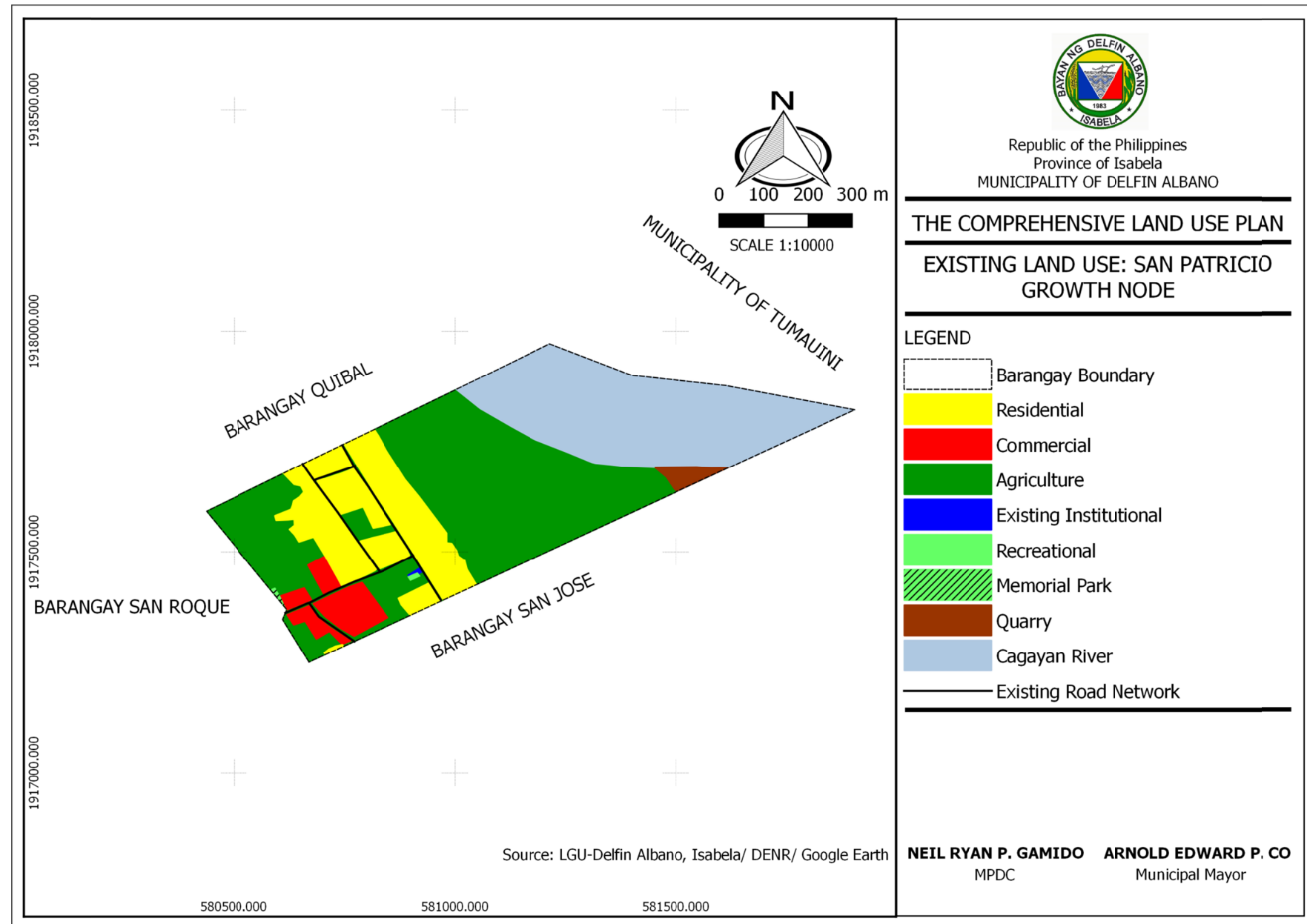
Andarayan Growth Node

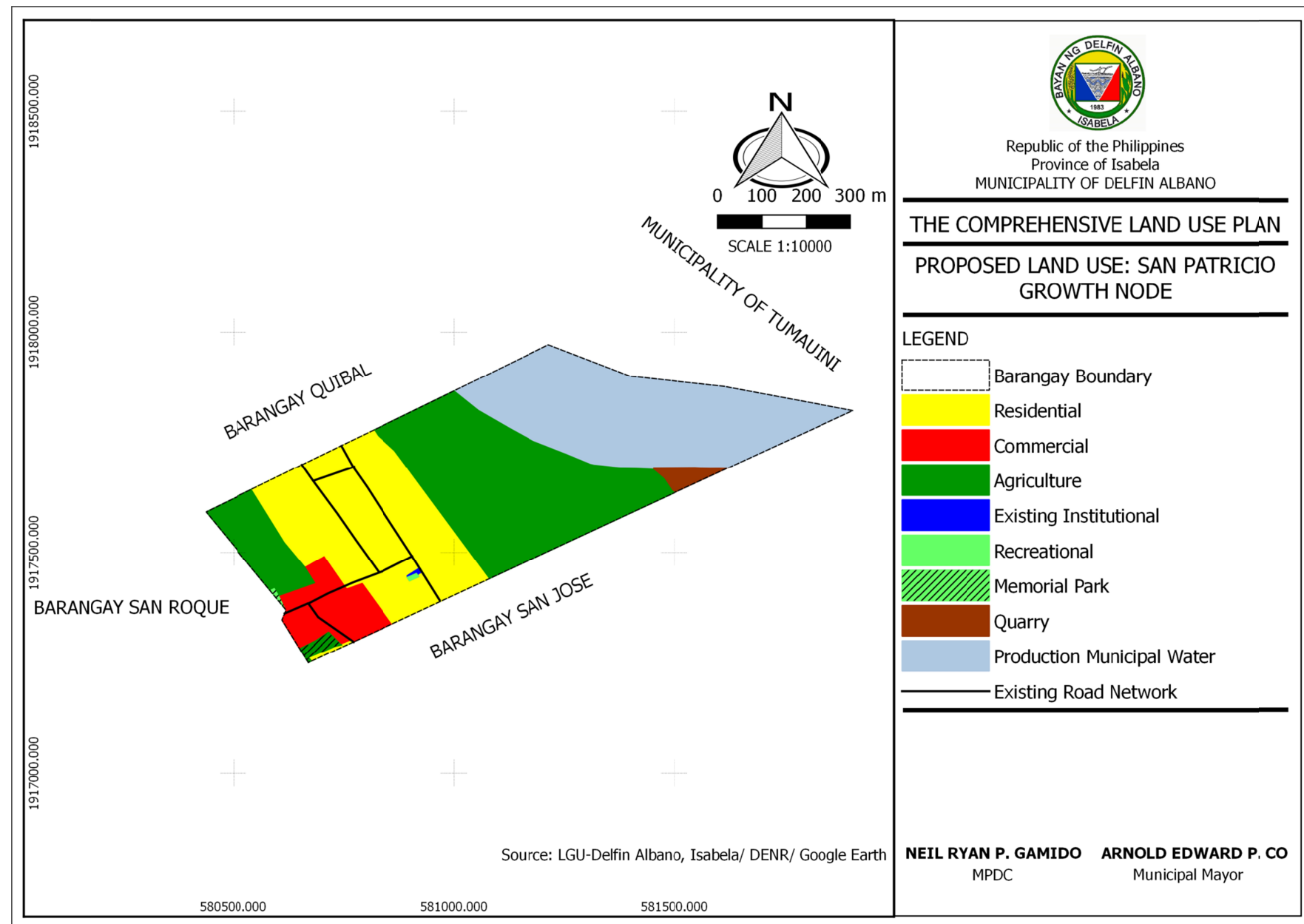




	EXISTING LAND USE		PROPOSED LAND USE		DIFFERENCE
Land Uses	Area (Has.)	%	Area (Has.)	%	DECREASE/INCREASE
Residential	25.67	1.46%	39.69	2.25%	14.02
Commercial	0.05	0.00%	2.88	0.16%	2.83
Institutional	0.75	0.04%	0.75	0.04%	0
Industrial	0.03	0.00%	0.03	0.00%	0
Agriculture Production	691.08	39.17%	658.30	37.31%	-32.78
Agriculture Protection	0	0.00%	0	0.00%	0
Forest Production	0	0.00%	949.82	53.84%	949.82
Forest Protection	0	0.00%	76.88	4.36%	76.88
Grassland	1041.87	59.05%	0	0.00%	-1041.87
Memorial Parks	0.4	0.02%	17.54	0.99%	17.14
Recreation	0.04	0.00%	0.04	0.00%	0
Roads/Utilities	4.36	0.24%	4.53	0.25%	
Quarry	0	0.00%	0	0.00%	0
Tourism	0	0.00%	18.15	1.03%	18.15
Lakes	0	0.00%	0	0.00%	0
River	0	0.00%	0	0.00%	0
Total	1764.25	100.00%	1764.25	100.00%	0

Carmencita Growth Node





Land Uses	EXISTING LAND USE		PROPOSED		Difference
	Area (Has.)	%	Area (Has.)	%	Decrease/Increase
Residential	7.34	16.17%	11.20	24.68%	3.86
Commercial	2.05	4.52%	2.9	6.39%	0.85
Institutional	0.03	0.07%	0.03	0.07%	0
Industrial	0	0.00%	0	0.00%	0
Agriculture Production	20.95	46.18%	15.99	35.24%	-4.96
Agriculture Protection	0	0.00%	0.25	0.55%	0.25
Forest Production	0	0.00%	0	0.00%	0
Forest Protection	0	0.00%	0	0.00%	0
Grassland	0	0.00%	0	0.00%	0
Recreation	0.04	0.09%	0.04	0.09%	0
Memorial Parks	0.05	0.11%	0.05	0.11%	0
Quarry	0.5	1.10%	0.5	1.10%	0
Tourism	0	0.00%	0	0.00%	0
Roads/Utilities	0.69	1.52%	0.69	1.52%	0
Lakes	0	0.00%	0	0.00%	0
River	13.72	30.24%	13.72	30.24%	0
Total	45.37	100.00%	45.37	100.00%	0

San Patricio Growth Node

9.0 Land Use Policies

On Settlements:

1. Residential use shall enjoy priority over other uses in the allocation of hazard – free areas.
2. Hazard – exposed settlements both urban and rural shall be relocated to safe areas.
3. Vulnerable settlements that cannot be relocated shall have an operation community – based disaster management plan.
4. Multi-storey dwellings shall be sited in areas determined to be safe by engineering geological studies.
5. Regular monitoring and evaluation of structural quality of dwellings shall be established.

On Infrastructure:

1. Follow design standards for safety.
2. Minimize exposure to geo-hydrological hazards.
3. Office and centers that need to be relocated must subject the site to intensive risk analysis.
4. Establish civil works that assist nature to rehabilitate itself or maintain its integrity.

On Production Areas:

1. Industrial and commercial land use should be properly located in consideration of their traffic generation potential and pollution impact.
2. Strict zoning regulation shall be enforced on livestock, poultry and piggery houses located in residential areas.
3. Effects of agricultural chemical residues shall be monitored and regulated.

4. Environmental impact rather than potential revenue shall be the primary consideration in granting permits for small-scale mining and quarrying.
5. Tourism projects shall be evaluated equally for their income generation potentials as against the environmental degradation, displacement of local residents and moral corruption that usually accompany these projects.

On Protection Areas:

1. Liberal allocation of open space in heavily populated areas shall be used as a vulnerability-reduction measure.
2. Encourage maintenance of greenery in public and private lots not only for amenities but for its carbon sequestration function.
3. Environmentally critical and hazardous areas shall be properly demarcated and buffered.
4. The ecological function shall be paramount over economic and other consideration when allowing the use of protected areas.

10. Major Development Programs

Listed below are the prioritized programs and projects which have to be implemented in due time in order to accelerate Delfin Albano's spatio-sectoral development. Based on the planning process, these programs and projects are the outcome of the preceding major steps in the process, namely, the situational analysis, the goals/objectives/targets, and the policies/ strategies. These programs and projects also constitute the basis for the formulation of the Investment Program that will be funded within the ten-year planning period. In this section, they will only be listed since their specific components are contained in another volume titled Priority Programs and Projects. Most of the programs and projects listed are "hard" or land development-related that reflects the focus of the current planning exercise.

a. Social and Economic Sectors

- Resettlement of Informal Settler Families Occupying Danger Areas

- Establishment of Evacuation Centers as an Alternative to Using Schools as Evacuation Centers During Disasters
- Construction of socialized Housing Projects for Low/Middle-Income Groups
- Establishment of Ecoparks in Order to Promote a Healthy Lifestyle
- Construction of Secondary and Primary Level Health Infrastructure
- Allocate an Adequate Land Area for Expansion of Schools
- Construction of Protective Services Infrastructure
- Construction of the Following Social Welfare Facilities: Women and Children; CICL Rehabilitation Center; Center for Street Children

b. Environment and Natural Resources Sector

- Capacity Building in Environment and Natural Resources
- Water Quality Management Project
- Air Quality Management
- Solid Waste Management System

c. Infrastructure and Utilities Sector

- Integrated Flood and Drainage System
- Small Water Impounding System
- Construction of Detention Ponds

d. Local Administration and Finance Sector

- Local Government Unit in Coordination with Department of Education (DepEd) School Districts and Division Offices for the DepEd School-to-School Partnership Arrangements
- Land Banking for Future Economic Development of Delfin Albano
- Regular Conduct of Community-Based Monitoring System
- Delineation of Barangay Boundaries
- Adoption and Mainstreaming of Green Technology

11. Monitoring and review of the CLUP

The monitoring, review and evaluation (MRE) of the CLUP and ZO implementation is a major activity that needs to be strengthened. Thus, it is important that an effective MRE system be established, in order to track the progress reached by the CLUP. This is recognized in Section 3 of EO 72 and Section 5 of MC 54. An effective MRE system is a guide for the LGU to focus their development efforts and interventions towards the achievement of their vision.

11.1 Organize a monitoring, review and evaluation (MRE) body.

Under the Local Government Code, the Local Development Council (LDC) is responsible for LGU plan preparation and MRE. Within the LDC, an MRE body shall be created, whose membership shall be identified and functions defined. An MRE body shall be organized to undertake the monitoring, review and evaluation of the CLUP and ZO implementation.

11.2 Develop MRE Systems and Procedures

The development of an MRE systems and procedures shall ensure that changes in land uses and progress in priority programs and projects implementation are tracked. Moreover, an assessment on the CLUP and ZO implementation reflects its impact in achieving improvements in quality of life of the locality.

Below are the steps in the development of the MRE Systems and Procedures

11.3 Establish indicators, baseline and determine frequency and format of MRE for the following areas:

- Quality of life
- Land use changes
- Priority programs and projects

Baseline information shall be obtained from the approved CLUP, such as from the Vision Reality Gap Analysis; the Core indicators for gender-responsive POPDEV Planning at Local Level. The agreed CLUP key outcome and results indicators will serve as the basis for regular MRE by local implementing bodies (i.e. LDC or C/MDPC). It may also be their reference for issuing progress reports to the general public.

The LGPMS shall be the main reference for measuring the changes in the Quality of Life.

- **Quality of Life Assessment** using the essential elements of the vision adopted by the city/municipality. This can be done through:
 - ♦ The Vision Reality Gap Analysis previously described.
 - ♦ Indicators of well-being consistent with population and development sensitive planning approach may also be used.
- **Land Use Changes:** consider land use locational clearances and permits issued. These are presented in reports of issuances, decision maps and environmental studies conducted for the purpose. Consultations with stakeholders are also conducted to assess community's reactions on the particular project or land use change.

- **Priority Programs and Projects Implementation**

- **Project Implementation Monitoring System/Scheme (PMS)** is basically a systematic design of monitoring a particular project. It is a systematic, timely, and regular gathering of feedback about the progress of a project in terms of inputs, operations and outputs, and the timely provision of appropriate support or intervention, if need be.

Actual data is compared with the plan to determine whether clearance from funding and support agencies has been sought and whether there are any deviations from the original plan. The cause of deviations, if any, is examined and solutions/persons likely to solve the problem and necessary interpretations are identified.

- **Decision Mapping**

Decision mapping may be done manually or by indicating in the Zoning Map the approximate location of land development projects issued clearances and permits using "mapping pins." To facilitate interpretation the color of pin shall correspond to the color codes for land use categories specified in Table 7-1. This method will make transparent to stakeholders the real-time monitoring of land use changes.

This may also be done through the use of GIS.

For monitoring and review, the MPDC shall:

- Coordinate with all relevant local and national agencies, including research/ academic, private sector, NGOs/CSOs groups, to generate and consolidate necessary information for MRE.
- Prepare the CLUP Progress Report Card in cooperation with other relevant local and national agencies and institutions.
- Provide monitoring reports to the SB, LDC and LCE on an annual basis

11.4 The MRE body shall evaluate the results of the monitoring activities. Evaluation may be done in two ways:

1. during the period of implementation—Periodic evaluation is conducted to provide early feedback to project management on the following concerns: policies affecting the project; attainment of sectoral goals and objectives; adequacy of institutional arrangements; and the appropriateness of project design and the level of resources.
One familiar activity is the conduct of mid-program and project evaluation to determine if the assumptions made regarding the project environment and target group are still valid. The review likewise helps determine whether the project should be modified due to environmental constraints. Moreover, the review can ascertain how natural phenomena, local political events, national and international incidents have affected the project (NCRFW, 1993:31).
2. After the period of implementation (Post Evaluation)—On the other hand, post evaluation involves the systematic and objective assessment of completed development projects. It may be done at the end of the project or sometime thereafter. It analyzes project outcomes and the underlying factors which contribute to the project's success or failure so that it can identify the features that deserve replication in future projects as well as the pitfalls that need to be avoided.

11.5 Review CLUP and ZO for updating

1. A CLUP and ZO review shall be conducted every five years, ten years, or as the need arises. A sample guideline for assessing when CLUP and ZO revision is necessary is presented herein as Guidelines on the Evaluation of CLUP and ZO for Updating/Replanning Purposes.
2. The continuous monitoring of CLUP outcome and results indicators and the operationalization of the different implementing mechanisms, including local citizen bodies created for monitoring the implementation, would make the review or updating of the CLUP more effective and systematic

11.6 Evaluation of CLUP/ZO for Updating/Replanning Purposes

11.6.1. Tools for Evaluation/Assessment

- DZA report on applications for Certificate of Zoning Compliance (CZC), Exception, Variance, CNC (Certificate of Non-Conformance, where applicable)
- Decisions of the Regional Officers (ROs) on Locational Clearance (LC) applications (before the devolution of the LC issuance function to the LGU)
- Decisions of Zoning Administrator/Zoning Officer/Enforcement Officer (Upon the devolution of HLURB function)
- Decisions of the SP/SB on subdivisions, including subdivisions 9 lots and below, farmlot, memorial parks and Socialized Housing Project counterpart.
- Decisions on violations of the ZO

11.6.2 Parameters

- Nature and number of Certificate of Zoning Compliances (CZC) issued
- Nature and number of Variances, Exceptions, and CNCs issued
- Amount of change and rate of increase
- Nature and number of structures without CZCs
- Nature and number of subdivision projects (9 lots and below, farm lot, SHP and memorial parks)

11.6.3 Project Inventory

- Location of projects with CZCs/LCs
- Location of subdivision projects with DPs
- Projects in the LDIP, whether implemented or not
- Other projects not in the LDIP but implemented
- Revisit VISION, development thrusts not only of the city/municipality but also that of the province, region and nation as a whole, (the in-thing, the buzz-word for the season, e.g., Countryside Agricultural Development, Newly Industrialized Country, Sustainable Development, Gender Sensitivity, etc.)
- Interview with Local Government Officials, NGOs, POs, Civil Society

- Actual development in the city/municipality as against the proposals in the development plan
- All revisions/rezoning found to be too harsh for implementation
- All projects implemented as against projects programmed for implementation

11.6.4 Procedural Guidelines

- Check the completeness of the CLUP
- Determine the degree and/or extent by which the CLUP and ZO have been implemented/enforced
- Prepare inventory of projects
- Conduct field investigations
- Conduct interviews with public and private sectors/officials

11.6.5 Review Questionnaire

- Do the CLUP and ZO contain substantial elements as indicated in the CLUP/ ZO guidelines?
- Has the CLUP/ZO been fully implemented / enforced by the locality?
- Are the proposed programs and projects indicated in the plan being implemented in the identified locations and in the timeframes as scheduled/ programmed?
- Are those the priority projects of the city?
- Are the intended clientele benefited by the projects?
- Are there other projects implemented which are not included in the CLUP?
- If yes, do these projects support the development need of the city?
- Is the actual development of the city still within the conceptual framework of the CLUP/ ZO (How much of non-urban areas have been converted to urban uses, % of non- urban to total urban area)
- Is the overspill due to lack of available space in non-urban areas?

Are there deviations between the actual development and the proposed land use/ ZO? If yes, identify the specific areas where there are deviations and the development projects (classification and location) taking place.

Deviations from proposed land use/ZO are considered significant when:

- The number of non-conforming applications/projects for specific classification granted within the zone is 50% and above of the total number of applications within the city.

- The land area covered by identified non-conforming project classification is 50% and above of the area of the given zone.
- The programs and projects identified in the LDIP are not implemented by at least 20%.
- Do the goals and objectives, and projections of the plan still support the current development trend? If no, elaborate.

Has the local government met difficulties/setbacks in the implementation of the CLUP/ ZO? If yes, specify and discuss.

11.6.6 Re-Plan

- Current developments in terms of urbanization has overtaken the projections indicated in the CLUP
- CLUP/ZO has been outdated by the LGU's emerging functional role, goals and objectives, and requirements brought about by current developments

11.6.7 Re-Zone/Update

- Development is still within the confines of the plan, but certain proposed zones have been developed into other uses.
- Development has reached the limit of the plan within the immediate period, thus, the need to update projections, requirements and land use proposal,(CLUP Guidebook 2013,Volume 1, 2,3).

If the approved plan has not been enforced, it should be updated to keep abreast with current developments.

11.6.8 Status Quo

- If at least ten (10) out of the twelve (12) questions in the questionnaire for review have been answered "yes"
- If the plan and actual developments are at par.

ANNEXES

Executive Summary

Pictorials



ENVIRONMENT



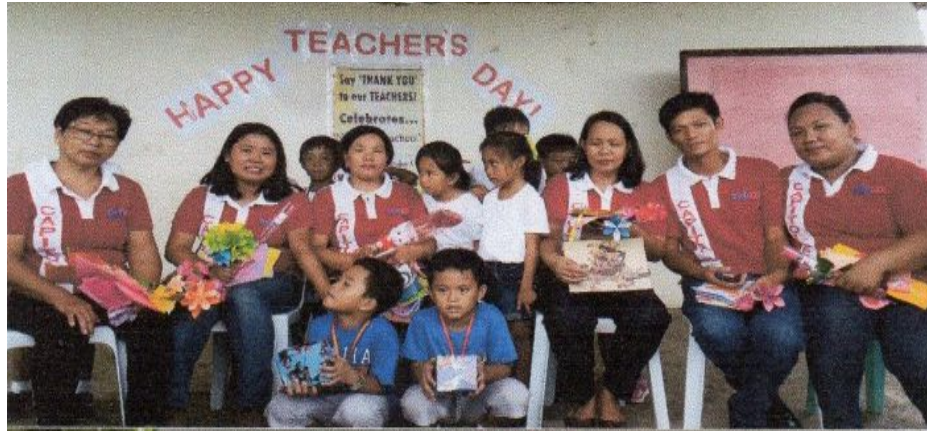
INFRASTRUCTURE





INSTITUTIONAL





SOCIAL SECTOR





ECONOMIC

