

COMPREHENSIVE DEVELOPMENT PLAN 2010-2016

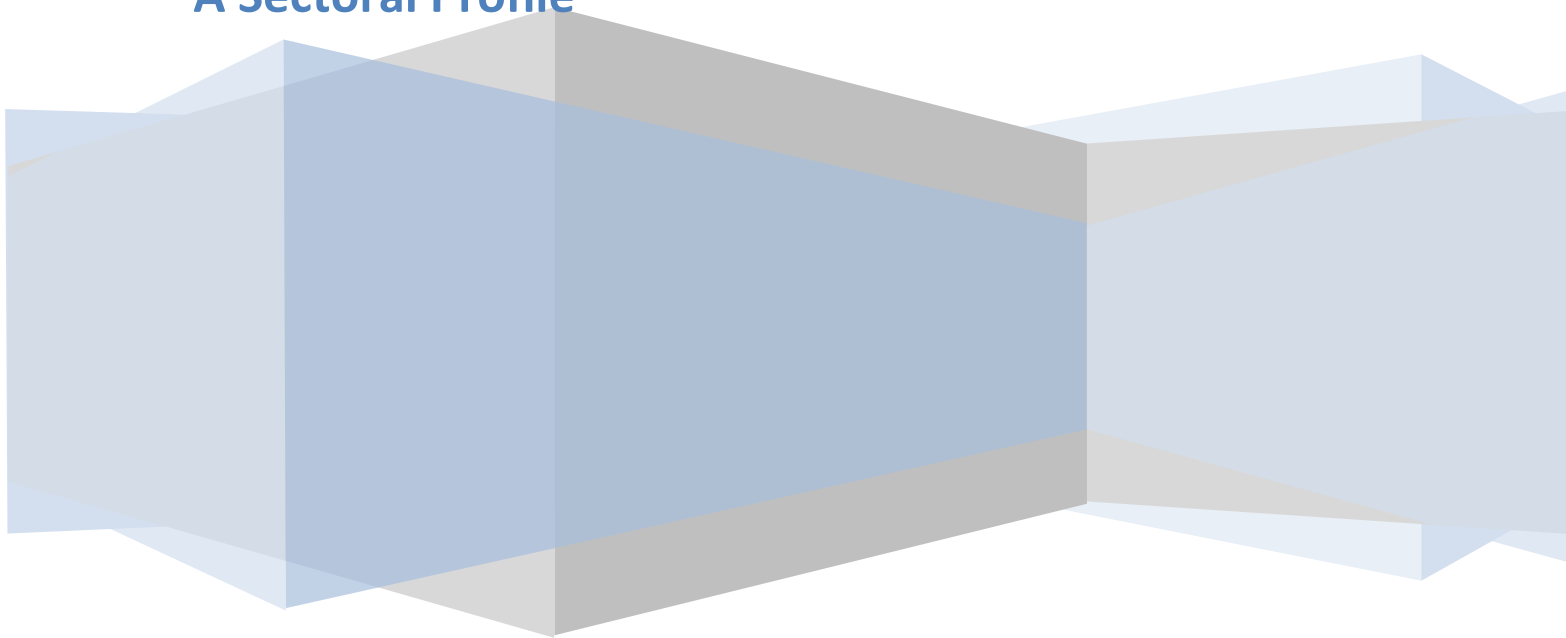
The Comprehensive Development Plan is a guide to the growth and development of the Municipality of JAGNA. It sets forth the development vision, policies and an implementation plan for the next six (6) years. Comprehensive planning is the foundation for quality growth management.

*Municipality of
JAGNA*

Municipality of Jagna

Economic Sector

A Sectoral Profile



Economic

THE LOCAL ECONOMY OF JAGNA

Majority of the households in Jagna is engaged in farming that makes agriculture its primary economic activity. But the main driver of the economy of the municipality is on trading and other services.

In the municipality trading sector controls the economic condition in terms of profit. Supply of agricultural product is bought in by traders which offer much lower price than that of the retailers. Supply gap of other prime agricultural products are sourced out from the neighboring provinces in Mindanao and Visayas.

The tertiary driver of the economy of Jagna is the industry sector because it mainly supports the economic activity and demand of the trading and agricultural sector such as electricity, gas and water while manufacturing are basically cottage industry and food processing.

Primary Sector

Agriculture

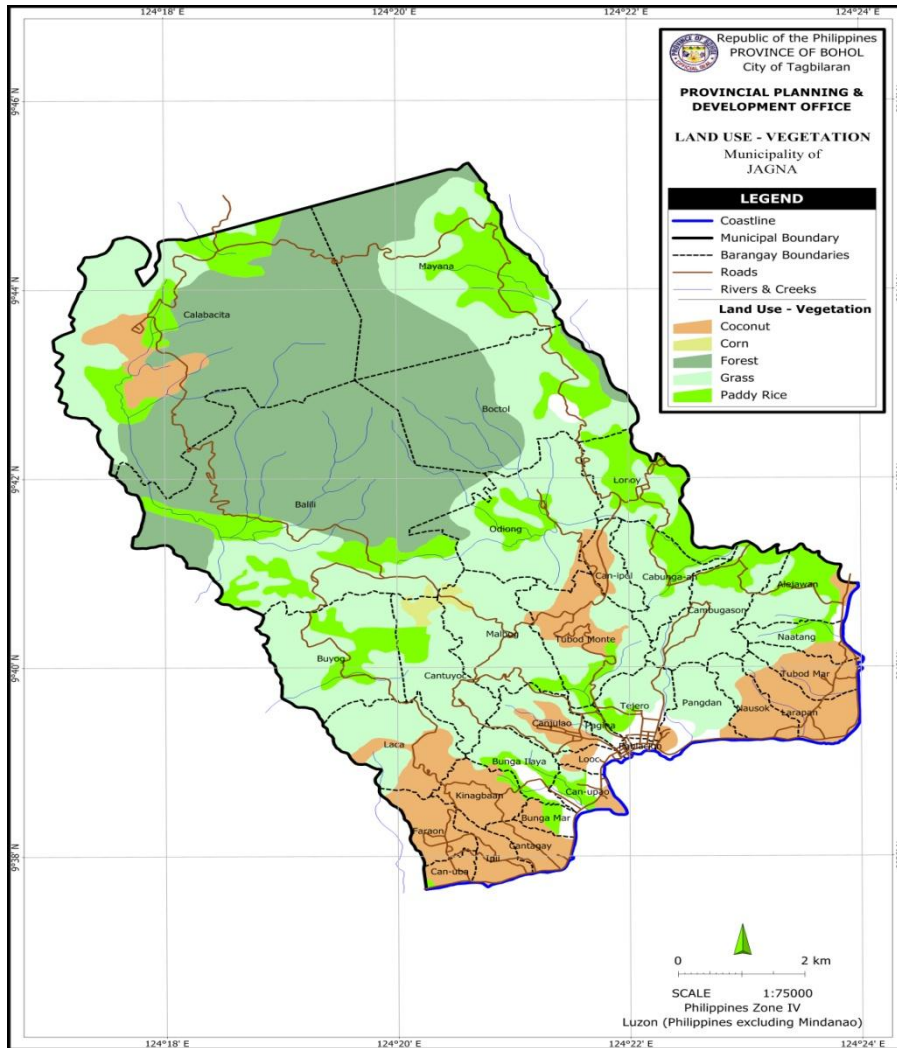
Agriculture is one of the primary economic drivers of the municipality of Jagna with farming, fishing and livestock raising as its main economic activities. The present agricultural land area of the municipality represents 69.24 % of its total area. Out of the total of 8,353.39 hectares of agricultural land area only 4,183.63 hectares or 49.92% are presently used or devoted to crop production. The remaining 4,169.76 hectares of agricultural land is potential for other agricultural production or usage.

Table 1.1. Agricultural Land Categories

Category	Area (has.)	% To Total
Crop Production Area	4,183.63	50.08%
Potential Agricultural Production Area	4,169.76	49.92%
Total land Area for Agriculture	8,353.39	100.00%

Source: Municipal Agricultural Office, 2008

Currently, about 8,353.39 hectares or 69.25% of the total land area of Jagna is for agricultural production from the previous 8,325.58 hectares. This was the result of the reclassification of the land use as mandated by the Municipal Comprehensive Land Use Plan (CLUP 1997-2006) wherein the other 2,068 hectares has been reclassified to protected and forest reserves.



Map 1.1. Land Use and Vegetation

Farming is not the only main occupation of the seventeen (17) upland barangays but also to four (4) other coastal and one (1) urbanizing barangays. However, farming activities in the upland barangays are more intensive compared to that in the coastal and urbanizing barangays where farming is not the only source of livelihood but is resorted to when fishing and paid labor are scarce.

Jagna's farming activities are not of plantation types but small, scattered and of the backyard scale. Land ownership in Jagna is basically characterized by small and scattered parcels of landholdings mostly owned by owner-cultivators who live in the locality; absentee landlords of the new type – mostly residents of Metro Jagna who are either professionals or business people whose farms are tilled either through tenancy, leasehold or administratorship arrangements; and part owner-administrators in the case of family landholdings which have not yet been legally partitioned. While the extent of land ownership needs to be accurately determined, most of the farmers are a combination of tenants, leaseholders and /or administrators.

Results of the PDMS survey in 2009 showed that 2,835 households or 45.02 % of the total number of households of Jagna are basically engaged in farming. This economic activity is considered family's business whereby the father is the farm owner, mother and children are farm workers. In some cases women are hired as paid labor for specific lighter farm operations receiving equal daily wage as that of men. However, women spend most of their time doing household chores and yet they still manage to go in the farm and help their spouses.

Table 1.2 shows the land ownership of households based on the major crops grown in Jagna. Except for rice with slightly lower percentage of farming households who owned the lot of 81.36%, all other crops are mostly owned and cultivated by farming households with an average land ownership of 97.46%. Consistently, rice showed greater percentage of farming households who are just tenant to the lot they tilled. However, average land tenancy to other crops of the farming households in Jagna is 1.88%. Least percentage of land ownership is classified 0.86% administrator and 0.21% leaseholder. Tenorial status of land ownership is not really a big issue for it doesn't affect agricultural development in Jagna.

Table 1.2. Agricultural Land Ownership based on the Cultivated Major Crops

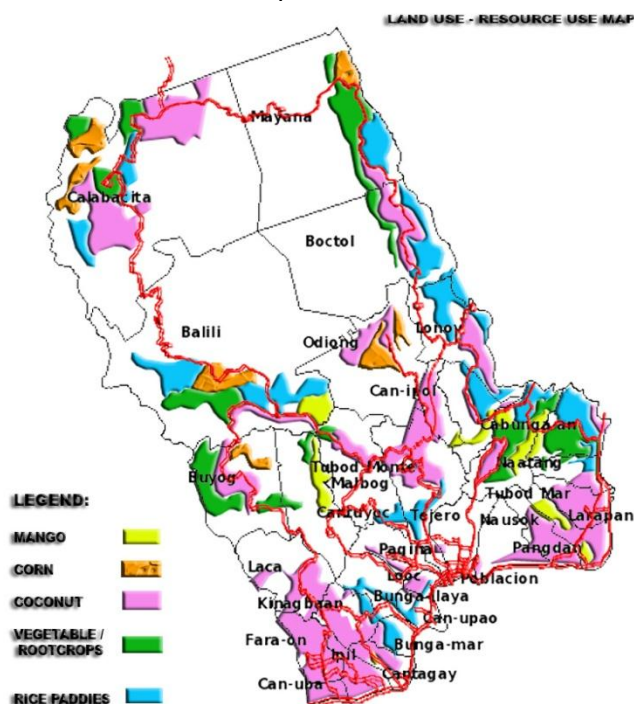
Type of Crops	Ownership Type	No. of Households	% of Total Households
1. Coconut	Owner	5,683	90.25%
	Administrator	175	2.78%
	Tenant	329	5.22%
	Rental	14	0.22%
	Other	96	1.52%
2. Rice	Owner	5,123	81.36%
	Administrator	131	2.08%
	Tenant	894	14.20%
	Rental	32	0.51%
	Other	117	1.86%
3. Corn	Owner	6,103	96.92%
	Administrator	18	0.29%
	Tenant	166	2.64%
	Rental	4	0.06%
	Other	6	0.10%
4. Banana	Owner	5,916	93.95%
	Administrator	91	1.45%
	Tenant	262	4.16%
	Rental	3	0.05%
	Other	25	0.40%
5. Mango	Owner	6,281	99.75%
	Administrator	5	0.08%
	Tenant	11	0.17%
6. Oil Palm	Owner	6,297	100.00%
7. Ubi	Owner	6,288	99.86

	Administrator	3	0.05
	Tenant	6	0.10
8. Cassava	Owner	6,255	99.33
	Administration	5	0.08
	Tenant	34	0.54
	Rental	1	0.02
	Other	1	0.02
9. Other Crops	Owner	6,271	99.59
	Administrator	6	0.10
	Tenant	19	0.30
	Rental	1	0.20

Source; PDMS Survey 2009

1.0 Crops

The main agricultural crops grown in the municipality are coconut, rice, corn, root crops, vegetables, and spices, bananas and fruit trees which are for cash and/or consumption. Cut flowers and ornamentals have also become sources of income. Presently, Jagna is among the suppliers of some varieties of vegetables and spices as well as cutflowers in the province. While the agricultural crops are cultivated in almost all the areas they are best grown in particular barangays as shown in the map below.



Map 1.2 Land Resource Map - Vegetation

Production

In terms of production area, coconut occupies a large percentage of the agricultural land. The total land area planted to coconut is 1,440.43 hectares, which represents 42% of the total crop production area. Rice as a staple crop is second with 682.50 hectares planted for both

irrigated and rainfed areas with a larger portion, which is about 358.50 hectares irrigated and the remaining 324.0 hectares as non-irrigated rice lands. Land holdings of small rice farmers are generally limited, ranging from 0.2 to 0.6 hectares. Rice farming served as the primary source of subsistence of most farming households. Corn production area occupies 205.8 hectares compared to fruit crops with a combined production area of 764.6 hectares with a larger portion, which is about 679.8 hectares planted to banana. Vegetables occupy 85.9 hectares of the total crop production area and rootcrops with 42.4 hectares.

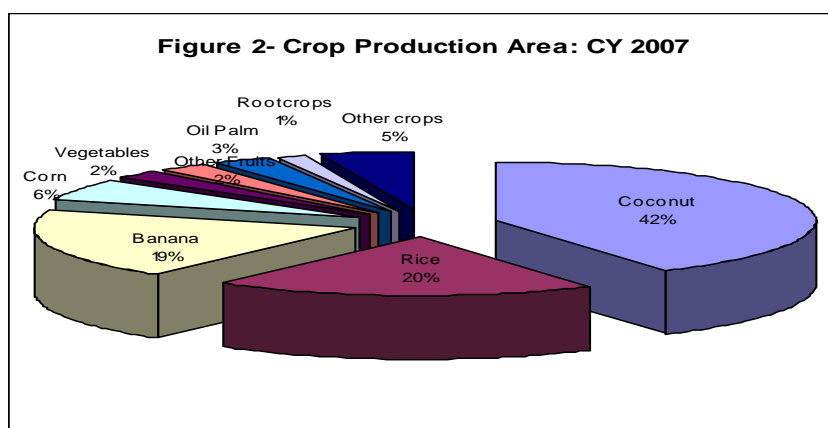


Figure 1.1. Crop Production Area

Based on the Municipal Agricultural Office (MAO) data, the following table shows the crops, area planted and production of major crops grown in the municipality:

Table 1.3. Area, Production and Value of Production by Major Crops CY – 2007

Major Crops	Area	% To Total Agricultural Land Devoted to Crop Production	Production (Metric Ton)
Coconut	1,440.43	41.15%	1,728.51
Rice	682.50	19.50%	2,047.50
Banana	679.84	19.42%	1,699.60
Corn	205.81	5.88%	314.88
Vegetables	85.97	2.46%	212.24
Mango	84.74	2.42%	2,345.56
Oil Palm	112.00	3.20%	
Rootcrops	42.39	1.21%	55.65
Other Crops	166.68	4.76%	28.40
Total	3,500.35	100.00%	

Source: Municipal Agricultural Office, 2008

The average yield per hectare for rice is 3.0 metric tons per hectare, which is above the province's average yield of 2.32 mt/ha. For the irrigated area, average yield is 3.5 mt/ha. while for the rainfed, its 2.5 mt/ha. For corn, the average yield is 1.53 mt/ha, a little bit above

the province' average yield of 1.05 mt/ha. The production of mango in the municipality is promising, with its average yield of 3.75 mt/ha. It is lesser compared to the province average yield of 4.66 mt/ha. However, for coconut, rootcrops and banana the average production is below the province average yield for each of the mentioned crops.

a) Coconut

Coconut is the major crop in terms of agricultural land usage. It is predominantly grown in all parts of the municipality and serves as the main source of cash for farmers and landowners. Income from coconut production supported the basic needs of most farm families but has been in the downtrend due to fluctuating price of copra and low productivity caused by the damage inflicted by strong typhoons in the past; lack of improved varieties and production technologies. Just recently, virgin coco oil processing has been established as value-added technologies other than that of copra processing whose market price is fluctuating.

The coconut production in the municipality needs to be sustained. There is a necessity to enhance the coconut-based farming system through inter-cropping and integration of livestock farming. High-yielding coconut varieties need to be distributed to farmers for replanting and as replacements for non-bearing old palms.

An issue concerning this particular crop is the fluctuating and decreasing farm gate prices of its products, which lessens the real economic benefits for farmers. With this, it is encouraged to involve farmers with production of coconut by-products, thereby providing them with new sources of income, like virgin coconut oil processing, which is a very promising alternative source of income aside from copra. Cutting of coconuts for lumber also remains to be a concern, which consequently decreased coconut production.

b.) Rice and Corn

Several areas in Jagna are suitable for rice production, however, because only a few are irrigated and almost half of the total rice areas are declared rainfed. This cannot sufficiently provide for the needs of the population. As of 2007, the per capita consumption of rice is 109.2 kilograms per person a year or approximately 3,498,113 kilograms of rice for the whole population of the municipality. But the palay production from irrigated and non-irrigated lands is only 2,047,500 kilograms per year which entails for a shortage of more than half of the expected demand. On the other hand, corn is widely grown and serves as a substitute crop for rice. This is especially in rice areas which are declared rainfed.

Production gap for rice have been supplied by the major rice-producing municipalities of the province particularly Sierra-Bullones, Pilar, San Miguel and Ubay.

However, big percentage of the gap has been filled in by the imported National Food Authority (NFA) rice especially during lean months.

Meanwhile irrigation facilities in Jagna are not as extensive as it always depends on the availability of water sources. Expansion of rice area in Jagna is not feasible anymore however

increase in production of rice is still possible through the application of appropriate technology.

With a growing population, there is an urgent need to comprehensively address the issues of low productivity, lack of improved production and post harvest technologies, and lack of technical and credit facilities, for these are essential to attain self sufficiency in rice. As palay is mainly produced by farmers with small farm size, there is really a need to increase their productivity through appropriate technology inputs and assistance.

The shift to organic farming is a strategic option in bringing about sustainable agricultural development direction in Jagna. While it is true that increasing productivity is a big issue, it should not compromise the care for the environment and welfare of the consuming public. On the other hand, high production cost due to high price of inorganic farm inputs can be minimized by the use of safe and low cost organic farm inputs. Conversion process would not happen over time. It requires thorough planning, legislation and effective implementation for this should not only focus on the technology itself but the shift of the values and attitude of the farmers who have been dependent to inorganic inputs in agricultural production.

c) Root crops

Root crop production includes camote, cassava, gabi and ubi. Though, mostly grown as backyard production, these serve as cash crops of the farmers. However, some upland barangays use root crop as substitute for rice in times of scarcity.

Peanut is another emerging commodity with potential economic importance. The crop is grown abundantly in Tubod Mar with an average yield of 2.4 mt/ha., more than the province's average yield of .62 mt/ha. It is also processed into traditional delicacies either for home consumption or as a source of additional income for the women.

The Bohol Initiative for Migrant Development (BoholDev) which is into the forward and backward linkaging of the ubi has influenced its development. In partnership with the Municipal Agriculture Office (MAO), both entities are assisting in the formation and strengthening of the ubi farmer organization, in facilitating technical trainings and in ensuring improved production. The potential for ubi has already been seen with the establishment of ubi processing centers in the province, which signaled the substantial demand for the crop. With this, there is really a need to make the necessary measures that would ensure a sustainable production of good quality ubi.

d) Vegetables and Spices

Jagna is becoming the producer of vegetables and spices in Southeastern part of Bohol and is especially grown in highland areas of the municipality. Presently, there are ten (10) barangays whose vegetables and spices production includes bell pepper, eggplant, ginger, garlic, tomato, beans, green onions, squash, sayote, cabbage and carrots. Aside from the local market, these products are sold in Tagbilaran City and elsewhere in the province through traders who come directly to the barangays to buy them.

The rapid expansion and increasing population in Bohol particularly Tagbilaran City and the nearby Metro Cebu and urban growth centers in the Visayas, would definitely cause significant and sustained increases in the demand for organically produced, good quality and fresh vegetables. This increasing demand provides the opportunity for both lowland and highland vegetable growers to improve their on-farm production system.

It is worthy to note that the uncultivated or potential area is net of mandatory protection area and that the utilization of this area for vegetables, spices and other high valued commercial crops should be maximized. Farmers have to be organized and encouraged them to do farming extensively not only on backyard scale but also on commercial production in order to meet the demand in the local market and the growing center in the province.

e) Bananas and Other Fruits

Banana production has gained prominence in Jagna especially in Brgy Mayana because of the Mayana Association of Farmers (MASFA) which is into the production of the bongon variety using organic fertilizer. Organized since 1989, this 89-member association has been exporting the bongon to Japan through the assistance of the People's Fair Trade Assistance Center (PFTAC). Every two months, it packs about 300 cartoons with 20 kilos of banana per cartoon and sold at Php 34.00 per kilo. Brgy Boctol produces also the bongon variety to comply with the demands of the Japan market.

There are three (3) other varieties of banana such as latondan, lakatan and Arabia which are grown in several barangays the total production of which is 405.35 mt. per year. These are sold in the local market as well as in Tagbilaran City.

Banana production is basically small and a backyard farming activity despite the export market of the bongon. The banana is one of the more affordable fruits in the market especially the local variety yet it is not as abundant as before. While the integrated value chain for the bongon variety is in place through the partnership of the MASFA-PFTA-DA, the potential of the other varieties can be realized by addressing comprehensively the issues on production and post harvest technologies and marketing.

There is an increasing plantation of fruit trees in Jagna to include mango (which is the most prominent), lanzones and jackfruit. Coffee production is also found along forest buffers while there are a few cacao trees in the areas. The planting of fruit trees and other fruit bearing trees and plants should be part of the reforestation strategy of Jagna. Moreover, the value added potentials of fruit trees and other fruit bearing plants should be the framework of developing production and post harvest technologies.

f) Cut flowers and Ornamentals

Barangay Mayana is considered as the summer capital of the province. Due to its cool climate, this barangay through a cutflower association compose mostly of women grows several cutflowers and ornamentals such as anthurium, rose, gladiola, baby's breath and azucena making Jagna famous for its cutflowers and ornamentals.

The LGU has a cutflower demonstration farm in the barangay in order to showcase technologies and as a production source of cutflower varieties. In fact in the Local Agricultural Strategic Plan of the LGU, this facility is to be upgraded. The establishment of the greenhouse in Mayana is a positive outcome of the plan which hopes to generate other varieties of cutflowers.

But since its demand is seasonal, farmers can not proceed to mass production yet despite the fact that these flowers are sold at the local market and in Tagbilaran City as well.

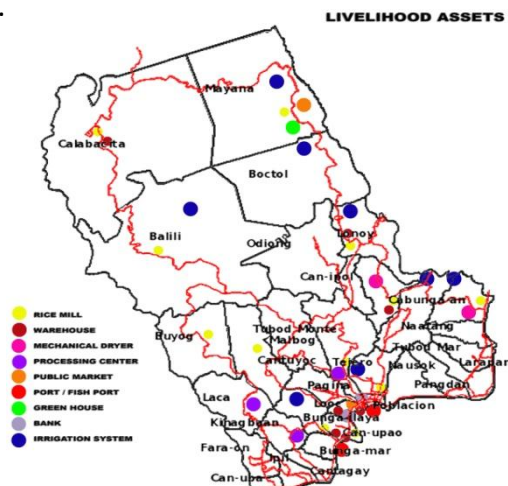
However, local flower arrangement ventures are flourishing as a result of cutflower and ornamental production. On the other hand, there is the bonsai society composed of bonsai enthusiasts who are actively growing bonsai plants particularly in Barangay Tejero and Poblacion.

g) Oil Palm

Farmers in sitio Cabungaan in barangay Calabacita and Balili are embarking on the oil palm plantation with a total area planted reaching to 112 hectares. The plantation is a joint undertaking between the land owners and the First Consolidated Bank (FCB) Foundation.

Generally, oil palm is an emerging commodity which offers additional opportunities to hasten local economic growth and development but it is not yet proven in Bohol.

In addition, Jagna is geologically karst and the presence of the said plantation poses threat to the environment based on the symposium conducted by the Soil and Water Conservation Foundation (SWCF) in 2004.



Map 1.3. Agricultural Infrastructure and Support Facilities

Agricultural support facilities can be classified into two types: 1.) those that support production and 2.) Post harvest facilities.

1.) Production Support Facilities include irrigation system, farm implements, supply of farm inputs, agricultural credit and extension services.

Irrigation facilities in Jagna consist of Communal Irrigation Systems established by the National Irrigation Administration (NIA) in barangays Alejawan, Bockol, Cabungaan, Cambugason and Lonoy. Other existing irrigation systems developed and being managed by the farmers associations are located in barangays Bunga Ilaya, Tubod Monte, Odiong, Balili, Calabacita and Mayana. Number of privately owned water pumps were installed to serve sizable farms of the owner. These irrigation systems currently serve an aggregated service area of 358.50 hectares of rice producing area in Jagna.

Hand Tractors and Power Tillers are increasingly replacing carabaos as draft animals. These farm implements are privately owned and are used for hire in a rental basis by most farmers during land preparation activities.

Agricultural Supplies and Credit facilities are important components as far agricultural production is concerned. Some farmers are just dependent on the subsidy program of the Local Government for the supply of seeds and fertilizer. Though, production assistance can be accessed by some farmers from the 3 rural banks, multipurpose cooperatives and lending institutions that operate in Jagna. On the other hand, Philippine Crop Insurance Company (PCIC) has been extending services under its insurance policy program to farmers and livestock raisers.

Agricultural Extension Services are provided by the Municipal Agriculture Office (MAO) in the form of technical assistance and services to farmers, livestock and poultry raisers and fisherfolk.

Technical assistance to crops includes crop production and protection covering rice, corn, rootcrops, vegetables, banana, coconuts and other high value commercial crops grown in Jagna. Conducting farmers classes, season long trainings, farmers' meetings, cooking and processing demonstration, business planning workshop, field monitoring and evaluation are among the services offered to farmers. Providing access to rice and corn seeds, vegetable seeds, fruit and forest trees seedlings, coconut and banana planting materials and other farm inputs has also been provided to the farmers.

Interventions to livestock and poultry development in Jagna include the provision of technical assistance and services. Among these veterinary services usually conducted are treatment/medication, vaccination, castration, supplement administration and deworming. Highly technical services such as heat synchronization, pregnancy diagnosis, artificial insemination and conduct of trainings/seminars have been provided as part of the upgrading program for livestock. Livestock dispersal of swine, cattle and goat has been implemented as livelihood program to qualified farmer beneficiaries.

The MAO also provides technical assistance to marine and inland fisheries. Among the assistance extended are supervision and strengthening of fishermen associations and cooperatives and assist them in the maintenance and management of the coastal and marine resources. Livelihood trainings and seminars have been conducted to fishermen associations

to capacitate and assist them in the management and monitoring of the livelihood projects such as euchuema culture, tilapia dispersal and loan repayment.

Rice post-harvest facilities available in Jagna include 1 commercial rice and corn mill located in barangay Can-upao and some 11 small scale rice mills with an average capacity of 10 bags (50 kgs) per hour located in 11 barangays.

Mechanical flatbed dryers with a capacity of 120 cavans of palay per 10hrs drying time are strategically located in the major rice producing barangays of Alejawan and Cabungaan.

Four (4) commercial warehouses are located within urban center in Jagna and the combined capacity of these warehouses is undetermined.

Other post-harvest facilities/machineries are privately owned and are being used for rent to other farmers. Among these are 60 mechanical threshers and more than 87 pedal threshers and 35 units mechanical blowers distributed to the rice producing barangays.

Farm to market roads already in placed in every barangay yet they need to be maintained and rehabilitated. Initial concreting of more or less 76 m span along these roads has just been completed thru a funding assistance from the Department of agriculture.

Jagna Port is one of the major ports in the province of Bohol. This serve as the primary gateway to Mindanao where exchange of goods and commodities in and out of the province take place.

Fish port in barangay Bunga Mar - the fishing capital in Jagna serves as fish landing facility where traders and local vendors were able to get fish and marine products for distribution to Jagna markets and elsewhere the province. Commercial fishers from the nearby islands in Mindanao and Visayas used to land their fish catch in Jagna fish port especially during peak season. This implies, volume of fish landed in Jagna would apparently increased and surplus in supply at the local market is evident.

Ubi Processing is an important post-harvest facility established and being managed by the Local Government thru the MAO. Ubi tubers produced by farmers are being processed into powder. Women confectioners used this as raw material for food and confectionery products which are being sold locally and to the provincial market.

Copra is primary processed product from coconut and is directly sold to the three copra dealers in Jagna. Village type Virgin Coconut Oil (VCO) processing plant was established in barangay Kinagbaan through a loan package of the Local Government of Jagna from the Soil and Water Conservation Foundation (SWCF). This post-harvest facility is intended for the production of VCO as the only value added product from coconut. Though VCO has gained its potential as food supplement and raw material for cosmetic products, its marketing and promotion needs enhancement.

Food Supply and Demand Analysis

Table 1.4 summarizes the demand-supply condition of major food items as measured against the per capita food requirement recommended by the Food and Nutrition Research Institute (FNRI).

Based on the current production as against the demand requirement of the population, Jagna has a deficit in almost all major food commodities except for corn. The same trend is expected until the end of the planning period with only corn and eggs experiencing a surplus as against its consumption for a nutritionally adequate diet.

If present production will continue, Jagna will experience severe deficit to meet the per capita food requirement of its population. The deficiency will persuade the local government unit to look for a strategy that will overcome the shortage within the planning period. It could either be increase or expansion in area planted to crops as there is still about 49.92% potential agricultural land area that can be utilized and planted to major crops or application of more technologies to increase production. A more aggressive approach in terms of food production must be a priority concern of the municipality.

As in the case of meat whose production is also lacking, livestock raising must be intensified. One way is through livestock and poultry integration into the existing farming systems that are viable options to small farmholders.

The integration in crop production will mutually complement both farming systems. Animals can serve as high protein food, source of draft power for farm operations and as a good source of organic fertilizer. On the other hand, crops and its by-products can provide the animals for its feed requirement.

Aside from such advantage, livestock raising generates income regardless of season unlike crops which can only be harvested at certain times of the year. It can also maximize space utilization as areas not suited for crops can be used for pasture or range areas.

Table 1.4 Food Supply and Demand 2008-2018 (in Metric Tons)

Commodity	2008			2012			2018		
	Product ion (m.t)	Demand Rqmt.	Surplus/ Deficit	Productio n (m.t)	Demand Rqmt.	Surplus/ Deficit	Produc tion (m.t)	Dem and Rqm t.	Surplu s/ Deficit
Rice	2,457.72	3,521.59	(1,063.87)	2,536.95	3,592.79	(1,055.84)	2,790.65	3,723.83	(933.19)

Corn	314.84	281.86	32.98	327.56	287.56	40.00	360.32	298.04	62.28
Root crops	61.87	1,953.97	(1,892.10)	64.37	1,993.47	(1,929.10)	70.81	2,066.18	(1,995.37)
Vegetables	44.46	1,765.63	(1,721.17)	46.26	1,801.33	(1,755.07)	50.89	1,867.03	(1,816.14)
Fruits	188.01	2,471.89	(2,283.88)	195.61	2,521.86	(2,326.25)	215.17	2,613.84	(2,398.67)
Meat	656.40	1,068.41	(412.01)	682.92	1,090.01	(407.09)	751.21	1,129.77	(378.56)
Egg	95.58	128.35	(32.77)	131.54	130.95	0.59	144.69	135.72	8.97
Fish	411.18	988.75	(577.57)	427.79	1,008.74	(580.95)	470.57	1,045.54	(574.97)

Source: MPDC, MAO 2008

Note: Per capacity description is based on figure from the Bureau of Agricultural Statistics.

2.0 Livestock and Poultry

Livestock and poultry production are one of the livelihoods in the municipality. It provides alternative source of income to farmers. However, it continues to be a backyard activity basically for home consumption. The municipality has no full-scale commercial livestock production although there are areas that can be tapped and suitable to pasture area.

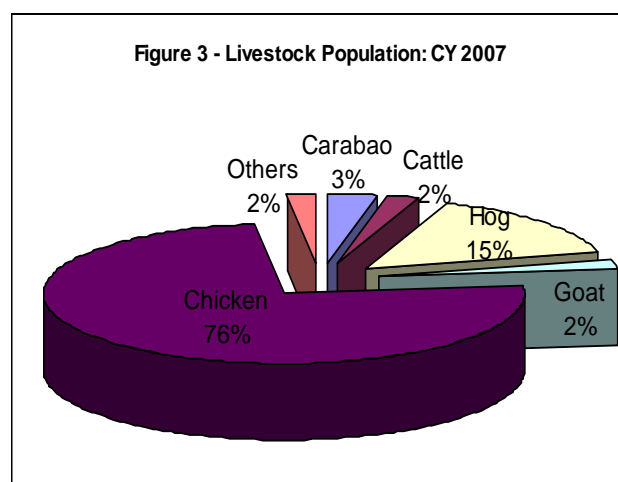


Figure 1.2. Livestock Population

Figure 1.2 presents the livestock population of the municipality with chicken numbering 27,912 heads, about 76% of the total livestock population. Almost all households in Jagna raise chicken primarily for consumption. The carabaos are raised to help in the farm with about 3.4% of the total livestock population, while cattle, hog and goat are raised for commercial purposes.

Table 1.5. Livestock and Poultry Production

Livestock	No. Of Heads	Dressed Meat(kls)	Equivalent Meat Production Dressed Meat(Metric tons)
Carabao	1,262	100	126,200
Cattle	849	100	84.9
Hog	5,755	40	230.2
Goat	784	12	9.4
Chicken	27,912	1	27.91
Others	710		-
TOTAL	37,272		

Source: Municipal Agricultural Office, 2008

Generally, there is no full-scale commercial production of livestock and poultry in Jagna. Production of livestock and poultry products is basically backyard farming for home consumption resulting in a deficit, basing on the required consumption for the whole populace of the municipality.

Local production of beef, carabeef and pork are not enough to meet the demands of the local market so these are sourced out from neighboring towns of Ubay, Alicia, Candijay, Mabini, Guindulman and Anda.

In the case of poultry products these are purchased from outside the province as frozen commodities.

3.0 Coastal Resources

The establishment of marine protected areas (MPA), if properly designed and managed could meet various coastal and marine conservation needs by preserving habitat and important species. Moreover, certain areas are being set aside and protected from exploitive human activities which enable resources to regenerate and reproduce.

The Municipality of Jagna has a total of 14 coastal barangays with a coastline of 14 kilometers stretching from Barangay Can-uba to barangay Alejawan with rich coastal resources, mangroves, sea grasses, corals and beaches.

Among the known beaches of Jagna are Can-uba Beach, Bunga Mar Beach, Pangdan's Paseo del Mar, Delilah's Rock Resort, Batong-buhay Can-upao Beach and Alejawan Beach.

Three marine sanctuaries each located in three barangays (Tubod Mar, Pangdan and Naatang) were established in 2002 by the Local Government together with BFAR-7. Initial monitoring was conducted in 2007 by BFAR-7.

On June 8-10, 2009, monitoring was again conducted by the MPA-TWG Monitoring Team which aimed to look into the changes in the biophysical status of the coral reefs in the said marine sanctuaries.

Data collected include percent benthic cover and fish biomass and density. Two transects were laid each inside and outside the sanctuary.

Assessment of benthic cover was conducted through point-intercept transect technique. This method was used in estimating the relative abundance of living and non-living things in the reef area. Using this method, benthic cover such as hard coral, soft coral, dead coral, algae and various reef substrates which may reflect the health of a given reef area could be precisely estimated.

Two 50-meter transects at ten meters apart parallel to the shoreline were laid inside and outside Tubod Mar and Pangdan marine sanctuaries. In Naatang, two transects were laid inside the marine sanctuary. The transects laid were used in observing benthic cover and fish visual census.

Fishing and Aqua Culture

While Jagna is considered a coastal town, there are only few small-scale commercial fishing in the area and the rest are mostly subsistence fishing. Presently, there are three (3) barangays – two (2) under the coastal cluster and one (1) under Metro Jagna which depend upon fishing as the main source of livelihood. The other coastal communities are primarily farming communities with fishing as their secondary source of income.

Fish used to abound even near the shorelines of Jagna where small fisherfolk can catch fish for everyday consumption. But over the years due to illegal fishing practices fishery resources have been dwindling. Many small and some middle fisherfolk have then made farming their principal source of income and fishing as their seasonal occupation.

Most of the marine products that are sold in the market come from other areas because local products cannot suffice for the needs of the populace as evident in the supply and demand table that there is a deficit in the need for fish. Because of scarcity, fish products are very expensive although there is also the need to study the extent of the role of middlemen in fish trading. The sources and variety of fish sold at the Jagna market is found in Table 1.6.

Table 1.6. Sources, Frequency and Varieties of fish sold at Jagna Market CY- 2007

Town	Frequency of Supply	Variety
Jagna		Mangko, nokos, bangsi, tognos, mangsi
Loay	Seasonal	Mangko, tabodlos, baksawan

Ubay		Nokos, lambay, bangus
Mabini	Daily delivery	Caraballas, parotpot, kinhason, uwang
Valencia	Every other day	Bolinao, tognos
Talibon		Lambay, bangus
Duero	Daily	Mangko, nokos, tabudlos, baksawan, anduhaw, tambantoy
Limasawa	June-Dec (fisherfolks from this place temporarily stay at Bunga Mar)	Bangsi ug nooks
Camiguin	June-Dec	Bangsi
Libertad, Mis. Or	June-Dec (fisherfolks from the place temporarily stay at Can-upao and Looc)	Bangsi

Tilapia is the only variety for inland fishing with a cultivated area of only about 1,259.2 sq meters and located in eight (8) barangays which is mainly for home consumption. Bangus and other marine products cannot be developed in Jagna because of the lack of enough area with brackish water.

The establishment of marine sanctuaries under the Coastal Resource Management Plan of 2003 was the urgent response to the alarming reality of marine degradation and depletion. The sanctuaries aim to rehabilitate and preserve the habitat of marine life thus, providing for the sustainable marine needs of the people in the municipality. However, there are oppositions to the marine sanctuaries. Fisherfolk from within and outside of Jagna which includes commercial fishermen continue to disregard fishery ordinances. Besides the need for sustained information and education campaigns (IEC) there is the need for the full enforcement of the law.

Fish Catch

The municipal waters of Jagna offers few type of fish. On the average fish catch estimate for fishing activities Drift Gill Net will reach to about 386 tons, for hook/long line is about 1.8 tons from fishpond operation it is expected to reach about 1.3 tons.

Table 1.8. Fishery Data

No. of Fishermen	2,131
No. of Motorized Bancas	200
Average Fish Catch per day, per fishing	5 kilos per day

Source: Municipal Agriculture Office, 2007

4.0 Agrarian Reform

Of the thirty-three (33) barangays in the municipality of Jagna, about 5 of these have carpable areas, namely; Balili, Calabacita, Malbog, Buyog and Cantuyoc. Under the Operation Land Transfer program, 0.4754 hectares are covered, while another 2 barangays with an area of 18.29 hectares are under the Compulsory Acquisition. About 25 lot owners are affected with the CARP Program benefiting some 216 farmer beneficiaries.

Based on the data from the Municipal Agrarian Officer (MARO), the total CARPable area of the municipality is 301.204 hectares, of which about 5.749 hectares is under Land Acquisition Development (LAD), while a bigger portion of 295.0455 hectares is under Non-Land Acquisition Development (N-LAD).

On the latest information from MARO, there are twenty six (26) barangays that are approved and confirmed as eligible for and ARC sites. The remaining seven (7) barangays of Cantagay, Cantuyoc, Faraon, Poblacion, Tubod Mar, Can-uba and Mayana are not covered by ARC.

With the number of CARP beneficiaries increasing, they will have the advantage of developing and making use of land granted to them in terms of income and form utilization. On the other hand, the said development is advantageous to the LGU being a revenue generation activity.

Table 1.9. Area Number and Location of CARP Areas

BARANGAY	TOTAL AREA (Hectares)							NO. OF OWNERS	NO. OF BENS.
	OLT	VOS	VLT/DPS	CA	GFI	GOL/NLS F	UN		
Balili	0.475			5.74		202.78	-192.81	12	153
Calabacita				12.54				1	9
Calabacita (RSD)							8.77	1	
Malbog						64.97	-55.87	7	25
Buyog							11.18	2	10
Cantuyoc							10.03	3	19
TOTAL	0.475			18.28			297.75	25	216

Source: Municipal/Provincial Agrarian Reform Office

Note:

OLT - Operation Land Transfer

VLT - Voluntary Land Transfer

CA - Compulsory Acquisition

VOS - Voluntary Offer to Sell

DPS - Direct Land Purchase Scheme

GFI - Government Financing Institution

GOL - Government Owned Lands
UN - Unknown

NLSF - National Livelihood Support Fund

SECONDARY SECTOR

Mining and Quarrying

Quarry of limestone in the area of Malbog and Laca generates income for the locality from the permit issued from the provincial government, as mandated by the Local Government Code there will be share of 30% for the municipality and 40% for the barangay.

Other people benefited from this activity are the land owner of the lot quarried and the people employed. Another quarry site is located in barangay Boctol where serpen tine mineral is extrated and mainly used by the Department of Public Works and Highway for the maintenance of roads.

Table 1.10. Inventory of Existing Mineral Resources

Name of Permittee	Mineral	Location	Areas	Duration of Permit		Remarks
				Start	End	
Sofronio Abrea	Limestone	Malbog		11-05-04	01-05-05	Expired
Domingo Chua	Limestone	Malbog				Expired
Rustico Virtudazo	Limestone	Laca		08-22-05	08-22-06	Expired
Isidro Sajulga	Limestone	Malbog		02-13-06	02-13-07	Expired
Manuelito Varquez	Limestone	Malbog		08-08-07	10-06-07	Expired

Source: Bohol Environment Management Office 2008

Manufacturing and Processing Sector

Calamay making and body-building are considered the major cottage industries in Jagna. The calamay industry is the backbone of about 70 producers from Can-upao, Looc, Pagina, Bunga Ilaya and Canjulao. This century-old delicacy has become popular not only in Bohol but also in other provinces in the Visayas and Mindanao.



Figure 1.3. Calamay

Internationally, it is a nostalgic product especially of Jagnaanonns abroad. Because the real calamay is processed only in Jagna, the town is aptly called as the Home of the Original Calamay.

Aside from the making of calamay there are other minor cottage industries operating in the municipality. Jagnaanonns are also engaged in some century-old but still productive minor business enterprises such tableya making in barangay Canjulao, cookies in Pangdan, pot making and “*dajok*” in Tejero, ginger production in Laca, ubi powder of the Local DA, suman and dinomogan in Tubod Monte, peanut butter in Tubod Mar and metal works in Poblacion.

The flourishing of business ventures in Jagna is one indicator of the entrepreneurial inclination of the people. However, these establishments are mostly engaged in trading and services rather than in manufacturing that has a greater potential in job creation, which in turn will affect the economic development of the municipality. Industries in Jagna are very limited to absorb the potential labor force.

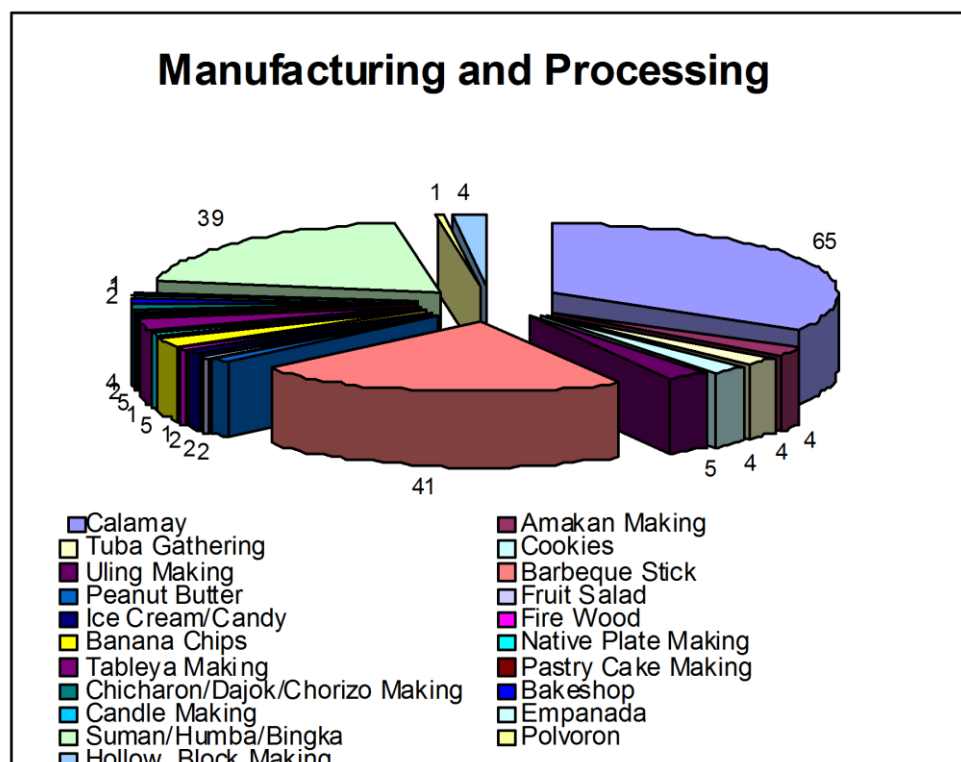


Figure 1.7. Inventory of Manufacturing/Processing Enterprises

Electricity, Gas and Water

Bohol Electric Cooperative (BOHECO) II has been serving Jagna for more than two decades. All 33 barangays in Jagna have One Hundred Percent(100%) access to electricity.

The presence of BOHECO II Main Office in Barangay Cantagay contributes to the economic activity of the municipality. Aside from its services to the business sector it has also become the biggest private employer in Jagna.

Jagna has three (3) distribution centers for fuel such as Petron, Shell, and Caltex.

Jagna Water Works System has remained the main provider of potable water in the Metro Jagna Area and Barangay Water Works System in the rural Areas. Other providers of potable water are the three (3) Water refilling stations in the municipality.

TERTIARY SECTOR

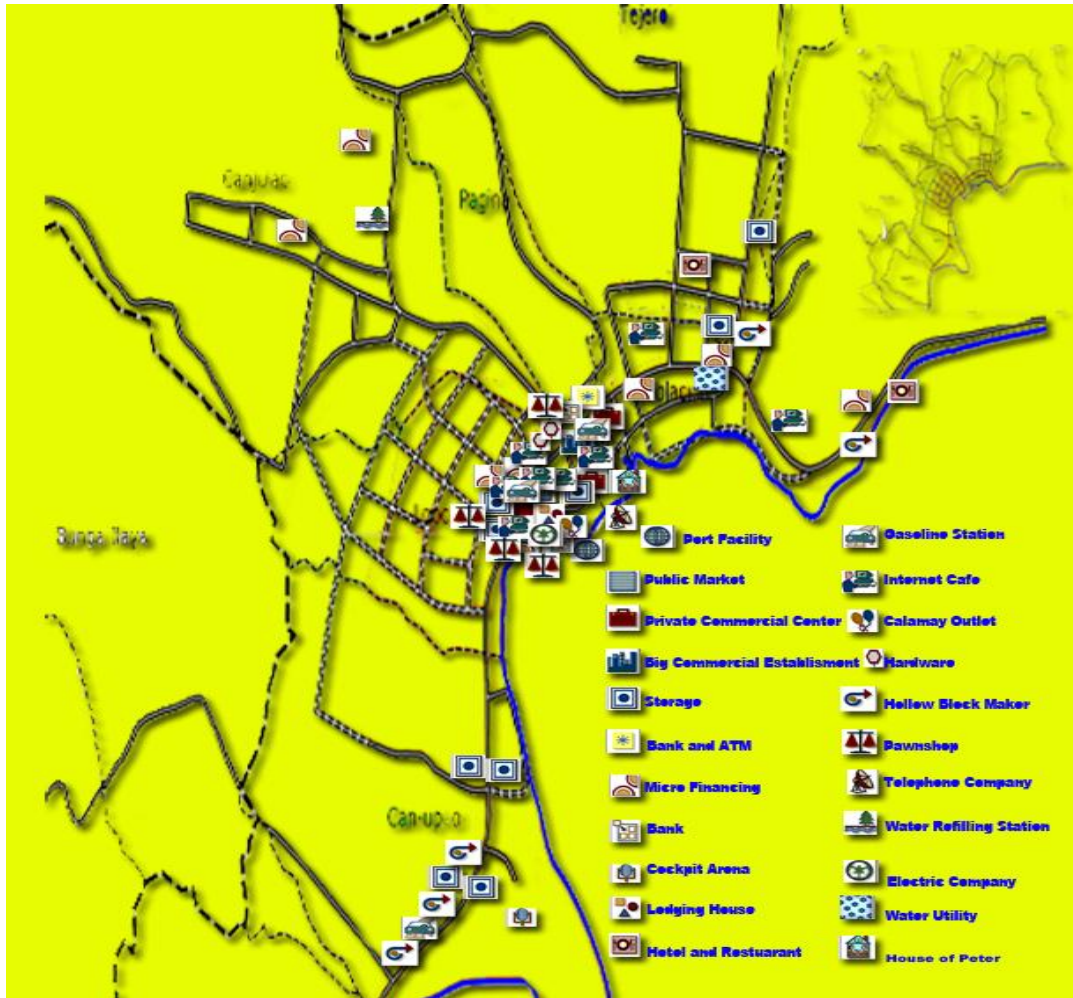


Figure 1.4. BUSINESS ESTABLISHMENTS

Whole Sale and Retail Sector

Majority of the economic activity in Jagna is engaged in wholesale and retail. Most common wholesale products in the municipality are on fish, vegetables, dry goods, beverages, rice and feeds.

The most common type of trading in Jagna is sari-sari stores, food vending, rice retailing and vending of agricultural product. There are also individuals who are producing at the same time selling their products.

Commercial activity is largely concentrated in the Metro Jagna area where commercial establishments are mostly located. The opening of the new commercial building owned and operated by the municipal government provided an add-on to the potential of the

municipality given its strategic location as well as the presence of a seaport providing as entry of goods and commodities.

Majority of the commercial activities mostly falls during market days were goods from as far as the interior part of the province as well as those coming from the barangays are displayed.

Furthermore, opening of new commercial and service activities are becoming a trend. This includes completion of the new Jagna Public Market, financial services, education as well as in accommodations like pension houses and restaurants. This kind of development will affect the adjacent barangays in the Metro Jagna area, which may eventually become a part of the growing economic expansion area.

The presence of the Jagna Port that makes Jagna as the Gate Way to the mainland of Mindanao creates a big impact trading in the municipality. The present of this port made an access of more people and goods to come and pass that makes Jagna as the Trading Capital of the Southeastern part of the province.

Transportation, Storage and Communication

Types of transportation means in Jagna are Motorela, Motorcycle for Hire, Van for Hire, jeepneys and Buses. Every type of transportation service has its own organization except for the bus. Motorela has two organizations the Jagna Motorcycle Operator and Drivers Association (JAMCODA) and Jagna Motorela Operator Mutual Benefit Association (J-MOMBA).

Motorelas is the main conveyance in the Jagna especially in the Metro Jagna area and the coastal barangays. Motorcycle for Hire or the Jagna Single Motor Association (JASMA) commonly called as “Habal-Habal, these type of transportation is used in the remote areas in the town where the access roads are not passable by any other kind of transportation. The Jeepneys has a two (2) organization Jagna Jeepney Operator and Driver’s Association (JJODA) which serves passengers from Jagna to the eastern part of the municipality to the towns of Guindulman and Mabini. The Garcia Hernandez Operator and Drivers Association (GHODA) is the group of jeepney operator which serves passengers from Jagna to the western part of the municipality to the towns of Garcia and Valencia.

Other individual jeepney operators convey passenger’s to the interior part of Jagna and Garcia Hernandez. One Bus Company that serves Jagna to Tagbilaran the Dory Jagna Transit and Van for hire which is also organized as Jagna Van Operator and Driver’s Association (JAVODA). In this kind of transportation utility available in the municipality contributes development of the business environment Jagna because in can help the trading system more possible and increase the volume of visitors in the locality. With this potential the town’s public roads especially in the public market area become congested because of the limited area for parking spaces and no permanent terminal for public utility vehicles.

Ships also serve Jagna through the local Port. There are four (4) shipping companies that serve Jagna to Mindanao Sulpicio Line, Cebu Ferries, Super Shuttle Ferries and Paras Seacat which is a fast craft vessel.

This sea transportation and facility in Jagna boost the economic activity of the municipality not only on business but also on employment such as labor especially that the port of Jagna is included in the Central Nautical Highway Project of the National Government.

Jagna is also advantaged in terms of economic facilities because of the presence of its storages. Alturas storage, hardware, Copra and beverage make the municipality more conducive to business and costumers to come in the municipality.

Cruz Telephone Company (CRUZTELCO) is the major telecommunication in Jagna. Although other types of communication like cellular, internet and media is accessible in the locality.

There is one Cable TV Station, the San Miguel Cable TV and two FM Radio Stations, Radio Natin and the Jagna Community Radio Station DYJP.

Finance, Insurance, and Business Services

Several establishments in Jagna offer services like financing, insurance and services. Jagna have banks that offer saving account, debt, payment for SSS and one bank has an ATM Service. Other financing services are from micro financing cooperatives and firms where businesses and other sector can borrow capital for business and other means.

Insurances are also present in the town that mostly accommodates services for vehicles owner before registering their unit in the Land Transportation Office (LTO). This adds more people to come to Jagna to insured their vehicle.

Business services in Jagna such as pawnshops, pera padala and courier services facilitates in the financial needs of the people in Jagna especially on their business. Smoke testing and drug testing center in Jagna serves the people in and outside the town in getting requirements for registration of vehicle and for personal use in securing or renewing license.

The presence of the port stevedoring services in the Jagna port create a good environment of the facility on trading that make the traders comfortable in transporting goods in Jagna.

Jagna has a cockpit arena which accommodates the cockfighting activity every Sunday. Cockfighting derbies which is participated by Jagna-anon and visitors outside the town and even outside the province will come this arena to participate the competition, gamble and spend their money in the town.

Accommodation Establishments

There are five (5) accommodation establishments that cater to over night visitors in Jagna. Two of these like the Domene Kaw and Idea Pension House do not only offer rooms for rent but also food, beverages and services for special functions.

The other two, the Delilah and Batong Buhay are beach resorts. They also have rooms to stay-in and they likewise offer services for special function. The DQ lodge is purely for transient guests

Table 1.11 Inventory of Registered Businesses

Types Of Business	Within the Public Market	Outside The Public Market	No. Of Establishment Within Jagna
Telephone		2	2
Carenderia	11	7	18
Beauty Parlor	5	2	7
Rice Mill		12	12
Bakery	9	1	11
V-Hire		25	25
Motorcycle For Hire		287	287
Motorela		315	315
Sari-sari Store	31	62	98
Pharmacy	3	5	7
General Merhandise	3	2	5
Agrivet Dealer	4	1	5
Meat Vendor	13		13
Fish Vendor	50	10	60
Rice & Corn Retailer	6	14	20
Dry Goods	27	10	37
Auto Repair Shop		4	4
TV Repair Shop		3	3
Dress Shop		3	3
Tailoring	3	3	6
Distributor of soft drinks		2	2
Cockpit		1	1
Appliance Dealer	2	2	4
Fruit and Vegetables	113	2	115
Tobacco Dealer	6		6
Glass Service		4	4
Gasoline Station		3	3
Pawnshop	1	5	6
Hardware		3	3
Photoshop		2	2
Water purifier	2	2	3
Drug Testing Center		2	2
School Supplies		2	2
Wholesaler	3	2	5
Internet Cafe	2	10	12
Painitan	7		7
Fresh Flower	3		3

Tuba Retiler	5		5
Hotel/Restaurant		2	2
Snack Inn	3	1	6
Watch, Umbrella, Shoe Repair	6		6
Suman Humba Vendors	23		23
Salted & Dried Fish	5		5
Fishing Supplies	3		3
Cellphone Accessories	3	2	5
Coco Grating	2	2	4
Chainsaw Services		7	7
Micro Financing		8	7
Gasoline Station		3	3
Storage		3	3
Copra Buying		6	4
Hollow Block Maker		5	5
Motocycle Dealer		3	3
Furniture		3	3
Beach Resort		2	2

Large number of registered businesses in Jagna is connected to services. Most of this type is in the field of transportation. It followed by trading, manufacturing/processing, food and beverages and agri-aqua.

At present, there are 277 existing commercial establishments in Jagna based on the 2007 DTI business name registration records. These were able to employ hundreds of people. Establishments include banks and other lending institutions, business enterprises, distribution centers, lodging accommodation, funeral parlor, pawnshops and others. The following is the list of commercial establishments categorized as follows:

Table 1.12. Number of DTI Registered Business Establishments

Number of registered retailers	149
Number of registered manufacturers	26
Number of registered services	94
Number of registered wholesalers	07
Number of registered financing	01

Source : DTI

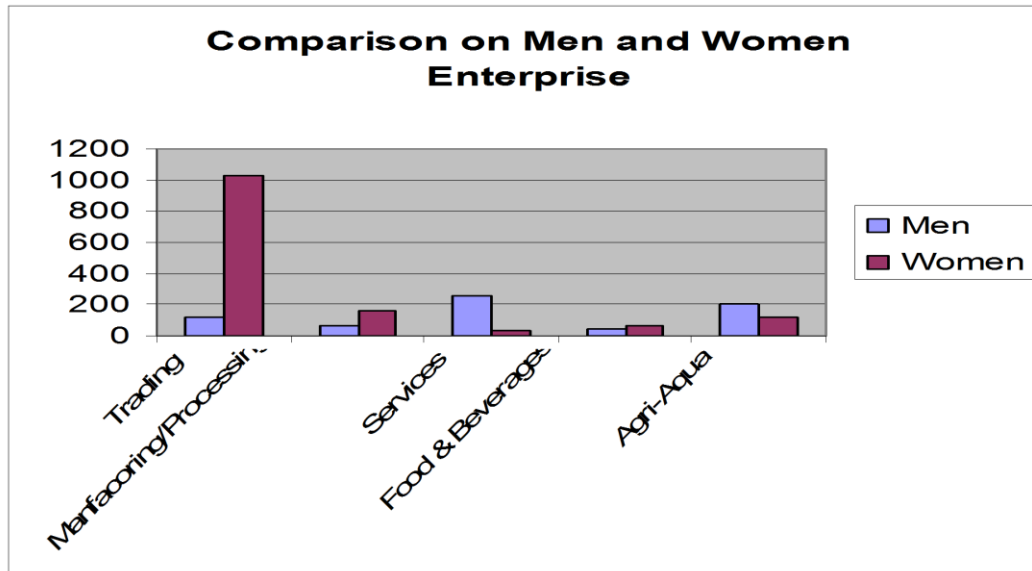


Figure 1.5. Comparison of Ownership of Enterprises (Men and Women)

In the field of trading, manufacturing and processing women are dominant compared to men not only in the urban area but also in the rural barangays. This activity is mainly on retailing or vending and processing of food product. In the other feature men is majority in the services and agri-aqua sector. Most of this enterprise requires hard labor and big investment. In the food and beverage sector men and women are partly equal in the engagement.

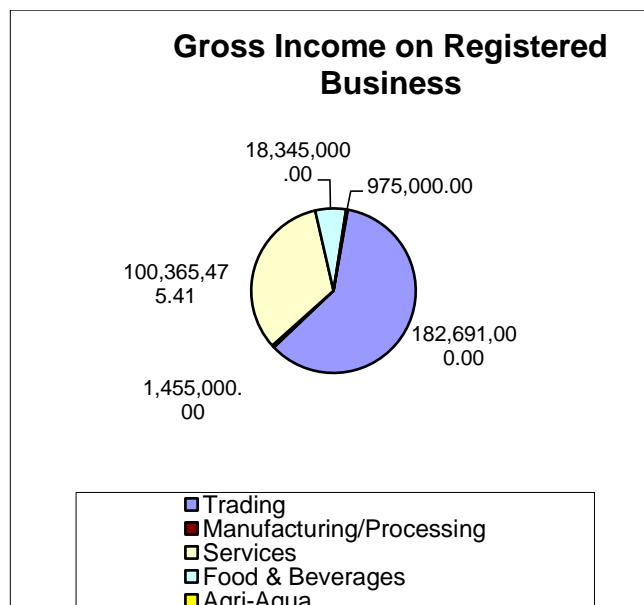


Figure 1.6. Gross Income of Registered Businesses

Although services has the highest number of registered business, but in terms of the annual gross income trading got the highest. Registered services are mostly motorela, motorcycle for hire and van for hire which genetes lesser income compared to the trading business which are engaged in wholesaling and retailing.

Market Facility

Jagna has one of the most modern market facilities in terms of design and construction. The completion of its phase 3 section or the 2nd floor of the main building is currently under way. It covers a land area of 0.6 hectare and is expected to have 232 stalls in the main building and 133 tables in the wet market.

The new building still undergoes modifications to adjust its environment as to the actual usage of the facility. Additional entry points and pathways are established in the wet market area to enhance the condition of the stalls in the inner portion of the building. Drainage renovation inside the market building and concreting of open spaces in front of the building which is also utilize as area for parking are need to be develop to minimize its dusty condition especially on summer. Other additional developments are the construction of a bagsakan and storage area for agricultural goods.

The biggest bulk of the LGU's biggest income comes from market operations. Market income is estimated at almost 3.5 million annually (2007). An Ordinance (No. 10-10-2007 series of 2007) had been passed declaring market day or "tabo" daily were agricultural and fishery products are displayed for sale to the costumers making the commercial activity in the area more vibrant.

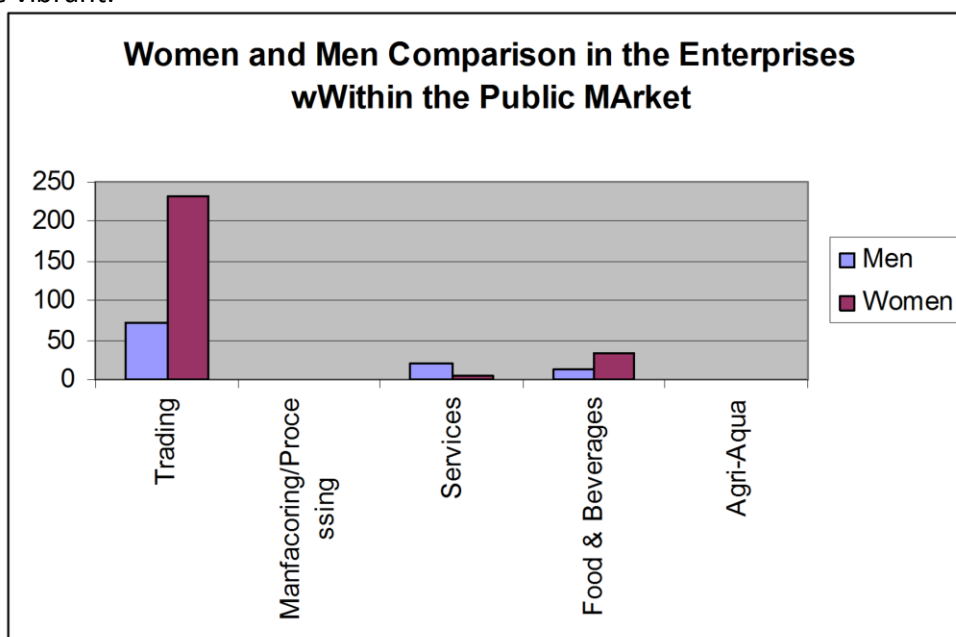
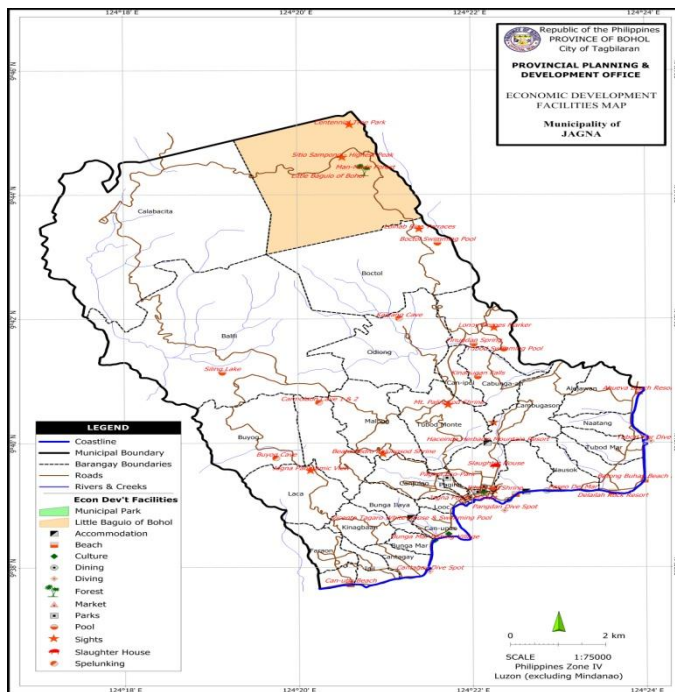


Figure 1.7. Enterprises within the public market

Enterprises inside the public market are also highly dominated by women especially on the field of trading and also in food and beverages. Men excel in the enterprises which belongs to the services sector most of it are repair shops.



Map 1.5. Economic Development Facilities

Tourism in Jagna has always remained a minor driver of economic activity despite the presence of sites that can be developed

The LGU had already identified more than a dozen tourist spots and attractions. These can be classified into resorts, caves, waterfalls, landscapes, historical landmarks and even religious or pilgrim sites.

Being a town and parish for three hundred seventy nine (379) years since its first establishment in 1631 by the early Jesuits, its rich culture and values remained intact made manifest regularly through its socio-cultural presentations. Particularly and popularly revered traditions include the Sinoog and the Sakay-Sakay during its yearly town fiesta on September 29.

The Sinoog dance was further enhanced and later in 2001 was evolved into a new cultural attraction the Sinuog Estokada. The LGU institutionalized it and has since made it as one of the highlights in the yearly fiesta celebration in honor of the patron saint Michael the Archangel.

During Christmas season, the Padagan sa Kometa and Dagit sa mga Bitoon also remain a cherished religious tradition. It has in fact invaded the “you tube”.

The string of Barangay and Sitio Fiestas in the month of May considerably increases the town's economic activity during this time. Everyday in May in Jagna is in festive mood. And the purchasing power of the people is evidently full of zip.

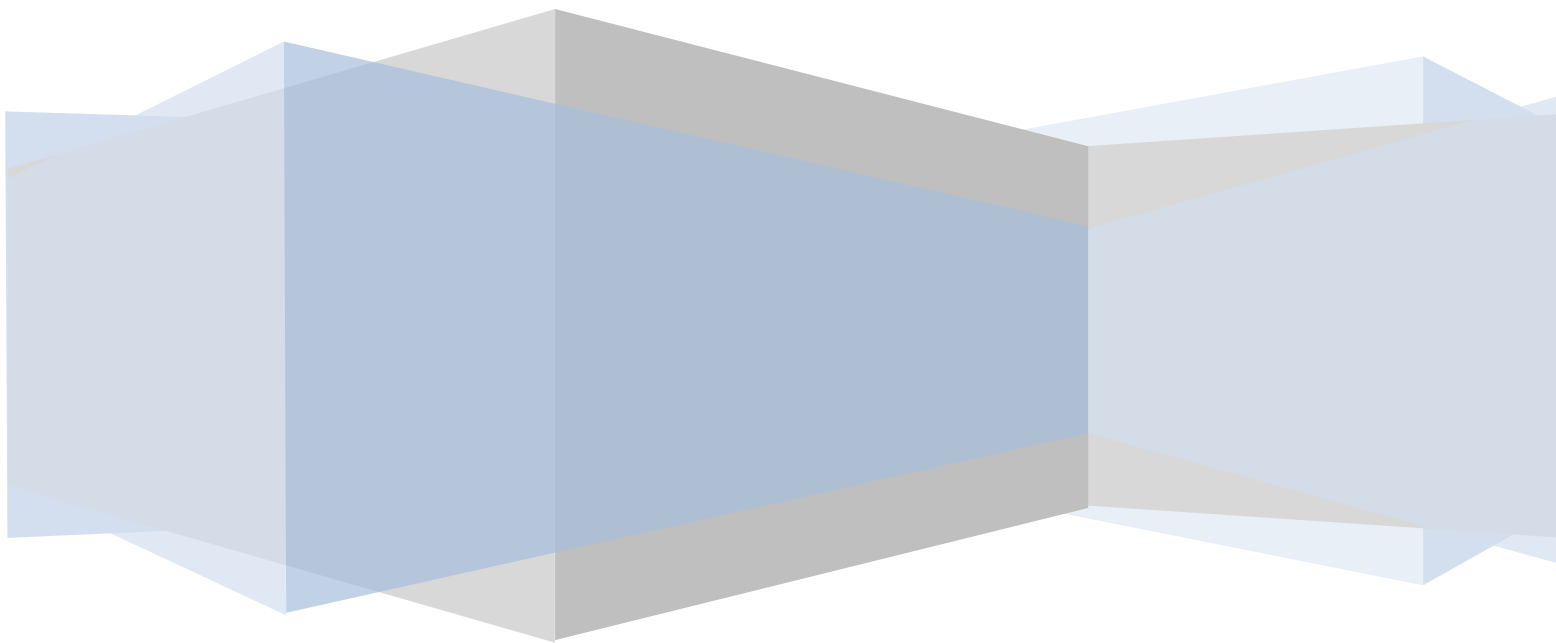
Over the years, the LGU has attempted to include tourism as one of the pillars of the town's economic programs. Initially it formulated an ordinance creating the Municipal Tourism Council (9-09-2004).

The ordinance was in place but other equally important concerns failed the MTC to propel thereby hampering its full implementation. The situation further delayed the formulation of the Comprehensive Tourism Development Plans which could have had pushed for the diversification of Jagna's tourism potential destinations, attractions as well as its products to expand the resource base and the market.

Municipality of Jagna

Social Development

A Sectoral Profile



SOCIAL DEVELOPMENT SECTOR

Population/Demographic Features

a. Population Size

The total population of Jagna based on the 2007 Census of Population and Housing, was 32,034, an increase of 1,391 over the 2000 census results (Table 2.1). From only 13,123 in 1903, the population had almost doubled in the 1990's, after 88 years. During most of its history, Jagna's population has increased slowly. The highest increase was recorded during the 1970 Census with an annual population growth rate of 2.22 percent. At the present rate of 0.61 percent, it will take more than a hundred years before it doubles its current population.

Table 2.1. **HISTORICAL GROWTH OF POPULATION**
Municipality of JAGNA
Census Years 1903-2007

Year	Population	Population Change		Annual Growth Rate
		Difference	Percent	
Aug 1, 2007	32,034	1,391	4.54%	0.61%
May 1, 2000	30,643	1,289	4.39%	0.82%
Sept 1, 1995	29,354	3,192	12.20%	1.60%
May 1, 1990	26,162	2,668	11.36%	1.49%
May 1, 1980	23,494	1,599	7.30%	0.98%
May 1, 1975	21,895	2,277	11.61%	1.53%
May 6, 1970	19,618	2,886	17.25%	2.22%
Feb 15, 1960	16,732	493	3.04%	0.41%
Oct 1, 1948	16,239	868	5.65%	0.76%
Jan 1, 1939	15,371	1,161	8.17%	1.09%
Dec 31, 1918	14,210	1,087	8.28%	1.10%
Mar 2, 1903	13,123			
2000-2007				0.61
1995-2000				0.92
1995-2007				0.74

Source: Census of Population, National Statistics Office (NSO)

Based on the 2007 census data, Barangay Canjulao was the most populated while Barangay Laca had the least population. Although Jagna still experienced population growth of .61 percent, nine (9) of its barangays are experiencing a decline in the total population. This is because of the out-migration cases wherein some of the people especially in the upland

barangays go to other places to look for a job to earn a living for their families. These barangays are Balili, Bictol, Ipil, Laca, Lonoy, Looc, Mayana, Poblacion and Tubod Mar.

From the war years in 1945 onwards, Jagna had a very minimal increase in population. The reasons are very evident. Fear, survival, and preservation of life were the major concerns of everyone.

Pre-Martial law years would see a considerable growth rate. The promise of a Bagong Lipunan of the late dictator Pres. Ferdinand Marcos would have given every family hope and better living condition.

The pending emergence of global crisis and the strong advocacy on contraception affected the traditional view on family planning at the turn of the new millennium.

Table 2.2. TOTAL & HOUSEHOLD POPULATION, NUMBER OF HOUSEHOLDS & ANNUAL POPULATION GROWTH RATE (APGR) BY BARANGAY, 2000 & 2007
Municipality of JAGNA

Barangay	Total Population		Household ¹		APGR ² 2000-2007
	2007	2000	Population	Number	
A. Urban	11,560	10,785	10,773	2,067	
1. Bunga Mar	1,274	1,156	1,156	215	1.35%
2. Canjulao	2,634	2,423	2,423	461	1.16%
3. Can-upao	2,022	1,771	1,771	333	1.84%
4. Looc	811	884	884	173	-1.18%
5. Pagina	1,330	1,313	1,313	233	0.18%
6. Pangdan	1,110	1,044	1,044	213	0.85%
7. Poblacion	950	973	973	195	-0.33%
8. Tejero	1,429	1,221	1,209	244	2.19%
B. Rural	20,474	19,858	19,846	3,890	
1. Alejawan	790	721	721	155	1.27%
2. Balili	1,223	1,268	1,268	246	-0.50%
3. Bictol	1,073	1,114	1,114	219	-0.52%
4. Bunga Ilaya	833	726	726	148	1.91%
5. Buyog	325	289	289	63	1.63%
6. Cabungaan	1,178	1,116	1,116	193	0.75%
7. Calabacita	1,506	1,439	1,439	267	0.63%
8. Cambugason	899	760	760	161	2.34%
9. Can-ipol	420	382	382	72	1.32%
10. Cantagay	866	832	832	159	0.55%
11. Cantuyoc	826	805	805	164	0.36%
12. Can-uba	362	312	312	72	2.07%
13. Faraon	525	489	489	104	0.98%
14. Ipil	275	281	281	66	-0.30%
15. Kinagbaan	414	408	408	77	0.20%
16. Laca	248	340	340	59	-4.26%
17. Larapan	791	738	738	127	0.96%
18. Lonoy	1,225	1,266	1,266	236	-0.45%

19.	Malbog	1,018	880	880	186	2.03%
20.	Mayana	1,861	2,074	2,062	374	-1.48%
21.	Naatang	543	525	525	106	0.47%
22.	Nausok	329	310	310	63	0.82%
23.	Odiong	1,057	1,038	1,038	216	0.25%
24.	Tubod Mar	505	558	558	117	-1.37%
25.	Tubod Monte	1,382	1,187	1,187	240	2.12%
Total		32,034	30,643	30,619	5,957	
1 Census of 2000; no data available for 2007			2 APGR= Annual Population Growth Rate			
Source: Census of Population, National Statistics Office (NSO)						

• Population Growth

Population growth has an effect in every facet of life, from settlement patterns to the price of basic commodities. As a result, it will have an impact in the design of policies, plans and programs that respond to the needs of the people.

TABLE 2.3. URBAN-RURAL POPULATION AND ANNUAL POPULATION GROWTH RATE BY BARANGAY: CENSUS 1990, 1995, 2000 & 2007

Municipality of JAGNA

Barangay	Total Population				APGR ² (2000-2007)
	2007	2000	1995	1990	
BOHOL	1,137,268	1,230,110	994,440	948,315	1.06%
Jagna	32,034	30,643	29,354	27,733	0.61%
A. Urban	11,560	10,785	9,322	8,555	0.96%
1. Bunga Mar	1,274	1,156	282	275	1.35%
2. Canjulao	2,634	2,423	2,105	1,926	1.16%
3. Can-upao	2,022	1,771	1,684	1,452	1.84%
4. Looc	811	884	964	885	-1.18%
5. Pagina	1,330	1,313	1,331	1,263	0.18%
6. Pangdan	1,110	1,044	980	811	0.85%
7. Poblacion	950	973	886	949	-0.33%
8. Tejero	1,429	1,221	1,090	994	2.19%
B. Rural	20,474	19,858	20,032	19,178	0.42%
1. Alejawan	790	721	694	572	1.27%
2. Balili	1,223	1,268	1,259	1,023	-0.50%
3. Boctol	1,073	1,114	1,189	1,058	-0.52%
4. Bunga Ilaya	833	726	707	644	1.91%

5.	Buyog	325	289	1,218	955	1.63%
6.	Cabunga-an	1,178	1,116	946	885	0.75%
7.	Calabacita	1,506	1,439	1,523	1,393	0.63%
8.	Cambugason	899	760	811	750	2.34%
9.	Can-ipol	420	382	353	300	1.32%
10.	Cantagay	866	832	744	577	0.55%
11.	Cantuyoc	826	805	796	675	0.36%
12.	Can-uba	362	312	335	300	2.07%
13.	Faraon	525	489	434	429	0.98%
14.	Ipil	275	281	292	261	-0.30%
15.	Kinagbaan	414	408	397	413	0.20%
16.	Laca	248	340	328	271	-4.26%
17.	Larapan	791	738	622	517	0.96%
18.	Lonoy	1,225	1,266	1,137	1,050	-0.45%
19.	Malbog	1,018	880	872	765	2.03%
20.	Mayana	1,861	2,074	1,958	1,755	-1.48%
21.	Naatang	543	525	498	438	0.47%
22.	Nausok	329	310	281	280	0.82%
23.	Odiong	1,057	1,038	1,006	879	0.25%
24.	Tubod Mar	505	558	523	490	-1.37%
25.	Tubod Monte	1,382	1,187	1,109	928	2.12%

The increasing population in the urban barangays is a result of the presence of new and established businesses and educational institutions and the completion of the new public market.

b. Population Structure, Composition and Distribution

Age and sex are the most basic characteristics of a population with every population exhibiting a different age and sex composition. This can have a considerable impact on the population's social and economic situation, both present and future.

Sex Composition

The sex composition of a locality's population affects the incidence of births, deaths and marriages. These will have implications on spatial mobility and work participation as well as the occupational structure of the locality.

Sex Ratio

The 2000 population census data for the municipality of Jagna reveal that there were 15,605 males and 15,038 females. Per age groupings, there were more males than females in the age group 0 to 59 years while females dominated the rest of the age groups (Table 2.4).

The sex ratio at birth in Jagna Municipality in the 2000 census at 104 males for every 100 females was almost the same as the 1995 figure of 101.4. Brgy. Can-uba has the highest predominance of males among its population compared to the other barangays with a sex ratio of 149.6 males for every 100 females while Brgy. Can-ipol's women outnumber the men in their population at 8 men for every 10 women, making it the most predominantly women barangay in Jagna.

Table 2.4. **AGE DISTRIBUTION OF POPULATION BY SEX, 2000**
Municipality of JAGNA

Age Group	Age Distribution (%)	Both Sexes	Male	Female
All Ages		30,643	15,605	15,038
Under 1	2.26%	692	375	317
1 - 4	8.79%	2,692	1,427	1,265
5 - 9	11.24%	3,444	1,799	1,645
10 - 14	11.11%	3,405	1,703	1,702
15 - 19	9.95%	3,050	1,642	1,408
20 - 24	8.72%	2,672	1,391	1,281
25 - 29	7.65%	2,345	1,193	1,152
30 - 34	6.96%	2,134	1,067	1,067
35 - 39	5.87%	1,798	908	890
40 - 44	5.20%	1,592	846	746
45 - 49	4.24%	1,298	665	633
50 - 54	3.98%	1,220	612	608
55 - 59	3.78%	1,158	565	593
60 - 64	3.30%	1,012	478	534
65 - 69	2.52%	772	359	413
70 - 74	1.95%	598	260	338
75 - 79	1.23%	376	167	209
80 & over	1.26%	385	148	237
0-17	39.46%	12,093	6,285	5,808
18 & Over	60.54%	18,550	9,320	9,230
15-64	59.65%	18,279	9,367	8,912
Below 15	33.39%	10,233	5,304	4,929
65 & Above	6.95%	2,131	934	1,197
Aged 15-49	47.73%			7,177

Source: 2000 Population Census, National Statistics Office

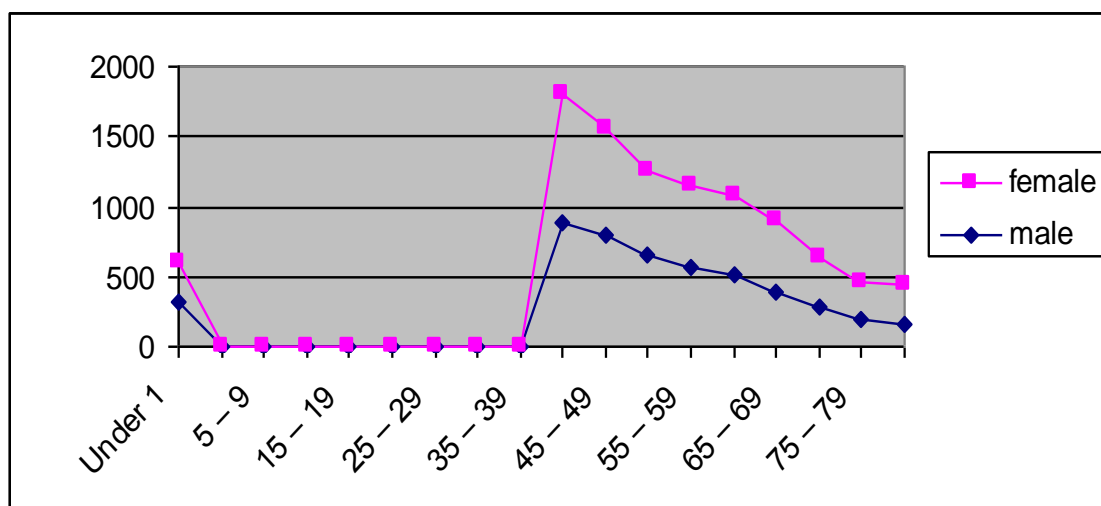


Figure No. 2.1 Graph of Male and Female Distribution

Women Population of Reproductive Ages

The census population data for the municipality reveal that women of child-bearing age are the most dominant in the age distribution of population by sex. This implies an increase in the population in the next years.

Child-Woman Ratio

There were 47 children under age 5 per 100 women of childbearing age (15-49 years) in 2000 or 4 children per woman of reproductive age. In the total population, the ratio of male and female is almost 1:1.

Labor Force

Of the household population of Jagna of 5,957 in 2000 for the age group 15 years old and over, about 89 percent of those in the labor force were employed. Of this, 51 percent were female workers.

Age Distribution by Age Groupings

The population in the productive ages, that is 15 to 64 years, represented 59.65 percent of the total population of Jagna Municipality (Table 2.5). The proportion of those aged 65 years and over was 6.95 percent. The youngest group (0-14 years) was 33.39 percent.

Table 2.5. **TOTAL POPULATION BY AGE-DEPENDENCY GROUP & SEX, 2005**

Municipality of JAGNA

Age Group	Total Population	Male	Female	% Distribution
Total	32, 107	16, 204	15, 903	100.00%
0-14, Young	10,388	5, 390	4, 998	32.35%
15-64, Working Group	19, 264	9, 782	9, 482	59.99%
65 & Over, Elderly	2, 455	1, 032	1, 423	7.65%

This means that in 2005, for every 100 persons in the working age group (15-64 years), there were 68 dependents, that is, 52 persons aged 0 to 14 years (young dependents) and 15 persons aged 65 years and over (old dependents).

Jagna has a majority of young population concentrated between the age of 5-19 which means that women tend to devote their time to reproductive roles or opt to stay in the house to do household chores rather than to work outside because of the prevailing young dependents.

This predominantly school age population is also a potential labor force.

Marital Status

From the 2000 Census, the singulate mean age at marriage in Jagna Municipality for males was 28 years old, whereas for females, it was 26 years old (Table 2.6). This means that a married male in Jagna spends 28 years in singlehood before ultimately marrying while a married female spends 26 years in singlehood before marrying.

Table 2.6. **SINGULATE MEAN AGE AT MARRIAGE, 2000**

Municipality of JAGNA

AGE GROUP	Male			FEMALE		
	Population	Single Population	%	Population	Single Population	%
All Ages	12,004	5,726	47.70%	11,811	5,126	43.40%
10-19	3,345	3,097	92.59%	3,110	2,908	93.50%
20 - 24	1,391	1,125	80.88%	1,281	897	70.02%
25 - 29	1,193	663	55.57%	1,152	495	42.97%
30 - 34	1,067	331	31.02%	1,067	276	25.87%
35 - 39	908	161	17.73%	890	140	15.73%
40 - 44	846	101	11.94%	746	73	9.79%
45 - 49	665	55	8.27%	633	68	10.74%

50 - 54	612	59	9.64%	608	65	10.69%
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Source: 2000 Population Census, National Statistics Office

c. Spatial Distribution

The patterns of settlement and dispersal of population within an area indicate the manner by which the population is distributed.

Urbanization and Distribution

In 2000, the municipality of Jagna was mainly a rural area with only 56 persons living in the urban area per 100 persons in the rural area.

Percent Urban

In 2007, Jagna Municipality had an urban population of 11,560 representing 36.09 percent of the total population of the municipality (Table 2.7). This means that for every 100 residents in Jagna, 36 live in the urban areas. An upward trend is noted in 2007 compared to 2000, implying increasing urbanization of Jagna Municipality.

Of the 33 barangays of Jagna Municipality, eight (8) barangays are classified by the Municipality as urban namely, Brgys. Bunga Mar, Canjulao, Can-upao, Looc, Pagina, Pangdan, Poblacion and Tejero occupying a total land area of 553 hectares or 8 percent of total municipal area.

Percent Rural

Rural population of Jagna Municipality comprises 64 percent of total municipal population (Table 2.7). Twenty-five (25) of the 33 barangays of the municipality are classified by the Municipality as rural, making it predominantly rural in 2007.

Table 2.7. **POPULATION DENSITY BY BARANGAY, 2007**

Municipality of JAGNA

Barangay	Population, 2007	Percent (%) Population	Area (hectares)	Percent (%) Area	Density (Persons/hectares)
Jagna	32,034		12,063.0		2.66
Urban	11,560	36.09%	552.86	4.58%	20.9
1. Bunga Mar	1,274	3.98%	47.42	0.39%	26.9
2. Canjulao	2,634	8.22%	125.61	1.04%	21.0
3. Can-upao	2,022	6.31%	63.53	0.53%	31.8
4. Looc	811	2.53%	42.66	0.35%	19.0
5. Pagina	1,330	4.15%	19.48	0.16%	68.3

6. Pangdan	1,110	3.47%	122.67	1.02%	9.0
7. Poblacion	950	2.97%	14.14	0.12%	67.2
8. Tejero	1,429	4.46%	117.35	0.97%	12.2
Rural	20,474	63.91%	6,268.45	51.96%	3.27
1. Alejawan	790	2.47%	156.55	1.30%	5.0
2. Balili	1,223	3.82%	1,010.68	8.38%	1.2
3. Boctol	1,073	3.35%	322.95	2.68%	3.3
4. Buyog	325	1.01%	116.40	0.96%	2.8
5. Bunga Ilaya	833	2.60%	357.70	2.97%	2.3
6. Cabungaan	1,178	3.68%	188.98	1.57%	6.2
7. Calabacita	1,506	4.70%	580.90	4.82%	2.6
8. Cambugason	899	2.81%	246.12	2.04%	3.7
9. Can-ipol	420	1.31%	70.33	0.58%	6.0
10. Cantagay	866	2.70%	74.48	0.62%	11.6
11. Cantuyoc	826	2.58%	309.63	2.57%	2.7
12. Can-uba	362	1.13%	28.30	0.23%	12.8
13. Faraon	525	1.64%	100.92	0.84%	5.2
14. Ipil	275	0.86%	81.80	0.68%	3.4
15. Kinagbaan	414	1.29%	124.69	1.03%	3.3
16. Laca	248	0.77%	237.92	1.97%	1.0
17. Larapan	791	2.47%	113.98	0.94%	6.9
18. Lonoy	1,225	3.82%	292.69	2.43%	4.2
19. Malbog	1,018	3.18%	311.51	2.58%	3.3
20. Mayana	1,861	5.81%	408.27	3.38%	4.6
21. Naatang	543	1.70%	59.76	0.50%	9.1
22. Nausok	329	1.03%	123.18	1.02%	2.7
23. Odiong	1,057	3.30%	459.86	3.81%	2.3
24. Tubod Mar	505	1.58%	109.02	0.90%	4.6
25. Tubod Monte	1,382	4.31%	381.86	3.17%	3.6

Source of Population Data: National Statistics Office;
DENR

Source of Land Area Data :

Population Density

Population density indicates the pattern of population distribution which can serve as an indicator of urbanization of an area.

The gross population density of Jagna was computed at 3 persons living per hectare but its built-up density was estimated at 4.70 persons per hectare classifying Jagna as a Low Density Area (Table 2.7). Built-up density is significantly higher in Brgy. Pagina at 68 persons per hectare and Brgy. Poblacion at 67 persons per hectare along with most of the urban barangays of the municipality. Brgy. Buyog is the least densely populated barangay in Jagna. Population density in the urban areas of Jagna are 7 times higher than that of the rural areas at 21 persons per hectare in the urban area and 3 persons per hectare in the rural area.

Percentage of Population by Geographic Classification

Jagna Municipality has eight (8) coastal barangays, seventeen (17) upland barangays and eight (8) metro jagna barangays. About 35 percent of the population of Jagna is living along the coast while a greater number (51%) are found in the upland area (Table 2.8). A movement of its population from the upland to the lowland is noted between the period 2000 and 2007.

The bulk of the people of Jagna dwell in the upland barangays as shown in the population distribution. This implies that the Local Government's intervention must be focused on agriculture so as to develop the economic condition of the people of Jagna. On the other hand, coastal barangays is into fishing but the people in the area must have an alternative livelihood to augment their income from fishing especially during off-season.

Table 2.8. **TOTAL POPULATION AND PERCENTAGE BY GEOGRAPHIC DISTRIBUTION**
Census of 2000 & 2007
Municipality of JAGNA

Geographic Classification	Total Population		% Population Distribution		% Change
	Aug. 1, 2007	1-May-00	Aug. 1, 2007	1-May-00	
Jagna Municipality	32,034	30,643			
Coastal Barangays (Brgys. Alejawan, Cantagay, Canuba, , Ipil, Naatang, Nausok ,Larapan, and Tubod Mar)	4,461	4,277	13.92%	13.95%	-0.03%
Metro Jagna (Brgys. Can-upao, Bunga Mar, Canjulao and Tejero Pagina, Pangdan, Poblacion, Looc)	11,560	10,785	36.08%	35.19%	0.89%

Upland Barangays (Brgys. Balili, Boctol, Buyog, Cabungaan, Calabacita, Cambugason, Can-ipol, Cantuyoc, Bunga Ilaya, Tubod Monte, Faraon, Odiong, Kinabaan, Laca, Lonoy, Malbog and Mayana)	16,013	16,018	49.98%	52.27%	-2.29%
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Source of Population Data: National Statistics Office (NSO)

d. Household and Family Characteristics

Households and families are the basic units in which most people live. Trends in the number, type, and composition of households are important especially in determining municipal services to be provided.

Table 2.9. **HOUSEHOLD POPULATION, NUMBER OF HOUSEHOLDS & AVERAGE HOUSEHOLD SIZE BY BARANGAY, 2000**

Municipality of JAGNA

Barangay	Households (HH) 2000			Barangay	Households (HH) 2000		
	Population	Number	Ave. HH Size		Populati on	Numbe r	Ave. HH Size
BOHOL	1,134,733	209,588	5.41	BOHOL	1,134,733	209,588	5.41
Jagna	19,485	3,639	5.35	Jagna	11,134	2,318	4.80
1 Larapan	738	127	5.81	18 Tejero	1,209	244	4.95
2 Cabunga-an	1,116	193	5.78	19 Naatan g	525	106	4.95
3 Laca	340	59	5.76	20 Tubod Monte	1,187	240	4.95
4 Pagina	1,313	233	5.64	21 Nausok	310	63	4.92
5 Mayana	2,062	374	5.51	22 Cantuy oc	805	164	4.91
6 Calabacita	1,439	267	5.39	23 Buyog	726	148	4.91
7 Bunga Mar	1,156	215	5.38	24 Pangda n	1,044	213	4.90

8	Lonoy	1,266	236	5.36	25	Odiong	1,038	216	4.81
9	Can-upao	1,771	333	5.32	26	Tubod Mar	558	117	4.77
10	Can-ipol	382	72	5.31	27	Malbog	880	186	4.73
11	Kinagbaan	408	77	5.30	28	Cambu gason	760	161	4.72
12	Canjulao	2,423	461	5.26	29	Faraon	489	104	4.70
13	Cantagay	832	159	5.23	30	Alejaw an	721	155	4.65
14	Balili	1,268	246	5.15	31	Bunga Ilaya	289	63	4.59
15	Looc	884	173	5.11	32	Can-uba	312	72	4.33
16	Boctol	1,114	219	5.09	33	Ipil	281	66	4.26
17	Poblacion (Pondol)	973	195	4.99	Source: 2000 Census of Population and Housing, NSO				

- **Growth of Number of Households and Average Household Size**

The average annual rate of change in the number of households for the municipality of Jagna was steadily increasing from 1.72 percent (1990 to 1995) to 1.80 percent from 1995 to 2000. However, its average household size was nearly the same at an average of 5 persons per household during the same periods. In the 2000 Census, Brgy. Larapan had the largest household size at 5.81 while Brgy. Ipil had the least average household size at 4.26 members per household.

- **Percentage of Household by Sex of Household Head**

In the census of 2000, majority of Jagna's households were headed by males with only 16 percent of its households headed by females. Most of these household heads belonged to the age groups 30-59 for males and 40-79 for females.

**Table 2.10. NUMBER OF HOUSEHOLDS BY AGE GROUP, SEX OF HOUSEHOLD HEAD
AND HOUSEHOLD SIZE, 2000**

Municipality of JAGNA

Age Group	Number of Households	Household Size								Average Household Size
		1	2	3	4	5	6	7	8 & Over	
Both Sexes	5,957	334	618	741	940	896	784	622	1,022	5.14
Below 20	12	1	4	2	1	0	2	1	1	4.00
20 – 29	392	15	40	86	114	66	44	18	9	4.11
30 – 39	1,205	37	75	147	219	224	200	155	148	5.17
40 – 49	1,326	50	60	108	197	222	217	165	307	5.82
50 – 59	1,234	68	107	142	173	178	159	129	278	5.44
60 – 69	1,015	68	155	142	144	131	99	97	179	4.96
70 – 79	595	72	123	90	70	62	51	45	82	4.33
80 & over	178	23	54	24	22	13	12	12	18	3.82
Male	4,986	178	446	588	811	787	709	562	905	5.34
Below 20	8		3		1		2	1	1	4.88
20 - 29	373	14	38	80	109	64	43	17	8	4.12
30 - 39	1,148	33	63	135	212	214	197	149	145	5.23
40 - 49	1,218	35	50	96	173	207	205	162	290	5.94
50 - 59	1,016	41	74	105	146	148	139	112	251	5.67
60 - 69	753	29	100	106	100	108	79	83	148	5.29
70 - 79	370	18	83	56	58	37	36	30	52	4.56
80 & over	100	8	35	10	12	9	8	8	10	3.99
Female	971	156	172	153	129	109	75	60	117	4.09
Below 20	4	1	1	2						2.25
20 - 29	19	1	2	6	5	2	1	1	1	3.95
30 - 39	57	4	12	12	7	10	3	6	3	3.98
40 - 49	108	15	10	12	24	15	12	3	17	4.44
50 - 59	218	27	33	37	27	30	20	17	27	4.36
60 - 69	262	39	55	36	44	23	20	14	31	4.03
70 - 79	225	54	40	34	12	25	15	15	30	3.96
80 & over	78	15	19	14	10	4	4	4	8	3.60

Source: 2000 Census of Population and Housing, NSO

Households Reporting Land Ownership

Of the 10 percent sampled households in Jagna, about 40 percent of these households owned agricultural land of which 2 percent was acquired as a beneficiary

of CARP/Agrarian Reform. About 44 percent of the households sampled in Jagna Municipality had at least one land owned in 2000.

e. Social Clustering of Population

The race/ethnicity, language and heritage reveal much about the population's origin and are often used in the administration of government programs.

Race / Ethnicity

In the 2000 Census of Population, 89 percent of the population of Jagna was of Boholano origin with Cebuanos as the next largest group comprising 9 percent of its population. It is noted that, there are some cultural minority groups such as the Aeta/Ati, Maranao and Tausog, living in Jagna.

Language or Dialect Spoken

Several languages/dialects are spoken in the municipality as reported by NSO in its Census of 1995. The Boholano dialect is commonly used by almost all of its population at 99.88% while only very few used other dialect.

Religious Affiliation

Jagna's population is predominantly Roman Catholic comprising 89 percent of its population followed by the Aglipayans. The rest are divided among various religious denominations like Evangelicals, Adventists, Protestants, among others.

Status of Well-being of the Population

The socio-economic status of the municipality and the access of basic services were measured using the Poverty Database Monitoring System (PDMS), a tool for poverty diagnosis conducted at the household level. The survey consisted of twelve (12) indicators in 2005 which had been increased to twenty (20) in 2009.

Table 2.11. Comparative Ranking by Indicators (2005 and 2009)

2005			2009		
Indicators	Percentage & Rank	Sectoral Concern	Indicators	Percentage & Rank	Sectoral Concern
Income Threshold	1 – 41.87%*	Economic	Water Waste Disposal	1 – 86.79%	Environment
Food Threshold	2 -28.24%*	Economic	Garbage Disposal	2 - 60.85%	Environment
Tenure Status	3 – 13.81%*	Social (housing)	Health Insurance	3 – 45.62%	Social (social welfare)
Unemployment	4 – 10.78%	Economic	Tenure Status	4 – 34.53%*	Social (housing)
School Drop Outs	5 – 8.07%	Social (education)	Sanitation	5 – 23.53%*	Social (basic utilities)
Crime Incidence	6 – 6.35%	Social (public safety)	Income Threshold	6 – 22.57%*	Economic
Sanitation	7 – 4.32%*	Social (basic utilities)	Food Shortage	7 - 18.38%	Economic
Water	8 – 3.05%	Social (basic utilities)	Food Threshold	8 – 12.2%*	Economic
Makeshift Housing	9 – 1.85%	Social (housing)	Electricity	9 – 11.2%	Social (basic utilities)
Child Malnutrition	10 – 2.12%	Social (health)	Unemployment	10 – 10%	Economic
Meals	11 – 0.19%	Economic	School Drop Outs	11 – 7%	Social (education)
Child Mortality	12 – 0.11%	Social (health)	Crime Incidence	12 – 5.47%	Social (public safety)
			Child Malnutrition	13 – 3.43%	Social (health)
			Water	14 – 3.28%	Social (basic utilities)
			Makeshift Housing	15 – 3.04%	Social (housing)
			Disability	16 – 1.58%	Social (health)
			Literacy	17 -0.91%	Social (education)
			Maternal Mortality	18 – 0.3%	Social (health)
			Child Mortality	19 – 0.24%	Social (health)
			Meal Shortage	20 -0.16%	Economic

Source: MPDC, Municipality of Jagna (2005 & 2009)

Comparing the performance of the 2005 indicators in the 2009 survey period, the data reveal that there has been an improvement in the economic aspect particularly in the income and food threshold indicators which means that there has been a decrease in the number of households living below the threshold level. However, these households including those living on the threshold or just above it are all vulnerable to various factors resulting from the global economic and environmental crisis. Meanwhile, the decrease in the school drop-outs indicator in the elementary schools can be attributed to the efforts of the Department of Education in the locality to respond to this problem.

On the other hand, the rest of the 2005 indicators all belonging to social concerns fared negatively most particularly the tenurial status, sanitation and makeshift housing. The very significant variance in the above mentioned indicators is a result of the re-definition of terms for said indicators. The recent definitions have been adapted to conform to international standards.

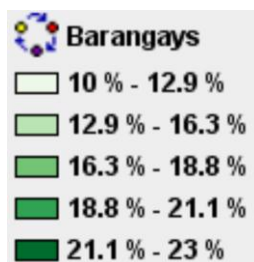
The indicators which were added in the 2009 survey focused more on environment and social concerns. Of the top ten, the indicators with the highest degree of deprivation were those related to the environment. For one, there has not yet been any intervention in water waste disposal while the implementation of the solid waste management is still within Metro Jagna. Another area where there is a significant level of deprivation is on health insurance even if the municipal government has already started to enroll its indigent constituents. The tenurial status and sanitation indicators are in the fourth and fifth ranks respectively as a result of the revised definition of terms.

To complete the top ten indicators showing the highest degree of deprivation were those related to economic concerns.

AVERAGE ACROSS INDICATOR MAP

Figure No. 2.2

LEGEND:



The map indicates that the highest degree of deprivation across all indicators is mostly in the rural barangays, followed by those in the coastal areas. The least deprived are the Metro Jagna barangays.

Table 2.12. Comparative Ranking of Poverty Incidence By Barangay (2005 and 2009)

2005	Percentage	2009	Percentage
1.Calabacita	16.91%	1.Boctol	23.03%
2.Can-ipol	15.46%	2.Mayana	22.82%
3.Laca	14.29%	3.Calabacita	22.66%
4.Buyog	14.02%	4.Alejawan	22.17%
5.Cabungaan	13.65%	5.Cambugason	21.67%
6.Odiong	13.56%	6.Lonoy	21.1%
7.Mayana	12.99%	7.Balili	20.61%
8.Balili	12.95%	8.Ipil	20.58%
9.Ipil	12.93%	9.Cabungaan	19.61%
10.Cambugason	12.61%	10. Bunga Ilaya	19.31%
11.Lonoy	12.51%	11.Odiong	19.28%
12.Boctol	11.87%	12.Kinagbaan	18.96%
13. Tubod Monte	11.28%	13.Tubod Monte	18.83%
14. Larapan	11.28%	14.Larapan	18.4%
15. Bunga Ilaya	10.91%	15.Cantuyoc	18.25%
16. Cantagay	10.77%	16.Can-upao	18.13%
17. Faraon	9.88%	17.Can-uba	17.81%
18. Cantuyoc	9.79%	18.Faraon	17.78%
19. Nausok	9.61%	19.Malbog	17.29%
20. Tubod Mar	9.59%	20.Tubod Mar	16.93%
21. Kinagbaan	9.44%	21.Cantagay	16.83%
22. Can-upao	9.34%	22.Buyog	16.81%
23. Can-uba	9.22%	23.Can-ipol	16.3%
24. Malbog	8.71%	24.Naatang	15.2%
25. Alejawan	8.51%	25.Nausok	15.04%

26. Looc	8.02%	26.Laca	15.03%
27. Naatang	7.98%	27.Bunga Mar	14.98%
28. Tejero	7.79%	28.Canjulao	12.88%
29. Bunga Mar	6.93%	29.Pagina	12.62%
30. Pagina	6.83%	30.Tejero	12.21%
31. Canjulao	6.29%	31. Pangdan	11.79%
32. Pangdan	5.78%	32. Looc	10.4%
33. Poblacion	5.15%	33. Poblacion	9.98%
Total	10.51%	Total	17.44%

Source: MPDC, Municipality of Jagna (2005 & 2009)

The poverty incidence of the municipality has increased to 65.5%. Contributing to this significant increase was the use of additional indicators, the redefinition of terms of old indicators and the interplay of external (e.g. global economic and environmental crisis) and internal factors (situation of the LGU and implementation of the interventions identified, among others).

From the above data, six (6) barangays belonging to the first ten (10) most deprived barangays in 2005 were still in the same category in 2009 although their ranking had differed. Most of these are big upland barangays. The other four (4) barangays had graduated from the top ten (10) of which three (3) are considerably small. For the Metro Jagna area, it is only Barangay Can-upao which is considered the most deprived.

The ranks of the barangays and their level of deprivation show that interventions have to be geared towards the upland and coastal barangays and the gains already achieved in improving the well-being of the people have to be sustained.

In the PDMS survey of 2005, the top five (5) indicators with high incidence of deprivation were related to economic and social development concerns. The indicators on income threshold, food threshold, employment and school drop outs were highest in the upland barangays while tenure status was highest in Metro Jagna. Fifteen (15) upland and five (5) coastal barangays were listed in the Top 20 most deprived barangays.

The 2009 PDMS survey consisted of twenty (20) indicators eight (8) of which are additional: two (2) of which are environmental concerns; five (5) are social and one (1) economic. The survey results revealed the following:

1. The top five (5) indicators with the highest incidence of deprivation are the water waste and garbage disposals; health insurance, tenure status and sanitation.

2. The environmental concerns were significantly high in all of the barangays. For the garbage disposal, of the eight (8) Metro Jagna barangays availing of garbage collection, one (1) barangay belongs to the top 20 which are using environmentally unfriendly garbage disposal. The rest consist of twelve (12) upland and seven (7) coastal barangays. For the water waste disposal, the top 20 consist of thirteen (13) upland, five (5) coastal and two (2) Metro Jagna barangays.
3. For the health insurance indicator, thirteen (13) upland; five (5) coastal and two (2) Metro Jagna barangays belong to the top 20.
4. With the redefinition of terms on tenurial status and sanitation, these two indicators ranked fourth and fifth of total indicators of which the number of households not owning the lot where they live had increased to about 148% and those with unsanitary toilets which also increased to 390% . There is also an increase of about 50% in the number of households with makeshift materials.
5. There were improvements in the economic indicators particularly income and food threshold wherein about 50% of households are no longer below the income and food threshold. As to the unemployment indicator, there was about an 8% decrease in the number of unemployed persons compared to that in 2005. On the other hand, food shortage, an additional indicator was listed as number 7 of total indicators.
6. Improvements in the other indicators can also be noted as in the decrease in crime incidence and school drop-outs.
7. Child malnutrition increased to about 61.8% compared to 2005.

As in the 2005 PDMS survey, the Top 20 most deprived barangays based on the total poverty indicators consists of fourteen (14) upland barangays; five (5) coastal and one (1) Metro Jagna barangay. But compared in 2005, five (5) had moved out of the top 20 to include three (3) upland and two (2) coastal barangays. Seven (7) of the eight (8) Metro Jagna barangays have consistently remained as the least deprived barangays in the two surveys conducted.

Based on the survey results, the environment-related indicators top the poverty list followed by economic and the different aspects of social development. Further, the interplay of these indicators vary in the different barangays with those in the upland cluster mostly belonging to the most deprived and those in Metro Jagna as the least deprived barangays.

HEALTH AND NUTRITION

There has been an improvement in the health care delivery in Jagna in recent years. Based on the standards set by the Department of Health, the municipality having a population of about 32,000 has complied with the 1: 20,000 ratio for doctors; however, it is abit below the 1:15,000 ratio for nurses; but it is more than the 1: 5,000 for midwives. However, there is still no dentist designate in either the district hospital or the rural health centers. The public schools are visited by the dentist designate based in the Department of Education. The dental concerns of the populace are served by private paractitioners.



Map No. 2.3

Table 2.13 HEALTH PERSONNEL AND FACILITIES
Jagna, Bohol (2009)

Personnel	Hospital		RURAL HEALTH CENTERS		OTHER (Private clinics)	TOTAL
	TBGDH	LIM HOSPITAL	RHU 1	RHU 2		
Doctors	6	5	1	1	3	16
Nurses	12	13	1	1		27
Dentists	0		0	0	2	2
Nursing Aides	5	5				10
Midwives	1	1	7	6		15
Medical Technologies	3	1	1			5
Sanitary Inspectors			1			1
Optometrists					2	2
Total	27	25	11	8	7	78
Rooms	16 (6 private)	11 (2 private; 2 semi-private)				27
Bed Capacity	25	28				53

Source: MPDC, Municipality of Jagna (2009)

The Teodoro B. Galagar District Hospital (TBGDH) serves as the flagship hospital of the 3rd district of Bohol particularly the neighboring towns of Jagna. A tertiary hospital, it is also the training conduit of the nursing department of two universities in Tagbilaran. Since 2005 it received an endowment fund from the Philippine Charity Sweepstakes Office (PCSO) for indigent patients in the amount of Php 200,000 annually which has been increased to Php 400,000 in 2008. While the hospital receives regular allocation of medicines and supplies from the provincial government for their patients, it is not sufficient for the latter's prescribed medication. The burden of procuring these needs fall on the patients. For indigent patients, they resort to soliciting for funds from individuals and oftentimes from the LGU by availing of the Assistance in Crisis Situation (AICS) fund.

On the other hand, there is the private-owned Lim Hospital which is a secondary hospital equipped with modern facilities comparable to those in the capital city. It also accommodates out-of town consultants who have medical clinics in the said hospital and whose patients come from different parts of the province. There are also seven private clinics operating in the municipality. One is a medical clinic equipped with a laboratory; another specializes in obstetrics; a physician couple owns a clinic for children; two are dental clinics and another 2 are eye clinics.

The referral system of patients has been a practice of both hospitals especially for complicated health cases which cannot be treated due to lack of medical specialists or lack of facilities needed in their treatment. Most referrals are forwarded to the government hospital in Tagbilaran.

The six - year partnership with Philos Health, a US - based health NGO has significantly contributed in the improvement of health delivery services. There is the sustained provision of medicines especially for diabetes and hypertension, and a Philos-paid nurse monitors related cases in the barangays. Equipments, supplies and materials had also been given to the LGU/RHUs and the district hospital. However, some of these medical equipments have not been very well utilized because the personnel lack the technical know-how to operate them.

There were also special health projects like providing prosthetics to persons with physical disabilities and medication to patients with grave health conditions. The RHU 2 building construction was made possible through its financial counterpart and donations of equipments. A donated vehicle from Philos Health has facilitated the mobility of the RHU 2 health providers.

.Table 2.14. BARANGAY HEALTH PROVIDERS AND FACILITIES

Jagna, Bohol (2009)

Personnel	Barangay Health Centers cum Lying –In Facilities		Barangays	Total	
	RHU 1(22 brgys)	RHU2 (11 brgys)		Male	Female
Midwives	7	6			13
Barangay Health Workers (BHW)	123	84			207
Barangay Nutrition Scholar (BNS)			33		33
Trained Hilot				3	12
Total				3	265

Sources: RHU 1 & 2, Municipality of Jagna (2009)

The establishment of the Rural Health Unit (RHU 2) based in Barangay Mayana, in the upland cluster is a significant development in the provision of health service in the hinterland barangays of Jagna. It covers 11 barangays with 12,842 people or 40% of total population. Its creation has eased the load of just one RHU for the entire municipality.

RHU 2 is manned by a doctor under the Doctor to the Barrio Program of the Department of Health who is on a two-year contract (2007-2009). The doctor holds regular clinic in each of the health centers of the 11 barangays under its coverage. However, in the last quarter of 2009, the position of RHU doctor was left vacant and is now awaiting replacement.

Meanwhile, the 13 midwives assigned in the 33 barangays cover at least 2 health centers each. Complementing the rural health units are the barangay health centers, one for each of the barangays under the care of barangay health workers whose number is commensurate to the size of the barangay's populace. Other health-related providers are the nutrition scholars who take charge of the nutritional concerns of the barangays. There are also 20 traditional midwives or "hilot", of which 15 had been trained and had assisted the midwives in child delivery at the barangay health center cum lying-in center. As of date, except for one (1) barangay health center, all the rest can be used as lying-in for those giving birth.

Private health facilities are preferred because these provide better services. However, these are not affordable especially to the marginalized sectors. Nevertheless, some still availed of these even if they have difficulty in getting money for the hospital bills. While the fee of the district hospital is affordable, the lack of medicines, facilities and supplies discourage people from accessing its services. Further, attitudinal problems of a number of healthcare providers get in the way of efficient and effective healthcare delivery.

Among the basic services accessed especially by the marginalized sectors is the maternal and child health program resulting to improved the health condition of children and women. Immunization had been administered to more children under five as a means of preventing the occurrence of illnesses and a safeguard to their health as they grow.

From the figures in **Table 2.15**, the variance in the number of children especially for ailments which need several doses is due to a number of factors. Some are unable to complete the dose because the children are not in a good state of health when the next dosage is to be administered; transfer of residence to other towns and in the case of hepatitis immunization, children who are born in the hospital are administered the first dose and the subsequent doses are administered elsewhere like in the RHU's.

Table 2.15. NUMBER OF IMMUNIZED CHILDREN

RHU 1			RHU 2		
Types	2008	2009	Types	2008	2009
BCG	330	351	BCG	230	344
DPT 1	380	396	DPT 1	268	324
DPT 2	382	356	DPT 2	243	357
DPT 3	370	353	DPT 3	249	356
OPV 1	387	372	OPV 1	268	298
OPV 2	385	340	OPV 2	243	349
OPV 3	381	348	OPV 3	249	343
HEPA 1	336	293	HEPA 1	242	296
HEPA 2	360	350	HEPA 2	249	309
HEPA 3	370	341	HEPA 3	264	382
MEASLES	362	325	MEASLES	243	349

Source: RHU 1 & 2, Municipality of Jagna (2008 & 2009)

In the case of child malnutrition, there is not only a variance in the two survey periods but also with the records of the Municipal Nutrition Action Officer. The results have reflected an increase of 61.8% in the number of malnourished children in the current survey.

Legend:

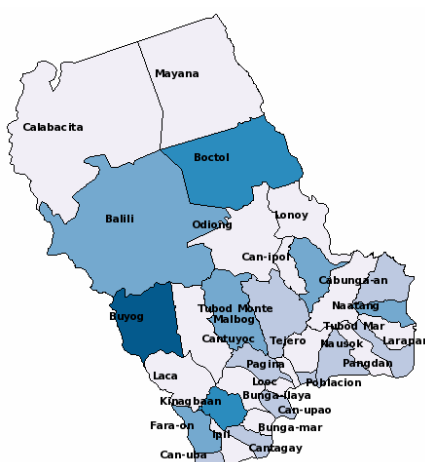
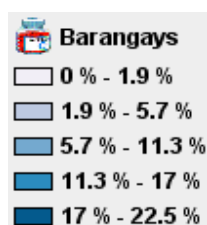


Figure 2.4 CHILD MALNUTRITION

To further understand the nutritional status of pre-schoolers in the municipality in the last five years, a comparative report of its Operation Timbang is shown below.

Table 2.16

COMPARATIVE REPORT OF OPERATION TIMBANG OF PRE-SCHOOLERS (PS)

Municipality of Jagna

Year	# of PS	Total Weighed	%	Below Normal VL *	%	Below Normal L **	%	Normal	%	Above Normal	%
2005	3,896	3,896	100%	8	.20%	452	11%	3,376	87%	60	1.5%
2006	3,641	3,641	100%	6	.16%	426	11%	3,158	87%	51	1.4%
2007	3,718	3,718	100%	5	.13%	398	10.7%	3,269	88%	46	1.2%
2008	3,815	3,815	100%	3	.07%	301	7.8%	3,483	91%	28	0.73%
2009	4,064	4,064	100%	2	.04%	198	4.87%	3,842	95%	22	0.54%

Source: MNAO, Municipality of Jagna, July 2009 (*Very Low **Low)

The data reveals a decrease in the number of malnourished children over the span of five years. The sustained nutrition program of the LGU has improved the nutritional status of the children of pre-school age.

Child mortality is less than 1% in the two survey periods but there is an increase from 0.11% in 2005 to 0.24% in 2009.

Family planning is promoted through IEC campaigns in the barangays and is among the topics in the pre-marital counseling sessions. The table below will show the acceptance and usage of the different family planning methods.

Table 2.17

FAMILY PLANNING METHODS AND USERS

Municipality of Jagna

	2008 –RHU 1		2008 –RHU 2		2009 – RHU 1		2009 – RHU 2	
FAMILY PLANNING METHOD	NA	CU	NA	CU	NA	CU	NA	CU
DAPA/Injection	3	28	18	3	12	36	0	18
IUD	4	74	98	3	2	64	2	97
PILLS	68	124	108	13	39	123	16	103
VASECTOMY	0	6	0	0	0	6	3	3
CONDOM	23	32	34	19	8	23	4	30
NATURAL FAMILY PLANNING	0	0	0	0	0	0	0	0
RHYTHM/CALENDAR	0	0	-	-	0	0	-	-

Source: RHU 1 &2, Municipality of Jagna (2008-2009) (NA-New Acceptors; CU-Current Users; DAPA-Depot-Medroxy-progesterone Acetate)

Among the different family planning methods, the widely used is pills, IUD, condom and injection.

Pre and post natal care has been availed by pregnant women and lactating mothers resulting among others to minimal incidence of maternal mortality. However, women, especially of reproductive age have to avail /continue to access regular examinations for the prevention of gynecological diseases.

The rural health centers also implement other health programs for different types of illnesses. While preventive measures are promoted and curative treatments are administered, cases still occur. Below is a list of the ten leading causes of morbidity and mortality.

Table 2.18
COMPARATIVE REPORT
TEN LEADING CAUSES OF MORBIDITY (All Ages)

RHU 1 (2008)		RHU 2 (2008)		RHU 1 (2009)		RHU 2 (2009)	
Causes	No.	Causes	No.	Causes	No.	Causes	No.
Acute Bronchitis	1,088	Hypertension	902	Acute Bronchitis	1,068	Hypertension	500
Hypertension	280	Upper Respiratory Tract Infection (mild)	701	Hypertension	303	Upper Respiratory Tract Infection (mild)	497
Diarrhea	260	Acute Respiratory Infection	648	Diarrhea	172	Urinary Tract Infection	400
Diabetes Mellitus	200	Rheumatoid Arthritis	323	Tonsillitis	84	Diabetes Mellitus	103
Skin Diseases	117	Gastritis	153	Skin Diseases	70	Rheumatoid arthritis	101
Urinary Tract Infection	52	Diabetes Mellitus	144	PTB	59	Carbuncle (Abscess)	26
Rheumatoid Arthritis	50	Pneumonia	100	Rheumatoid Arthritis	55	Tinea Vericolor (skin Disease)	21
Pulmonary Tuberculosis	49	Chronic Bronchitis	97	Urinary Tract Infection	45	Lower Respiratory Tract Infection	18
Abscess	33	Dermatitis	87	Peptic Ulcer Disease	38	Acute Gastro Enteritis	16
Peptic Ulcer Disease	31	Urinary Tract Infection	58	Abscess	35	Impacted Cerumen	10
Total	2,160		3,213	Total	1,929		1,692
Morbidity Rate	10200.22		24603.72	Morbidity Rate	8966.67		12450.33

Sources RHU 1 & RHU 2, Municipality of Jagna (2008 & 2009)

The above data shows that the leading causes of morbidity are lifestyle related. Hypertension is not only common in both health centers but also prominently ranks among the top three leading causes.

While there is a decrease in morbidity rates in the two survey periods, there are causes such as hypertension in RHU 1 and urinary tract infection in RHU 2 which register a significant increase. These lifestyle diseases can be prevented through a more intensive health program. However, a sustained maintenance treatment is required for those who have already been afflicted with the diseases.

Table 2.19
COMPARATIVE REPORT
TEN LEADING CAUSES OF MORTALITY (All Ages)

RHU 1 (2008)		RHU 2 (2008)		RHU 1 (2009)		RHU 2 (2009)	
Causes	No.	Causes	No.	Causes	No.	Causes	No.
CVA, Hypertension	25	Pneumonia (due to old age)	16	CVA, Hypertension	35	CVA, Hypertension	20
Pneumonia (due to old age)	22	CVA	8	Pneumonia (due to old age)	18	Pneumonia (old age)	14
CA (all forms)	17	Renal Failure	6	CA (all forms)	17	Renal Failure	6
Diabetes Mellitus	9	CA (all forms)	6	Diabetes Mellitus	9	Severe Malnutrition (old age)	5
Renal Failure	8	Severe Malnutrition (all ages)	5	Renal Failure	8	CA (all forms)	3
PTB	7	Multi-Organ Failure	5	PTB	8	Cardio-Respiratory Arrest	3
Multi-Organ Failure	6	Respiratory Distress	3	Peptic Ulcer Disease	7	PTB	2
Myocardial Infraction	6	Epilepsy	3	Sepsis	7	Fetal Death	2
Chronic Obstructive Pulmonary Disease	4	Sepsis	3	Myocardial Infraction	6	Myocardial Infraction	1
Asthma	4	Chronic Obstructive Pulmonary Disease	2	Asthma	5	Congestive Heart Failure	1
Total	108		42	Total	120		57
Mortality Rate	510.01		309.05	Mortality Rate	557.80		419.43

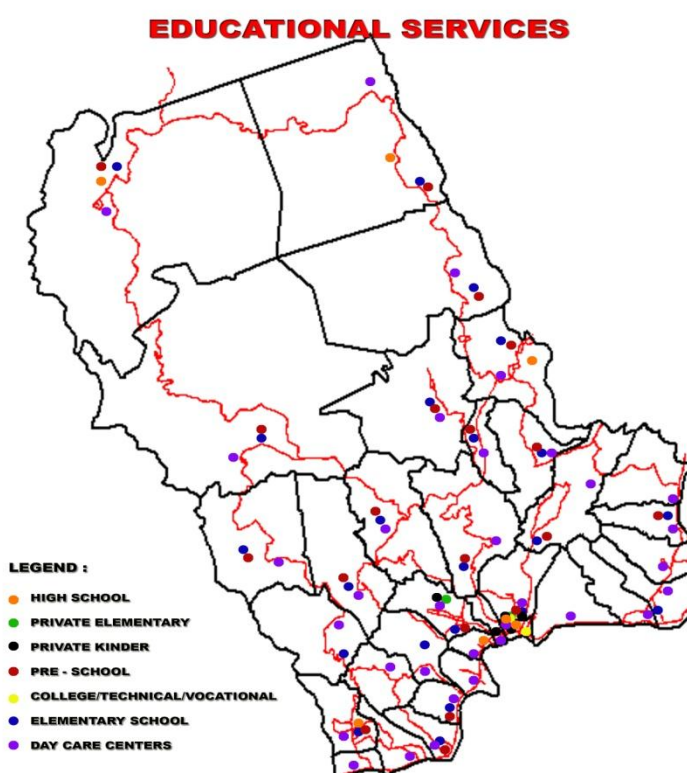
Sources: RHU 1 & RHU 2, Municipality of Jagna (2008 & 2009)

There is an increase in mortality rates in the survey period in both centers. From the data, there are common causes of mortality in the two centers but topping the first four leading causes of mortality are hypertension, pneumonia, cancer in all forms and renal failure. The same data will show that the causes are lifestyle related same as in the morbidity cases. Since

these can be prevented, early detection through regular consultation and lifestyle check could reduce their occurrence.

EDUCATION

The Municipality of Jagna has a total of 33 learning institutions, both public and private. Basic education is being provided by 3 primary schools, 21 elementary schools and 7 high schools strategically located in the municipality. Tertiary education is offered by 1 college (Bohol Institute of Technology-International College) and 1 technical/vocational school managed by the Technical Education and Skills Development Authority (TESDA). Public schools provide majority of the basic education services in the municipality while private schools served mostly Jagna's secondary and tertiary education levels.



Map 2.9. Educational Services

Table 2.20. SUMMARY OF SCHOOLS BY CATEGORY AND TYPE IN JAGNA, 2009

Category	Type/Number of Schools		
	Public	Private	Total
Primary	3		3
Elementary	19	2*	21
Secondary	3	4*	7
Tertiary	-	1*	1

Vocational	1	-	1
Total	26	7	33

Source: DepEd/TESDA (*The Bohol Institute of Technology is complete with an elementary, high school and college levels)

There are also preparatory schools in the municipality. There are 34 public Daycare Centers in the barangays and also those run and managed privately. One private elementary school also has a daycare. The St. Therese Kindergarten School is a private preparatory school and in the current school year (2008-2009), the public elementary schools have opened their preparatory schools as mandated by the Department of Education.

**Table 2.21. COMPARATIVE REPORT ON PERFORMANCE INDICATOR
PUBLIC ELEMENTARY SCHOOLS
SY 2006-2007; 2007-2008; 2008-2009**

Indicators	2008-2009	2007-2008	2006-2007
Enrollment	4,443	4,619	4,503
Male	2,381	-	2,396
Female	2,062	-	2,107
Retention Rate	94.32%	90.86%	84.49%
Survival Rate	87.52%	73.10%	69.65%
Transition Rate	-	88.13%	90.23%
Participation Rate	93.31%	90.98%	88.94%
Repetition Rate	5.85%	6.82%	6.18%
Completion Rate	84.09%	78.94%	60.56%
Drop-out Rate	0.69%	1.03%	0.96%
Graduation Rate	96.53%	93.77%	89.29%
Failure Rate	7.4%	6.10%	5.60%
Teacher-Pupil Ratio	1:30	-	1:31

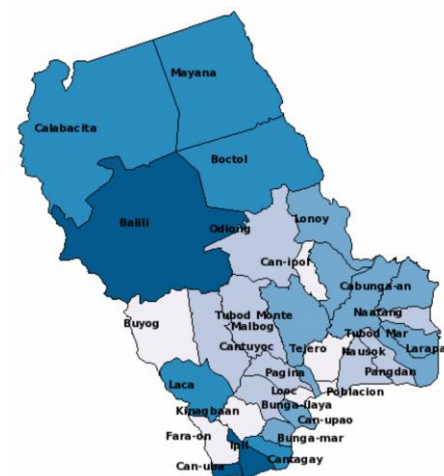
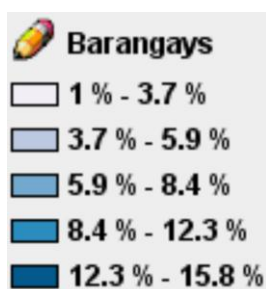
Source : DepED, Jagna

The comparative report on performance revealed a significant improvement in most of the indicators in the three (3) school year period. However, the DepED considers the repetition and failure rates quite high. While the overall performance is impressive, these vary considerably in the different schools.

Among the poverty indicators in the PDMS is the school drop-out rate. While the school performance indicator is limited to the public elementary schools, the PDMS survey is on a per barangay basis.

Map 2.10.SCHOOL DROP-OUTS

LEGEND:



School dropout rate decreased from 8.07% in 2005 to 7.0 % in 2009. The top ten in this indicator comprise of 6 upland and 4 coastal barangays. From the data, there were more male drop-outs than female with a 1: 2 ratio (1 female for every two male).

In the 2008-2009 school year Grade VI and Grade III National Achievement Test (NAT) the following were the results.

**Table 2.22. NATIONAL ACHIEVEMENT TEST RESULTS
GRADE VI AND GRADE III, JAGNA DISTRICT
2008-2009**

Rank & Rate	Grade VI	Rank & Rate	Grade III
No. 1 – 71.31%	Balili Elementary School	No.1-61.43%	Kinagbaan Primary School
No. 2 -71.16%	Naatang Elementary School	No.2-	Can-uba Elementary School
No. 3-67.05%	Jagna Central Elementary School	No. 3 -	Cantagay Primary School

Source: DepED

The Mean Percentage Score (MPS) of the National Achievement Test is 75%. From the data, none of the public elementary schools were able to achieve the standard score. The lowest got 43.4%. While the performance indicators show significant results, the achievement test is still way below the standard MPS.

School facilities, equipments, and supplies as well as financial support for additional teachers and classrooms are perennial concerns.

In the 2009 PDMS survey, Jagna's literacy rate was 99.1%. Of the 26,252 household population, only 238 persons or 0.9 % were illiterate. They were found mostly in the upland cluster. There is a 1:1 ratio of female and male illiterates.

Vocational courses are primarily offered by the Technical Education Skills Development Authority (TESDA) although the Bohol Institute of Technology also has technical courses. The TESDA center caters to students not only from Jagna but also from neighboring towns. It also gets financial support from the LGU.

SOCIAL WELFARE

Social welfare programs are categorized as social security, personal social services, and public assistance. These are extended to the community most particularly to children, out-of-school youth, women, the elderly, persons with disabilities, the distressed and those who are in difficult circumstances or in crisis situations. With a very small workforce and no Social Welfare Officer since 2006, the office and its related functionaries have extended basic services in response to the needs of its varied clientele.

A. DAY CARE SERVICES

Presently, the municipality has 34 Day Care Centers with corresponding number of Day Care Workers. Barangay Canjulao has two (2) day care centers because of its large population. Each Day Care Worker serves two (2) sessions daily to pre-school children aged 3-5.11 years old.

Of the thirty-four (34) Daycare Workers (DCW) and Daycare Centers (DCC), twenty-four (24) had been accredited for new tools and procedures. The accreditation ratings received were: fifteen (15) **Very Satisfactory** mark; four (4) **Highly Satisfactory** mark and five (5) **Satisfactory** mark. The remaining ten (10) DCW / DCC are still processing their accreditation pending compliance of requirements like repairs of Day Care Centers and DCWs who are under observation with technical supervision of the MSWDO.

The Early Child Care Development (ECCD) Project sponsored by PAGCOR and the Local Government of Jagna provides the following:

- a) Supplemental Feeding for seventy five (75) undernourished (0-6 ages) children in three (3) barangays (Cabunga-an, Pagina and Can-upao);
- b) Renovation / Completion of Day Care Centers in Barangays Pagina, Cantagay and Laca;
- c) Provision of Programs Materials on Day Care Services to 34 Day Care Centers; and
- d) Trainings / Seminars for Day Care Workers.

Table 2.23. COMPARATIVE REPORT
ENROLLMENT AT DAY CARE CENTERS, Municipality of Jagna

DCC	2009 No. Registered			M	F	2008 No. Registered			M	F
	3 years old	4 years old	5 years old			3 years old	4 years old	5 years old		
1.Alejawan	1	14	-	7	8	4	15	12	22	9
2.Balili	3	9	-	6	6	1	11	28	22	18
3.Boctol	11	13	11	11	13	-	-	22	12	10
4.Bunga-Mar	5	10	7	15	7	3	7	17	18	9
5.Bunga-Ilaya	4	15	16	19	15	3	13	18	21	13
6.Buyog	2	10	-	4	8	-	4	8	7	5
7.Cabunga-an	3	14	-	8	9	-	22	30	28	24
8.Calabacita	3	26	-	17	12	-	-	25	13	12
9.Cambugason	5	10	-	5	10	-	4	13	4	13
10.Can-ipol	6	2	-	5	3	-	10	10	10	10
11.Canjulao A	-	16	-	9	7	2	22	7	11	20
12.Canjulao B	5	-	-	2	3	-	3	35	18	20
13.Cantagay	3	5	-	6	2	-	6	12	13	5
14.Cantuyoc	4	5	-	2	5	1	2	13	12	4
15.Can-uba	5	3	-	2	5	1	4	7	8	4
16.Can-upao	5	16	15	13	26	3	20	28	23	28
17.Faraon	5	3	-	4	4	-	9	11	11	9
18. Ipil	6	-	-	2	4	-	5	4	3	6
19.Kinagba-an	-	5	5	5	5	2	3	7	6	6
20.Laca	2	5	1	2	6	-	6	-	2	4
21.Larapan	1	6	-	5	2	2	10	8	13	7
22.Looc	4	8	8	15	5	-	14	10	11	13
23.Lonoy	7	8	2	10	7	-	7	13	9	11
24.Malbog	4	11	-	9	6	-	7	18	7	18
25.Mayana	9	31	-	21	19	-	3	45	25	23
26.Naatang	1	12	-	5	8	-	14	11	15	10
27.Nausok	-	3	5	3	5					
28.Odiong	10	10	-	6	14	-	15	21	21	15
29.Pagina	10	11	-	11	10	3	11	12	20	6
30.Pangdan	18	12	-	12	18	4	10	8	12	10
31.Poblacion	15	14	-	10	19	-	16	12	14	14
32.Tejero	5	11	-	9	7	8	18	16	19	23
33.T-mar	-	4	-	3	1	4	3	13	14	6
34.T-Monte	6	8	-	8	5	4	7	14	6	19
Sub Total				271	286				450	404
Grand Total				557					854	

Source: MSWD, Municipality of Jagna, 2008 & 2009

There are also six (6) Barangay / Day Care Centers under the Milk Feeding Program sponsored by the National Dairy Authority (NDA) within 120 days period for ninety- four (94) undernourished Pre-schoolers. This program covers Barangays Mayana, Calabacita, Balili, Buyog, Kinagba-an, and ipil.

While the Daycare system has provided supplemental care of children aged 0-5 years, there has been a 35% decrease in the enrolment in 2009. A significant factor to this is the mandate of the Department of Education for the creation of pre-schools for 4.6-5.11 year olds in the barangays where the public schools are located. Parents who live in the said barangays have opted to send their children to the pre-schools as preparation for their entry into basic formal education. The elementary public schools in the municipality are located in 22 barangays or 1/3 of the total barangays. With the institutionalization of the pre-schools, there might come a time when the Daycare centers will exist in only 11 barangays because of lack of enrollees.

While Daycare workers are mainly remunerated by their respective barangay councils, there is a fixed amount of P 600 allocated by the municipal LGU as aid to each Daycare Worker. There is an ongoing request by the barangay councils to increase the municipal aid which is currently under study with due consideration to existing policies on the matter.

B. PAG-ASA YOUTH ASSOCIATION OF THE PHIL (PYAP)

The organizing of the out-of-school youth in the municipality is in ten (10) barangays: five in (5) Metro Jagna; three (3) coastal and two (2) upland. There is also a municipal level organization of the Pag-asa Youth Association. At the barangay level, there is constant reorganization because of the fluidity of the members.

The programs and activities conducted in the last two years (2008-2009) consist of scholarship grants funded from the Alay Lakad collection and also skills training (Refer to table below). They also participated in summer youth camp, coastal clean-up and sports competition.

**Table 2.24. COMPARATIVE REPORT OF PROGRAMS
MUNICIPAL PAG-ASA YOUTH ASSOCIATION OF THE PHILIPPINES (PYAP)
(2008-2009)**

Programs	2008	2009
1.Scholarship Grant	-10 students (Faraon High School)	-2 students (Lonoy National Heroes) -6 students (BIT-Jagna)
2.Skills Training	-4 OSY graduated from Driving and Engine Maintenance Training, CVSCAFT Tagbilaran -3 OSY (PYAP) graduated from Information Technology Literacy Training, Office of the Provincial Social Welfare Development, Tagbilaran	-1 OSY/PYAP trained on driving and engine maintenance, CVSCAFT, Tagbilaran

	-25 PYAP participated in Hot Kitchen Cook -More than 50 OSY/PYAP enrolled at TESDA taking up different courses	
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C. WOMEN SECTOR

In the 2009 PDMS survey, the women sector comprises 48.86% of the municipality's total population. Women still continue to dominate the reproductive sphere in the gender roles, however; there is a growing number of those who are balancing this with their productive, community management and constituency-based politics roles as well.

Married women especially those who are not gainfully employed are mainly into their reproductive role. But due to hard times when the principal source of income of the family cannot sustain their minimum basic needs, women are mostly engaged in subsistence livelihood just to have both ends meet. On the other hand, those employed are into jobs which are extensions of their reproductive roles such as those in the service and trading sectors as sales workers, house helps, and clerical workers. There are also a significant number of women who are practicing their professions in the health and education sectors as well as those who are in business and in administrative and managerial positions in private institutions and government.

There is a municipal-wide local council of women (Kahugpongan sa Kababayan-an sa Jagna-Local Council of Women, Inc.) which is registered with the Securities and Exchange Commission. It has a membership coming from the 33 barangays and six other municipal-level women organizations (both from private and government). Of the 33 barangay women organizations, eleven (11) are full-pledged organizations with two (2) which are registered with the Cooperative Development Authority and the other nine (9) are with the Department of Labor and Employment. Four (4) others are in the process of working for registration with DOLE. Of the other six (6) municipal-level organizations, one (1) is registered with SEC; another is with the DOLE/CDA and the other four (4) have not yet been accredited.

The local council of women promotes women economic empowerment, women's human rights and gender responsive governance as the key to gender equality and women's empowerment.

Seventeen (17) women organizations are into different group enterprises such as food processing, production and marketing, lending and catering services. Trainings and seminars on food safety and hygiene, product development, marketing, and organization have been conducted to these groups by government entities. But there is much more to be done in terms of information, credit, technology, training and market for these livelihood activities to become viable and sustainable.

More than five years ago, the Municipal Technical Working Group on Gender conducted gender sensitivity orientations and workshops in the barangays participated mainly by women. Gender related laws particularly the Anti-Violence against Women and their

Children Act and the Anti-Trafficking in Persons Act had also been disseminated in the barangays and schools by the PNP Women's and Children's Desk and the MSWD. However, the dissemination of other related concerns on GAD and women's economic empowerment has not yet been conducted. There is a need for continuous consciousness-raising not only among the women but also among the men about gender to effect behavioral change for both and most importantly for women to steadily climb the five levels of empowerment.

In the last three years (2007-2009) record on violence against women from the PNP Women's and Children's Desk is shown in the table below.

**Table 2.25. Comparative Data on Violence against Women and Their Children Cases
2007-2009**

Year	No. of VAWC Cases reported at the Jagna PNP	Forms	VAWC Cases filed at PPO/Court	Status of Cases
2007	4	3 physical abuse 1 combination of physical and psychological	Filed before the Provincial Prosecutor's Office	-3 settled -1 dismiss (victim executed affidavit of desistance)
2008	9	5 physical abuse 3 psychological 1 combination of psychological and physical	- do -	-1 case was filed by the victim's private lawyer -8 settled
2009	10	2 physical abuse 1 economic abuse 3 combination of physical and psychological 2 combination of psycho and economic 1 combination of physical, psycho and economic 1 combination of physical, psycho, economic and sexual	-do-	-8settled -1 waiting for the resolution of the case -1waiting for preliminary investigation
Total	23			

Source: Jagna PNP, Municipality of Jagna, 2009

From the data above, there is an increase in the VAWC cases filed in court. There is also progress in their status. While about 83% of these reached settlement, 9% has been pursued for resolution.

The figures indicate that more incidences of violence are coming out when this used to be a private matter in the past.

In terms of governance, the table below shows that elective positions in the municipal and barangay government units are still male-dominated.

**Table 2.26. Elected Municipal, Barangay and Sanggunian Kabataan Officials,
Appointed Barangay Secretaries and Treasurers**

Elective Position	Number	Male	Female
Municipal Level			
Mayor	1	1	
Vice Mayor	1	1	
Municipal Councilors	8	8	
Barangay Level (33 brgy)			
Punong Barangay	33	28	5
Barangay Kagawad	231 (less 3 unfilled positions)	163	65
SK Chairpersons	33	24	9
Total	307 (less 3 unfilled positions)	225	79
Appointive Positions (Barangays)			
Secretary	33	10	23
Treasurer	33	8	25
Total	66	18	48

Source: MLGOO, Municipality of Jagna, 2009

The elective positions at different levels of governance in the municipality show that 74% are held by men and only 26% or one fourth are for women. All the elective posts at the municipal level are occupied by men except for a woman municipal councilor who sits as ex-officio member being the President of the Federated Sanggunian Kabataan of the municipality.

The appointive positions of secretary and treasurer of the barangay are dominated by women who occupy 73% of all positions compared to 27% held by men.

From the data, it can be concluded that decision-making is still the domain of men especially at the municipal level. While the appointive positions would show the dominance of women, these are considered extension of their reproductive roles – where women are used to and good at.

The presence of the Municipal GAD Code and other related gender policies and ordinances have contributed to ensure that gender concerns are responded to by the municipal government. The GAD Code, in particular, needs implementing rules and regulations for its enforcement. Moreover, while the LGUs - municipal and barangays comply to the GAD Plan and Budget requirements, it should not only be for compliance purposes but for meaningful implementation

D. CHILDREN IN CONFLICT WITH THE LAW (CICL)

The involvement of children in crime-related incidence is a cause of alarm. While a number have been reported and appropriate actions had been taken, there are also unreported cases

in the barangays. While the government through the police and social welfare office is responsible for resolving the cases involving children, responsible parenthood should also be installed in the parents as their primary responsibility in the rearing of their children.

E. THE ELDERLY/SENIOR CITIZENS

The Senior Citizens Affairs Office is a separate functionary from the MSWD having three (3) staff / personnel. As provided in R.A. 7432, it is tasked to plan, implement and monitor programs and activities / services which benefit the elderly.

There is a municipal-wide organization of the elderly. There are three thousand forty-one registered senior citizens in Jagna, of whom sixty percent (60%) are women. Metro Jagna and the upland barangays register the most number of senior citizens. The senior citizen's building is yet to be completed.

The activities of the elderly include regular quarterly meetings, continuous issuance of identification cards and requirements for them to be able to avail of the benefits according to the law.

F. PERSONS WITH DISABILITIES

There is an existing association of persons with disabilities (PWD) which is processing its registration with the Securities and Exchange Commission.

Besides participating in the annual PWD celebration, there is the continuing issuance of Identification cards (ID) for them to avail of the privileges as stated in R.A. 9442 or the Magna Carta of Persons with Disabilities (PWD). The LGU is also negotiating with the Philippine Ports Authority (PPA) for a Therapeutic Massage Center at the Jagna Pier Terminal.

Based on the 2009 PDMS survey, there are five hundred nineteen (515) persons with disabilities or 1.58% of the population with two hundred ninety-five (291) men and two hundred twenty-four (224) women.

G. STIMULATION THERAPEUTIC ACTIVITY CENTER (STAC)

The Municipality of Jagna has been selected by the Provincial Government as pilot centers of the Stimulation Therapeutic Activity Center (STAC). A result of the project Breaking Barriers for Children implemented by the Katipunan ng Maykapansan sa Pilipinas, Inc. and the Danish National Society of Polio and Accident Victims, the STAC is designed to provide free comprehensive rehabilitations, special education, and social services to children with disabilities aged 0-13 years. The priority is the indigent families having children with disabilities.

The STAC is currently located at the administration building of the district hospital. There are eighty-two (83) beneficiaries, forty-eight (48) male and thirty-four (34) female mostly coming from the municipality of Jagna and from neighboring towns.

The types of disabilities are classified in the table below.

Table 2.27. Summary of Disabilities by Type, 2009

Barangay	Medical Surgical	Physical Motor	Behavioral	Mental Cognitive	Sensory	Total
Total	11	42	7	7	16	83

Source: MSWD, Municipality of Jagna, 2009 (*Medical surgical refers to cleft palate; Physical Motor to delay in motor development and leg length discrepancy; Behavioral to down syndrome; Mental Cognitive to mentally challenged and Sensory to low vision, cross-eyed and deaf mute*).

Within the project period, there had been positive results in the therapy provided. There were several testimonies given by parents and the children themselves about their transformation after the rehabilitation.

The project life is only one and a half years after which this will be turned over to the LGU. Its sustainability will require the hiring of therapists to continue with the services rendered by the center.

H. AID TO INDIVIDUALS IN CRISIS SITUATION (AICS)

Among the services provided by the MSWD is the assistance given to those in difficult circumstances either to defray payment of hospital bills, purchase of medicines, burial assistance or for other concerns.

Table 2.28. Types of Aid to Individuals in Crisis Situation by Barangay, 2009

Barangay	Cash Assistance			Referral			PCSO		
	M	F	Total	M	F	Total	M	F	Total
Total	145	154	299	13	12	25	22	19	41

Source: MSWD, Municipality of Jagna, 2009

From the above data, cash assistance for various situations was 76.8% of all types of assistance extended to the constituents of the municipality. However, the cash assistance cannot be categorized further for lack of proper documentation.

To manage the AICS better, present procedures and processes have to be reviewed, developed and enhanced for effective utilization of the assistance.

I . PHILHEALTH FOR INDIGENTS

The indicator on health insurance is number three with the highest degree of deprivation. Forty-four percent (44.62%) of the total population do not have health insurance which means that if there is the need for hospitalization, the burden of shouldering the prohibitive hospital bills is on the family many of whom are marginalized.

Table 2.29. Number of Philhealth Beneficiaries in the Municipality of Jagna, 2009

Barangay	Male	Female	Total No. of Beneficiaries
TOTAL	1,314	351	1,665

Source: MSWD, Municipality of Jagna, 2009

The number of Philhealth enrollees from the LGU is about 11.2 % of the 14,868 persons with health insurance based on the PDMS survey.

From the above data, the number of men enrollees is almost four times more than that of women. The head of the family, usually the man, is registered in the Philhealth along with the members of the family except those children above 21 years of age. The women who are considered as head of the family are the solo parents, those whose husbands are illiterate, with disability or in poor health among others.

From Philhealth contributions, there is the Philhealth capitation fund – an amount returned to the municipality, 80% to be utilized for procurement of medical equipments, supplies and materials, capacity development and the other 20% as incentives to the medical providers.

The more enrollees in the LGU, the bigger the share of the capitation fund.

With a significant number of non-Philhealth enrollees as shown in the PDMS survey, the data has to be further analyzed as to how many of these are indigent families. Moreover, a mechanism has to be worked out on how the LGU can further support more enrollees and how those currently enrolled can be sustained.

J. LIVELIHOOD and PRO-POOR PROJECTS

There were three projects availed from the livelihood and pro-poor projects.

PROJECTS	CATEGORY	STATUS
1. Self-Employed Assistance-Kaunlaran	Credit assistance for income-generating projects	-availed by 4 women's groups. The salabat processing by the Laca Women was the only successful project. -the three (3) others had problems with repayments.
2. Tindahan Natin	Focused on NFA rice	-3 operators serving 750 families prioritizing the indigents
3. Sari-sari Store	Selling of consumer items	-1 operator and doing soundly despite small investment

K. PRE-MARRIAGE COUNSELING

The five modules on Pre-Marriage Counseling packaged in a one-day orientation has been a requirement for couples applying for marriage license. It is designed to give an overview of

married and family life. It helps would-be couples and live-in partners to be aware of the realities and enable them to handle situations better.

To further ensure the effectiveness of this service, a review of the curriculum can be done for enhancement and a mechanism can be worked out to monitor its impact on the couples.

L. CULTURAL MINORITIES

The Muslim Community is found in Barangay Pagina although there are a few families who reside in other Metro Jagna barangays. Considered as traders, the Muslims especially the young generation have adapted to the norms of the Jagnaanons but they have retained their customs and traditions. There is a mosque by virtue of a Municipal Ordinance in 1991 which serves as their place of worship and observance of their religious celebrations.

The main concern of the Muslims as a community is that there is no burial ground within the municipality for their deceased family members. While they were able to purchase a lot in one of the barangays for this purpose, there are still environmental issues to be resolved before construction can commence.

HOUSING AND BASIC UTILITIES

The implementation of RA 7279 otherwise known as the Urban Development and Housing Act and RA 7160 or the Local Government Code, transferred more responsibilities to the local government units pertaining to its land use, housing and infrastructure development in their respective localities. As such, it becomes the principal implementing body with regards to the shelter needs of its constituents especially the homeless and the underprivileged.

The following are PDMS survey results in 2005 and 2009 on housing and basic utilities.

Table 2.30. Comparative Report on Housing and Basic Utilities Indicators
PDMS Survey of 2005 and 2009

Indicators	2005	2009	Remarks
Tenure on the house and the home lot	13.81%	34.53%	Increase of 150% (Variance is due to the difference in definition of lot ownership in the 2 survey periods)
Makeshift housing	1.85%	3.04%	Increase of 64.32%
Electricity		11.2%	Not an indicator in 2005
Potable water	3.05%	3.28%	Increase of 7.5%
Unsanitary Toilet	4.32%	23.53%	Increase of 444.67% (Variance due to the difference in the definition of sanitary toilet in the 2 survey periods)

Source: PDMS survey results of 2005 and 2009, Municipality of Jagna

A. On Tenure on the House and the Homelot/Makeshift Housing

There is a significant variance of this indicator in the two survey periods. This can be accounted to the difference in definition used for lot owner. In 2005, owner, owner-like possession of house and lot were all classified under lot owner. In the definition, administratorship of the family/mother/ancestral house by anyone; a family member or not of the owner can be considered as lot owner. In the latest survey, the definition strictly referred only to lot owner.

In the current survey, 5 upland, 3 Metro Jagna and 2 coastal barangays belong to the top 10 with 34.3% of households who are not lot owners of the houses where they live.

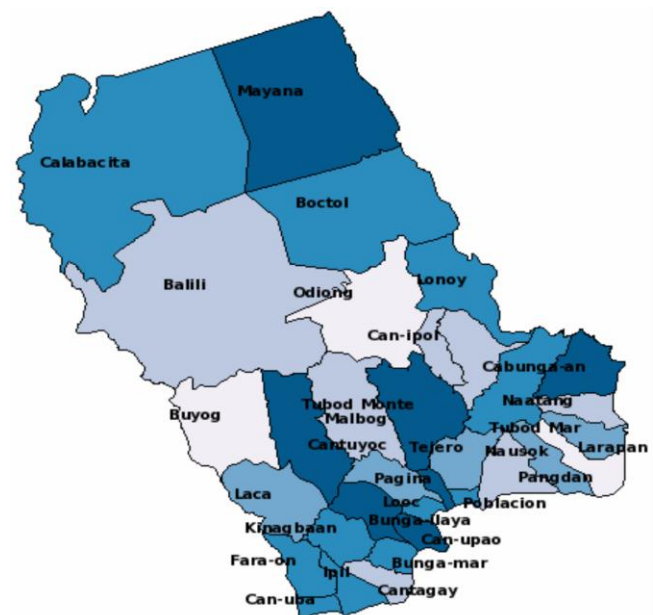
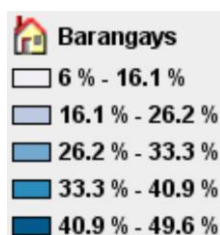
There are households in Brgy Pagina who are occupying the lot owned by the Philippines Ports Authority. The Barangay Council has spotted a suitable relocation area; however, the owners are not willing to sell the lot.

In the case of the 69 households which were destroyed in the Mayana landslide whose owners were advised not to rebuild structures in the previous areas, there has been a problem in negotiating for the price with the owners of the proposed relocation site. What complicates this situation is that the site is within the protected areas where no land titles can be issued even if there are the supposed lot owners.

An important concern related to lot ownership is that many houses are located in vulnerable areas of the municipality. What makes it more dangerous for these structures is the bad practice of solid waste disposal in still many of the barangays resulting to clogging and flooding affecting those in the river banks, creeks, lowlands and coastal areas. The rise in sea level also poses a threat to those residing along the coasts.

Map 2.11. LAND TENURE

legend:



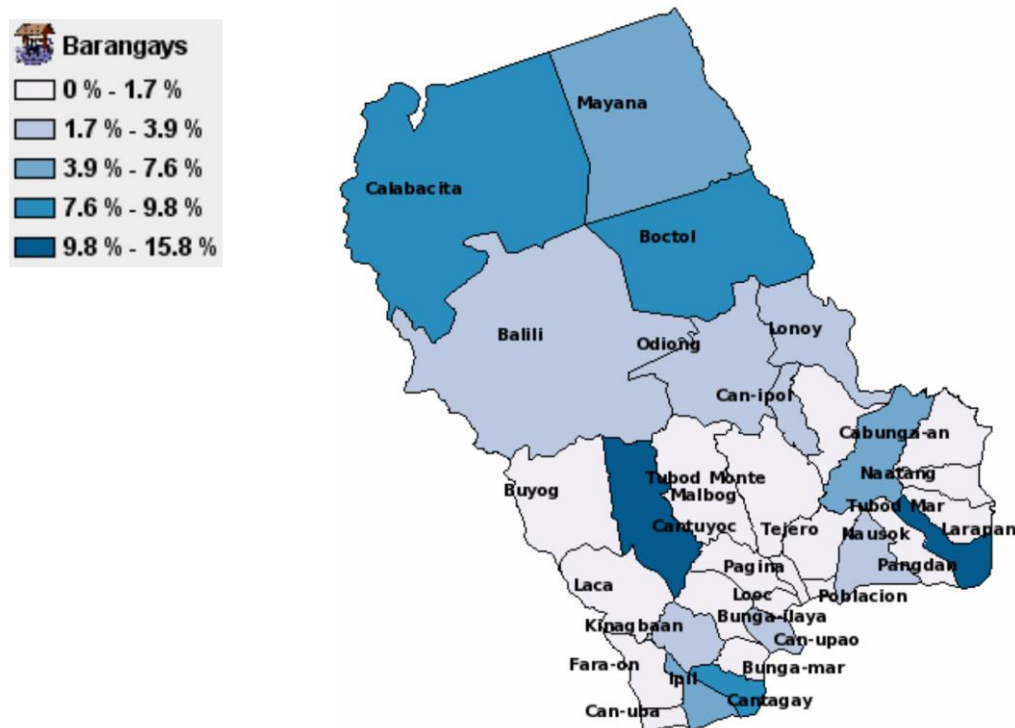
While most of the dwellings in the municipality are made of strong materials there is 3.04% of households considered as makeshift housing. Considered as the top ten barangays are: 5 from upland; 2 from Metro Jagna and 3 from coastal areas. The houses under this category are made of light materials which are the most susceptible to natural and man-made calamities.

B. On Potable Drinking Water

There are ongoing waterworks projects in the municipality and barangays to ensure not only access to but also a safe water supply. Based on the PDMS survey, the top ten barangays with least access to potable water are 7 upland and 3 coastal barangays.

Map 2.12. WATER

legend:



Level 3	Level 2	Combination of Level 1 & 2	Level 1
- All Metro Jagna barangays except 1	- Bunga Mar - 7 coastal barangays - 12 upland barangays	- Balili - Calabacita - Cambugason - Cantuyoc - Kinagbaan	- Nausok

Source: MPDC, Municipality of Jagna, 2009

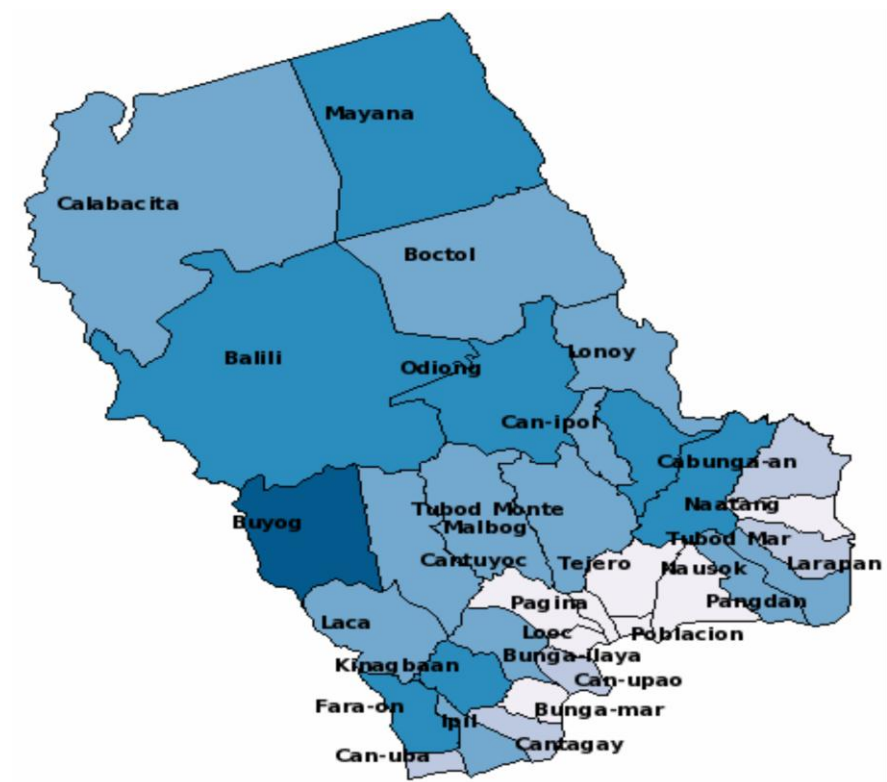
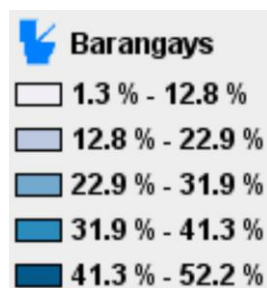
The data above shows where residents in the barangays access their water supply. While about two hundred nine (209) households do not yet have access to potable water, those using bottled water for drinking are growing in number not only in the Metro Jagna area but even the upland barangays. The presence of water refilling stations and distribution outlets in the municipality is evidence to this.

C. On Unsanitary Toilets

There has been an increase in the number of households with unsanitary toilets in the 2009 survey compared to that in 2005. The current definition of sanitary toilet “as the use of concrete septic tanks” has increased the number of households to 23.53% without sanitary toilets. Based on the PDMS survey, in the top 10 ranking, 10 upland barangays belong to this category. All the 17 upland and 3 coastal barangays consists the Top 20 in this indicator.

Map 2.13. SANITATION

Legend:



The new definition is according to world standard. However, it would be difficult for many households particularly in the upland barangays to have this type of toilet construction immediately considering their other more urgent concerns.

D. On Electricity

The Bohol Electric Cooperative II serves the electrification needs of the municipality.

At present, all of the barangays in Jagna have been energized. However, there are 714 households or 11.2% which do not have electricity. The top ten barangays in this category are 9 upland and 1 coastal barangays. Those in the upland cluster have sitios/puroks which are located in the hinterland areas. Some of these cannot avail of electric connection because they are either located too far away from the main line and/or they cannot comply with the required number of households set by BOHECO II.

In the Metro Jagna and coastal barangays, there are a few households with no electric connections because of affordability.

While electrification is not a major problem, unannounced, frequent intermittent power interruptions within a certain period of the year have been experienced. These do not only disrupt office and business transactions but also affect the functionality of equipments and appliances.

Improper wiring installation in many households especially in relatively old structures and overloading of appliances and equipments are concerns and have been some of the causes of fire incidents.

EMPLOYMENT AND INCOME

The variance of 7.23% in the unemployment indicator from 10.78% in the PDMS survey of 2005 to 10.0 % in 2009 reveals that there was no significant employment opportunities in between the survey period.

Map 2.14. UNEMPLOYMENT

LEGEND:

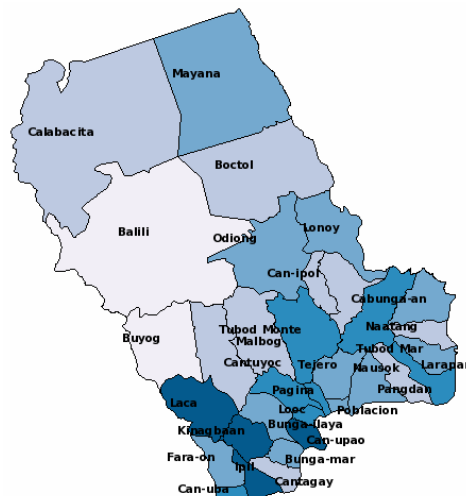
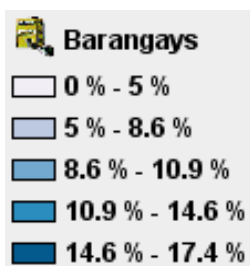


Table 2.32. Comparative Data on Unemployment of Top Ten Barangays, Municipality of Jagna

2009			2005		
Barangay	Cluster	Percentage	Barangay	Cluster	Percentage
1.Kinagbaan	upland	17.36%	1. Laca	upland	21.31%
2.Ipil	coastal	16.75%	2.Nausok	coastal	19.02%
3.Can-upao	Metro	16.20%	3.Can-uba	coastal	17.94%
4.Cambugason	upland	15.80%	4.Looc	Metro	16.87%
5.Laca	coastal	14.81%	5.Cambugason	upland	15.11%
6.Canuba	Metro	14.61%	6.Cabungaan	upland	15.04%
7.Pagina	upland	12.14%	7.Bunga Ilaya	upland	14.93%
8.Tubod Monte	upland	11.48%	8.Ipil	coastal	14.66%
9.Canjulao	Metro	11.37%	9. Faraon	upland	14.51%
10. Looc	Metro	11.24%	10.Larapan	coastal	12.68%

Source: MPDC, PDMS survey 2005 and 2009, Municipality of Jagna

In the 2009 survey, the top 10 barangays in the unemployment indicator comprised of 4 Metro Jagna; 2 coastal and 4 upland barangays. These upland barangays are located near the Metro Jagna cluster.

There were not enough job opportunities locally and elsewhere. There were retrenchment of workers because of the global economic crisis which account for the phenomenon.

On the other hand, there is a significant decrease in the number of households below the income threshold. From 41.87% in 2005 it is down to 22.57% in 2009 or 14 %.

Map 2.15. INCOME THRESHOLD

LEGEND:

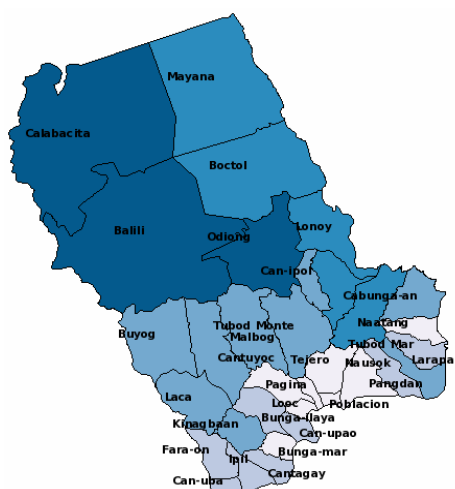
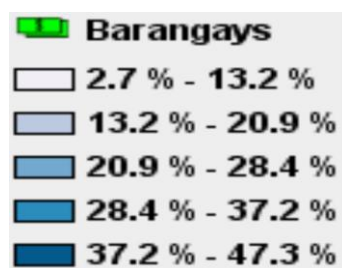


Table 2.33. Comparative Data on Income Threshold of Top Ten Barangays, Municipality of Jagna

2009			2005		
Barangay	Cluster	Percentage	Barangay	Cluster	Percentage
1.Odiong	upland	47.25%	1.Can-ipol	upland	72.15%
2.Balili	upland	43.16%	2.Buyog	upland	68.18%
3.Calabacita	upland	39.38%	3.Cabungaan	upland	65.17%
4.Cambugason	upland	37.76%	4.Calabacita	upland	64.14%
5. Boctol	upland	34.27%	5.Laca	upland	63.64%
6.Cabungaan	upland	33.02%	6.Odiong	upland	62.98%
7.Lonoy	upland	32.59%	7.Balili	upland	59.11%
8.Mayana	upland	32.09%	8. Ipil	coastal	56.67%
9. Buyog	upland	28.36%	9.Cambugason	upland	53.93%
10. Cantuyoc	upland	27.47%	10. Boctol	upland	52.38%

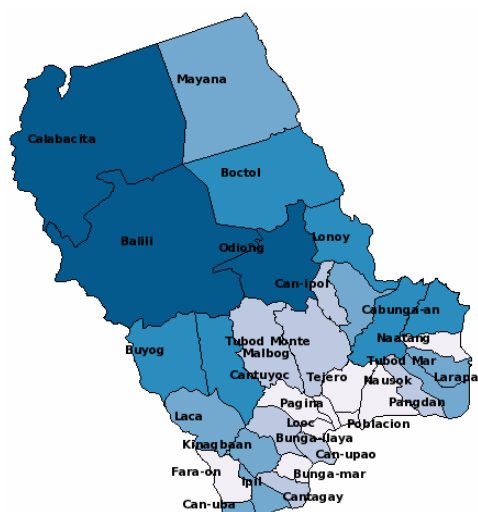
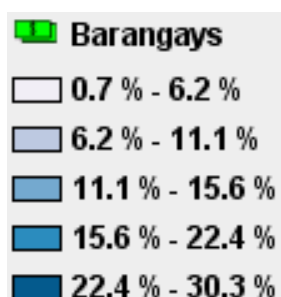
In the 2009 PDMS survey, the areas with the most number of households below income threshold of Php 12,871 per capita all belong in the upland cluster. The upland barangays also dominated the top 10 in the income threshold indicator in 2005 except for 1 coastal area. In the comparative report, there are three (3) barangays (1 coastal; 2 upland - which are all relatively small) which have moved out of the top ten.

Among the factors that contributed to the improvement in income threshold is the income derived from children. They were able to find work and are supporting their families. There are also areas where there were improvements in agricultural yield.

With a relative increase in income, there is also an improvement in the food threshold which amounts to Php 9,555.00. From 28.24% of households below the food threshold in 2005 it has improved to 12.17% in 2009. The top ten in this indicator belongs to 9 upland and 1 coastal barangays, much the same as in the 2005 survey period.

Map 2.16. FOOD THRESHOLD

Legend



The economic indicators show a modest improvement over the last five years. But there is much to be done considering not only the economic crisis but also the global phenomenon of climate change which is affecting the environmental foundation of economic activities.

SPORTS AND RECREATION

Basketball is considered as one of Jagna's major sports. It is a favorite pastime and hobby of men of all age groups. All barangays in the municipality have basketball courts and during the summer particularly in the month of May when fiestas are celebrated almost daily, basketball leagues are held led by the Sanggunian Kabataan.

Lawn tennis is also the favorite pastime of some professionals especially in Metro Jagna. There are two tennis courts located in the town center. Invitational and commercial games are also held in the municipality.

Boxing is another favorite sport in Jagna. Boxers are being trained and they compete in boxing bouts in and out of the province. Soccer football is also gaining popularity among the out-of-school youth. Inter-town competitions have been participated by Jagna whose players have shown good potential.

Volleyball is also a favorite sport especially among women in the upland barangays. There are also badminton enthusiasts who also compete outside of Jagna.

The athletic competitions participated in by the public schools have developed players who were part of the contingent for the Palarong Pambansa.

The LGU has a Sports Coordinator whose function has been focused on boxing. The function of the unit and its performance can be evaluated and enhanced based on current conditions.

On the other hand, the people of Jagna also love the beaches as part of the family's recreation and relaxation. Some of the well-known beaches are the Can-uba Beach, Pagatpat or Talisay at Brgy. Can-upao, Paseo del Mar at Brgy. Pangdan, Delailah Rock Resort and Batong Buhay located at Brgy. Larapan and the Alejawan Beach. Jagna is also blessed with spring water sources which have been developed into swimming pools such as the Boctol, Balili and Lonoy springs.

Mountain resorts have also been developed by the private sector which are being used for retreats and recreation.

Protective Services

The Philippine National Police is mandated to enforce the law, prevent and control crimes, maintain peace and order, promote safety and internal security with the active support of the community. Ideally, 1,000 constituents shall be serviced by one PNP personnel. At present, the actual total number of policemen in Jagna is 18, falling short of the standard which must be 32 based on the actual population of 32,000 (1:1000 police to population

ratio). The PNP station needs an additional 14 PNP personnel to conform with the standard. This personnel shortage could not be attributed to the Local Government Unit of Jagna since this is inherent to the PNP Organization. The number of PNP personnel assigned to the locality depends on the availability of police uniformed personnel at the provincial level.

Table 2.34 **PROTECTIVE SERVICES**

Municipality of Jagna

TYPES OF OFFENSES	FREQUENCY OF OCCURRENCE							
	2003	2004	2005	2006	2007	2008	2009	Total
Murder	1			1			1	3
Homicide	3	1	2	3	2	2		13
Physical Injuries	16	37	42	42	50	43	29	259
Robbery	11	10	8	9	5	4	13	60
Theft	21	35	22	33	19	41	24	195
Rape	1	1	1	2	1		4	10
Illegal Drugs			1			1	3	5
Illegal Gambling	3		1			2	7	13
Loose Firearms	1		1					2
Parricide	1							1
Reckless Imprudence Res. Damage Property/Physical Injuries	30	37	73	59		68	54	321
Illegal Possession of Firearms			3	3	1	3		10
Threats	3	11	6	14	1	8	1	44
Mal. Mischief	3	2	2	4		3		14
Public Disturbance	8	1						9
Swindling								0
Alarm Scandal	7							7
Oral Defamation	2	1		1		1		5
Violation of Special Law	2	1				2	2	7
Estafa	1	1		6	1			9
Direct Assault	2	1		4	1			8
Acts of Lasciviousness	1			1				2
Other Ordinances	11	1						12
TOTAL	128	140	162	182	81	178	138	1009

The limitation is temporarily addressed with the mobilization of the barangay tanods in every barangay and other support groups from civic organizations for the maintenance of peace and order in the municipality.

Despite the shortage of personnel, response time of PNP personnel is satisfactory. This can be attributed to the availability of two (2) patrol cars and one motorcycle. However, this is only true for barangays situated in the coastal areas considering that the access roads going to the upland barangays are difficult to traverse especially during rainy season.

The PNP is also sufficiently equipped with communication facilities. It has two handheld radios, a telephone system and an internet connection. As to office equipment, it has two computer units. The Jagna Police Station is blessed with adequate communication facilities given due credit to the LGU which sustains this capability. The Jagna Police Station is one among the few police stations in the province which has access to the internet.

Considering that police visibility is deterrence to criminalities and the PNP personnel should be accessible to the people, the existing Police Dangpanan Center situated near the public market should be strategically renovated and relocated to provide convenience to the PNP personnel on duty as well as the clients.

Based on records at the local police station, Reckless Imprudence resulting to Damage to Property/Physical Injuries has the highest frequency of occurrence from 2003-2008. Physical injuries place second and theft ranks third. The least number of incidents for the crimes are the murder, use of illegal drugs, acts of lasciviousness and parricide. It is noteworthy to mention that incidents of Reckless Imprudence Resulting to Damage to Property/Physical Injuries almost doubled in the year 2005. However, decline was noted in 2006. The tabular presentation of crime incidence only covers those reported at the PNP station.

The figures in the above table may be associated to a number of factors. For example the offense of reckless imprudence is significantly related to the growing number of motor vehicles operating in the locality (motorcycles particularly), the road condition (to include lack of road safety signage and road lighting facilities), and delinquent motorcycle owners (lack of road courtesy and discipline). Moreover, there is a need to note that majority of traffic incidents involves drivers being under the influence of liquor and long distance travel.

The increase in reported incidents of crimes may be attributed to the citizen empowerment, as the PNP, in recent years has implemented its Police-Community Relation Advocacy Programs urging the community to join its campaign against lawlessness. (This program is part of the continuing PNP Integrated Transformation Program which was launched in the year 2005)

The matter of determining the reasons for crimes and its occurrence is complex and is associated with culture, values, education and even an area's economic status. In theory the occurrence of crimes is also positively related with the economic growth of a community, although controversial, is appreciated by many studies. (E.g. Cantor and Land 1985, Fadaei-Tehrani 1990, Hoffman 1997, Bennett 1991, and etc).

The rate of certain crimes such as theft, as may be inferred from the data, although fluctuating when viewed on an annual basis, when summed up is rising at certain degree.

This is believed to have been affected by the municipality's economic well being, as prevalence of poverty and the existence of opportunity is undesirable. However, in the view of modern policing, crimes such as theft, physical injuries, robbery and malicious mischief occur due to lack of police visibility and failure of effective police intervention, since the latter is one, if not the most effective means in preventing crime. Thus, the lack of police personnel is once again cited.

There are also crimes which occur but are not “usually” reported since they are perpetrated privately or clandestine, thus they require special police and intelligence operations such as the sale and use of illegal drugs, illegal possession of firearms and violations of special laws.

Aside from the PNP, protective services are extended by the Bureau of Fire Protection (BFP) which is mandated to prevent and suppress fires avoiding loss of life and damage to properties. There are thirteen (13) firemen personnel assigned in the municipality and they are complemented with two (2) serviceable fire trucks. With a ratio of 1:2000 (based on standard), the present firemen lack three (3) more. With the population increase, the municipality of Jagna still needs an additional four (4) firemen personnel to augment its existing work force in the Bureau of fire Protection.

For its protective services, there are two existing fire hydrants in the municipality, the BFP also has two (2) handheld radios, one computer unit and a telephone system. These gadgets and equipment facilitated the extension of an effective and efficient service delivery by the BFP.

Table 2.35
Fire Incidence CY 2007
Municipality of Jagna

TYPES OF OFFENSES	FREQUENCY OF OCCURENCE					
	2005	2006	2007	2008	2009	Total
Accidental	4	3	3	0	3	13
Intentional	0	0	0	0	0	0
TOTAL	4	3	3	0	3	13

Source: Bureau of Fire Protection, Jagna Bohol

Based on BFP records, a total of 10 fire incidents occurred in Jagna for the period 2005 to 2008. This data only include those reported at the Office of the Municipal Fire Marshal. Despite shortage of personnel, the BFP was able to address fire prevention and suppression activities within their area of responsibility which covers the municipalities of Jagna, Duero and Guindulman.

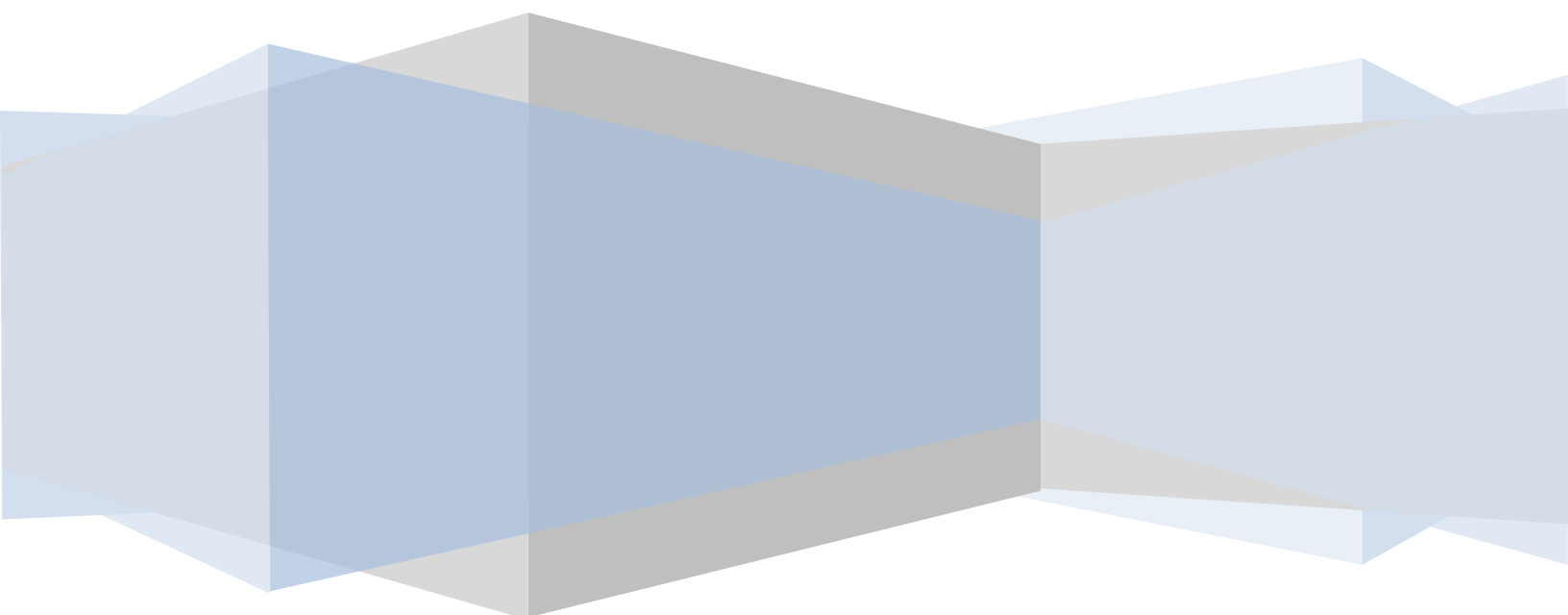
To address conflagration within the municipal hall, the BFP noted the absence of fire extinguishers in every office and the absence of fire exits at the second floor. On the other hand, to address occurrence of natural calamities early warning system is not yet

established and internalized by the citizenry and the Disaster Operations Center is not yet identified and set up with the required communication and other gadgets and accessories to be utilized in times of calamities.

However, the Municipal and Barangay Disaster Coordinating Councils are already organized but needs to be strengthened through the conduct of trainings and other capability building activities. The MDCC also realized that drills are still to be conducted to prepare the citizenry in the event of calamities. Though public buildings can be utilized as Evacuation Centers, the MDCC has not yet set in place the buildings' readiness. The BDCC must also be regularly convened for the formulation of plans and the discussion of pro-active and preventive measures related to calamities.

Infrastructure

A Sectoral Profile



Infrastructure

TRANSPORT

Roads

The municipality is served with a total road network of 146.22 kilometers which is 2.5 percent of the total road network in the Province of Bohol. They are classified into four categories: the national which is 22%, provincial is 23%, municipal is 2% and barangay is 53% of the total road length as shown in table 3.1 and *Figure 3.1*. The stretch of these roads is predominantly paved with gravel that comprises a total of 71.753 kilometers.

Figure 3.1

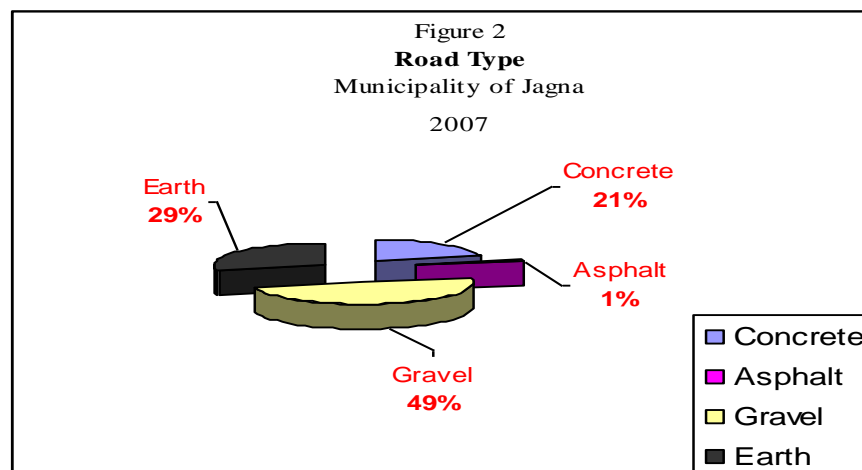
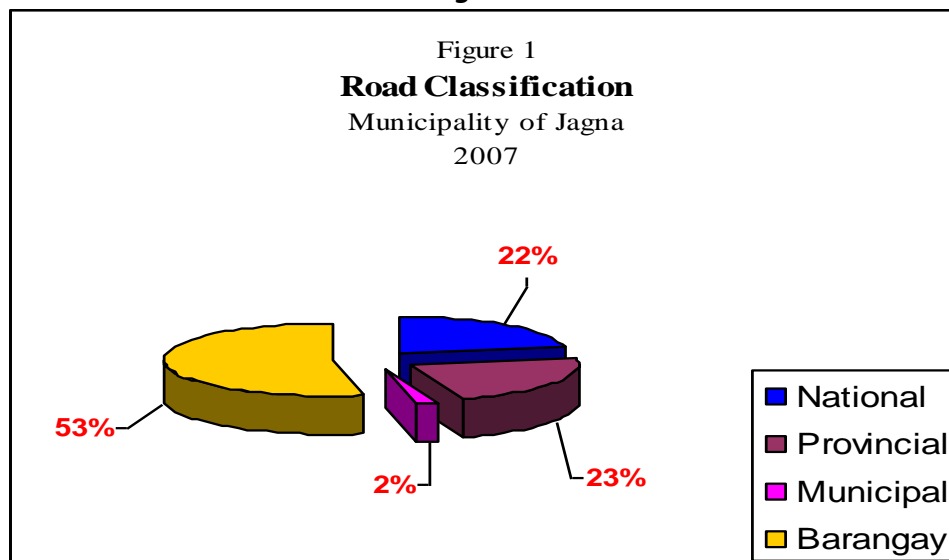


Figure 3.2

Table 3.1 and the graphical presentation as shown in *Figure 3.2* illustrate the inventory and classification of roads as to their type of pavement and it is then broken down as follows: concrete paved is 31.41 kilometers, asphalt is 0.71 kilometers, graveled is 71.753 kilometers, and earthfill is 42.343 kilometers representing 21%, 1%, 49% and 29% of the total road length of the municipality.

Based on the planning standard using the road density of one (1) kilometer-road for every 100 hectares, Jagna should have, at least, a total of 121 kilometers of road length. By computation: the total land area of Jagna is 12,063 hectares (12,063 divided by 100 hectares is equal to 121), but in comparison, the actual total road length of the municipality at present is 146.22 kilometers. This therefore signifies that the road network is deemed sufficient and adequate enough to serve over the planning period of 10 years.

Another basis for determining the adequacy of the road network is the use of Population-Road Length Relationship (road density of 3.9 kilometers (for rural) per 1,000 population). *Table 3.2* shows the road length requirements using this standard. At present the municipality has a sufficient road network of 146.22 kilometers or about 21 kilometers more than the required ratio of road length to population.

By 2018, the municipality will require 133 kilometers so the existing road network is more than adequate to meet the present and future requirements. The dominant type of road paving are the graveled and earthfill which causes the insufficient modality of service to the transportation needs of the people. And it has been observed that there are still large portions of the road network in the municipality that needs immediate improvement, that there is also a need for upgrading and maintenance of the existing road network of the barangay farm-to-market roads. It is highly recommended that the Local Government Unit take action towards this urgent concern.

Table 3.1. Inventory and Classification of Roads CY 2010

Classification	Concrete	Asphalt	Gravel	Earth	Total
National	31.868	-	-	-	31.868
Provincial	5.887	-	28.386	-	34.273
Municipal	2.357	-	-	-	2.357
Barangay	11.965	-	23.457	40.282	77.714
Total	52.077	-	51.843	40.282	146.21

Source: Municipal Engineer's Office 2010, Jagna

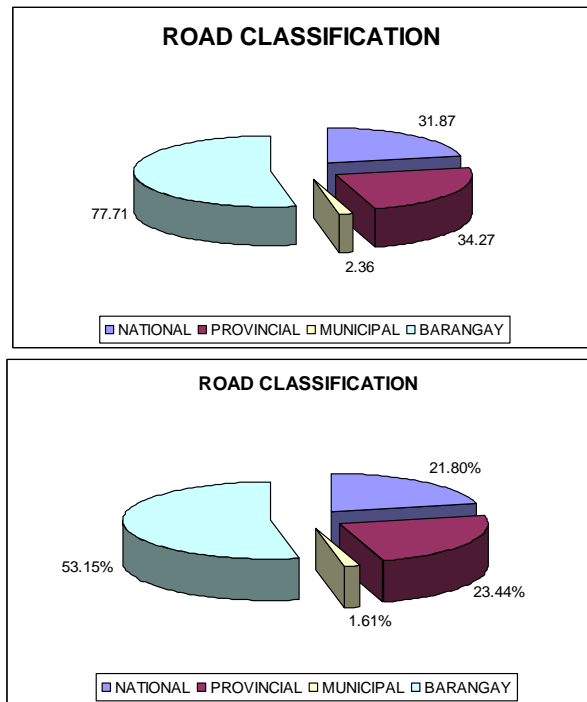


Figure 3.3

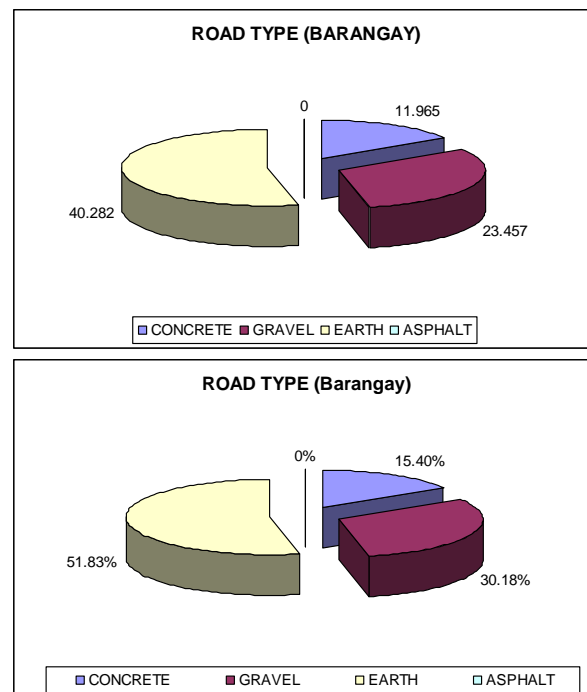


Figure 3.4.

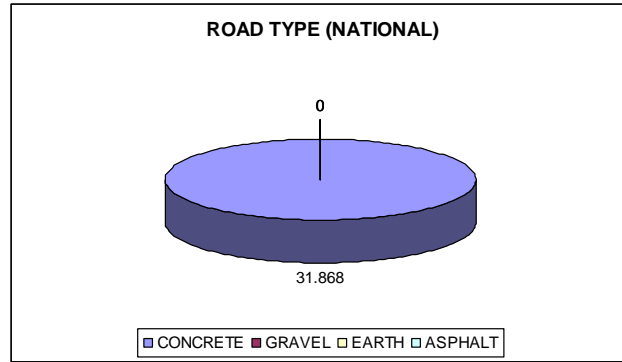


Figure 3.5

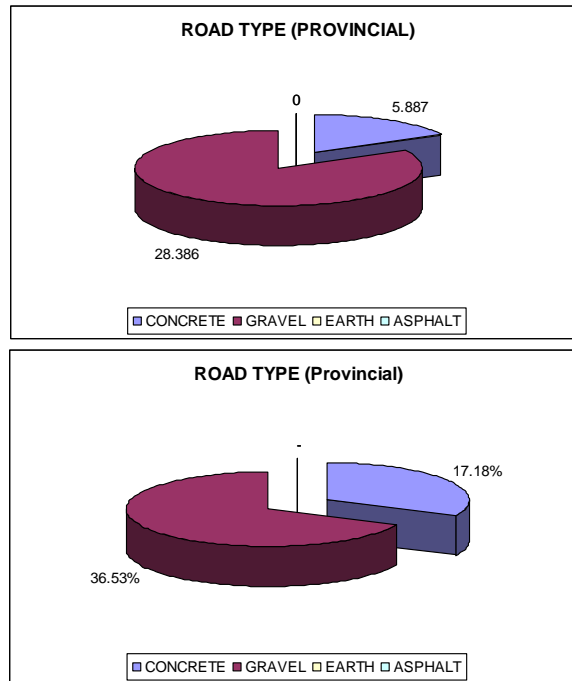


Figure 3.6

A significant increase in length of the concreted portion of Jagna for the Provincial, Municipal, and Barangay Roads was funded by the Department of Agriculture, through the Farm to Market Roads improvement projects. The barangay roads increased to 20.19% equivalent to in these 2,010 meters, There are barangays that don't have barangay roads yet. Residents in these areas are passing through Provincial roads leading to their respective barangays just like part of Bunga-Mar. The Provincial government has counterparted equivalent to the length being realized for the said barangay. Meanwhile, the Junction Jagna-Sierra Bullones National Road was still on-going with its concreting works.

Table 3.2. Road Length Requirement by Population to Road Ratio

Year	Population	Road Length (km)		
		Required	Existing	Difference
2007	32,034	124.94	146.22	21.28
2008	34,101	133.00	146.22	13.22

Source: Jagna Municipal Engineer's Office, 2008

Table 3.3. BARANGAY ROADS, Location, Surface type & Condition:

Road ID	Road Name	Class	length	Form	C-Way	Surface type (in mtrs)				Road Condition	Type of vehicle pass		Remarks
			(km)	width		Asphalt	Gravel	Earth	Concrete		Rainy	Dry	
	BARANGAY ROADS/STREETS												
1	BRGY. TUBOD MAR:												
	-Tubod mar brgy. Rd. to chapel	s	.847	4.0	2.80			732	115	good			Passable
	-Jct. Natl. H-way to upper	p	.700	6.0	4.0			235.5	464.5	fair			Passable
	-Larapan-Tubod mar-Naatang	p	1.750	6.0	2.50			1583.3	166.7	fair			
2	BRGY. NAUSOK:												
	-Nausok-Larapan rd.	p	1.3853	6.0	3.0			921.2	463	fair			Passable
3	BRGY. LARAPAN:												
	-Jct. Ntl. H-way to elem. Schl.	p	.5485	6.0	3.20		13	43.087	504.9	good			
	-Larapan Circumferential rd.	p	.689	6.0	3.50			689		good			
4	BRGY. CANJULAO:												
	-Daguiterra street	p	.700	6.0	3.30				700	good			
	-Pastor Lloren st.	s	.0545	6.0	4.0		290		255	good			
	-Aceron street	s	.0476	6.0	4.0		47.6			good			
	-Cadelina street	s	.0335	6.0	4.0			335		good			
	-Balikbayan street	S	.900	6.0	3.0			900		good			
	-George Casenas street	S	.1115	6.0	3.0				11.15	good			
	-Canjulao Brgy. Rd. to Edwin du	S	.310	5.0	3.0			31		good			
	-Canjulao-Cantuyoc rd	p	2.627	6.0	4.0		15.6	2059	131.55	fair			

Legend:

ALL TYPES	TRUCKS	LIGHT VEHICLES	MOTOR		
Trailers Heavy equipments Cargo trucks Bus Van Light vehicles Motorela Motorcycle	Dumptrucks Cargo trucks Bus Light vehicles Motorela Motorcycle	Van Multicab Motorela Motorcycle		P	Primary Road
				S	Secondary Road
				T	Tertiary Road

Road ID	Road Name	Class	length	Form	C-Way	Surface type (in mtrs)				Road Condition	Type of vehicle pass		Remarks
			(km)	width		Asphalt	Gravel	Earth	Concrete		Rainy	Dry	
	BARANGAY ROADS/STREETS												
5	BRGY. CANTUYOC												
	-Cantuyoc-Malbog (sog-ong)	p	.876	6.0	4.0			876		fair			
6	BRGY. TEJERO:												
	-Tejero – Tubod monte rd	p	1.250	6.0	4.0			1215	35	Bad			
7	BRGY. BUNGA ILAYA												
	-Jct. provl. Rd. to B-ilaya chapel	p	.800	5.0	3.0				800	good			
8	BRGY. CAN-UPAO												
	-Can-upao – B-ilaya rd.	t	2.500	5.0	3.0			2223	277	Bad			

9	BRGY. BUNGA MAR												
	-Bunga mar brgy rd.	T	1000					620	380	Fair			
10	BRGY. ALEJAWAN:												
	-Alejawan-Cambugason road	P	3,960					3582.8	377.2	Fair			
11	BRGY. BOCTOL												
	-Sitio Danao road	S	1,400	5.0			75.85	1149.15	175	Fair			
	-San pedro street	S	.040	5.0				40		Fair			
	-Sitio Ilaya road	S	.200	5.0				200		Bad	-		
	-San Vicente street	S	.100	5.0				100					
	-Brgy. Road to swimming pool	S	.150	5.0			150			Good			
	-Chapel –basketball court	S	.052	3.0				24	28				
	-Sitio Ilaud road	S	3.000	5.0				3000		Fair			
	-Sitio Labu road	S	.050	1.5				50		Bad	-		
12	BRGY. ODIONG:												
	-Odiong circumferential road	P	.770	4.0			570	40	160	Fair			
	-Jct. Provl. Rd. to kabulihan ilaya rd.	S	1.735	4.0				1700	35	Bad	-		
	-Ibabao road	S	.175	4.0				75	100	Fair			
13	BRGY. MALBOG												
	-Jct. to Malbog elem. Schl.	T	.450	5.0				450		Fair			
14	BRGY. BALILI:												
	-Jct. to Balili proper	P	1.4	5.0			1000	330	70	Good			
	-Balili – Buyog road	P	3.480	5.0				3399.1	80.9	Bad			Passable
	-Balili – Calabacita road	P	8.825	5.0				8825		Bad			Passable
15	BRGY. IPIL:												
	-Ipil-Faraon cultural center rd.	S	1.496				863.8	100	532.2	Fair			
	-Faraon-Ipil road (Dansuli route)	S	1.950					1787	163	Bad			
16	BRGY. FARAON:												
	-T.B. Galagar st.	T	.170						170	Good	trucks	Trucks	
	-Escolastico Bayron st.	T	.100					100		Bad			

	-Lauriano Acdal st.	T	.125					125		Bad			
	San Isidro st.	T	.100						100	Good	Trucks	Trucks	
	Faraon-Ipil Lumad st. (beside	T											For verification as to boundaries
	Cultural Center)	S	1.496						76.2	fair			
	-Tinaan st.	T	1.050				300	500	250	fair			
17	BRGY. CAMBUGASON:												
	-Jct. provl. Rd. to cambugason proper	P	1.506				232		1274	Good			
	-Cambugason river side rd.	S	.900					900		fair			
	-Can-ukso-cambugason elem. School road	S	1.400					1278.3	121.7	Fair			
	-Cabungaan-Cambugason road (Juan baga)	P	1.107				1107			good			
18	BRGY. MAYANA:												
	-Balikbayan to sampong rd.	S	3.500					3500		bad			Not passable
	-Barangay road to cementery	T	.500					500		fiar			
19	BRGY. LONoy:												
	-Teofilo nayga st.	S	1.100				1100						
	-Capt. Goyo st.	S	.150				150						
	-Adriano Ranis st.	S	.300				300						
	-Dionisio Daniel st.	S	.150				150						
	-Inocensio Gales st.	S	.180				180						
	-Abcede st.	S	.100					100					
	-Raymondo Galon st.	S	.100				100						
	-Nicholas Galon st.	S	.100				100						
	-Esteban Acedillo st	S	1.000				900	100					
	-Eleuterio Madrinan st.	S	.180						180				
	-Ranas brothers road	S	.800					800					
	-Luis Tadena st.	S	2.000				1100	900					

Road ID	Road Name	Class	length	Form	C-Way	Surface type (in mtrs)				Road Condition	Type of vehicle pass		Remarks
			(km)	width		Asphalt	Gravel	Earth	Concrete		Rainy	Dry	
	BARANGAY ROADS/STREETS												
20	BRGY. CALABACITA:												
	-Calabacita circum. road	P	.500						500	good			
	-San Vicente st.	S	.100				100						
	-Rd. to basketball court	S	.050				50			good			
	-Quezon st.	S	.100				100						
	-San Roque st.	S	1.500				500	1000					
	-Sta Veronica st.	S	.150				150						
	-San Juan st.	S	.450				450						
	-San Jose st.	S	.500				200	300					
	-Virgen de la paz st.	S	.150				150						
	-Jct. (Jagna-S-Bullones rd.) Catiwihan rd.	P	2.225				1878		278	fair			
	-Capahan rd.	P	3.257				3257			bad			
	Sitio Ilaud rd.	S	1.150				1150						
21	BRGY. LACA												
	-Laca circumferential road	T	.200			33	167			fair			
	-Laca-Cantuyoc rd.	T	2.000				2000			bad			
22	BRGY. TUBOD MONTE:												
	-Tubod monte-malbog (can sanga)	S								fair			
23	BRGY. PAGINA:												
	-Pagina Carmoli rd.	S	.825					825		good			
24	BRGY. POBLACION:												
	-Virgen sa Barangay rd.	T	.550				100	450		fair			

Road ID	Road Name	Class	length	Form	C-Way	Surface type (in mtrs)				Road Condition	Type of vehicle pass		Remarks
			(km)	width		Asphalt	Gravel	Earth	Concrete		Rainy	Dry	
	BARANGAY ROADS/STREETS												
25	BRGY. CANTAGAY:												
	-Cantagay-Kinagbaan road	S	2.500					2464	32	good			
	(kinagbaan portion)									fiar			passable

Table 3.4. MUNICIPAL ROADS, Location, Surface type & Condition:

Municipality of Jagna

Road ID	Road Name	Class	length	Form	C-Way	Surface type (in mtrs)				Road Condition	Type of vehicle pass		Remarks
			(km)	width		Asphalt	Gravel	Earth	Concrete		Rainy	Dry	
	MUNICIPAL ROADS/ STREETS												
1	BRGY. PAGINA:												
	-Acha st.	S	.249						249	good			
	-Sta. cruz st.	S	.234						234	good			
2	BRGY. POBLACION:												
	-Capt. Goyo Casenas st.	P	.294						294	good			
	-Achacoso st.	P	.234						234	good			
	-Quezon st.	P	.466						466	good			
	-Severo salas st.	P	.248						248	good			
	-Jct.-(ter) Jagna Gym (beside mun. building)	S	.110						110	good			
3	BRGY. TEJERO												
	-Cagampang st.	P	.262						262	good			

Table 3.5. PROVINCIAL ROADS, Location, Surface type & Condition:

Road ID	Road Name	Class	length	Form	C-Way	Surface type (in mtrs)				Road Condition	Type of vehicle pass		Remarks
			(km)	width		Asphalt	Gravel	Earth	Concrete		Rainy	Dry	
	PROVINCIAL ROADS/STREETS												
1	Can-uba – Faraon road	P	1.740				1017.20		722.80	good			
2	-Jct. (Jagna-S-bullones rd) Malbog-Calabacita	P	9.150				9110		40	fair			passable
3	-Jct. (Jagna-S-Bullones rd) Lonoy rd.	P	1.200				1120		80	fair			passable
4	-Jct. (Jagna-S-Bullones rd) Can-itol Odiong rd.	P	2.113				1852		261	fair			passable
5	-Jagna-Cabungaan-Lonoy rd.	P	6.42				4875		1545	good			
6	-Jct. (ter) Bunga mar-Kinagbaan-Laca-Buyog-Balili rd.	P	10.930				9748.67		1181.30	fair			passable
7	Road around Jagna Pub. Market	P	.315						315	Fair			passable
8	Road infront of JCES	P	.255						255	good			
9	Road to Jagna wharf	P	.100			10			90	good			
10	Severo Salas st.	P	.500						500	good			
11	Achacoso st.	P	.440						440	good			
12	Abrea st.	P	.140						140	good			
13	Jct.(ter) in front Jagna Central elem. Schl.	P	.260						260	good			
14	Jct. (Ilihan Hill rd	P	.710					85.07	604	good			

Table 3.6. NATIONAL ROADS, Location, Surface type & Condition:

Road ID	Road Name	Class	length	Form	C-Way	Surface type (in mtrs)				Road Condition	Type of vehicle pass		Remarks
			(km)	width		Asphalt	Gravel	Earth	Concrete		Rainy	Dry	
	NATIONAL ROADS/STREETS												
1	Tagbilaran East road	P	11.550	8	.20				11550				
2	Jagna – S-Bullones rd.	P	20.318	8	.20								

The municipality has seventy eight barangay roads which are mostly passable due to the good maintenance by the local officials. Presently, one of the barangay road which remains impassable is the Balikbayan Barangay road in Mayana which was affected by the landslide in 2005. The lack of rehabilitation funds has affected the transport of agricultural products from this sitio. The Nausok-Larapan barangay road has similar situation. The Nausok portion is passable by vehicles while the Larapan portion is not. This road is cut short to its next Barangay of Larapan. Unless funding and attention from the government, be addressed immediately these barangay roads remains the same.

The municipality has eight municipal roads, all of which are concreted and passable by trucks. These are located at Barangays Poblacion and Pagina. Some municipal roads are connected to the Provincial roads such as the streets of Severo Salas, Achacoso. These streets also need rehabilitation.

There are fourteen Provincial roads in this municipality. All are passable due to the government's efforts to maintain the roads. Some portions were concreted due to the efforts of the Provincial government made possible by the Barangay officials' ability to out source.

The national road in the municipality is almost near completion due to the Strong Nautical Highway program of the national government. The Tagbilaran East road is already complete, while the Jagna-Sierra-Bullones road is still on-going. It is expected to boost the eco-tourism programs of the municipality as it opens opportunities with interior towns particularly with Carmen, Bohol.

Bridges

The municipality has twenty-six (26) existing bridges, sixteen (16) of which are being maintained by the national government through the DPWH. Four (4) were constructed and maintained by the provincial government thru the Provincial Engineer's Office (PEO). Six (6) are maintained by the municipal and the barangays. The total length of the municipal bridge is 429.64 linear meters which represents 4.63 percent of the total length of the Bohol bridges. It is basically classified into national, provincial, municipal and barangay bridges with corresponding lengths of 289.64, 69, 36 and 35 linear meters respectively. Table 3.7 shows the inventory of bridges in the municipality as to the type of construction. It is further illustrated that majority of the bridges are concreted and it is followed by wooden and steel types with a length distribution of 336.40 l.m. or 78%, 78 l.m. or 18% and 15.24 l.m. or 4% respectively from the total length of bridges in the municipality. It is imperative that the wooden type bridges be upgraded to more permanent types of bridge like the concrete or steel types.

Table 3.7. Existing Bridges, Location and Type of Construction Materials Used CY 2007

Municipality of Jagna

Bridge Name		Location/ Barangay	Type of Construction Materials									Remarks/ General Condition
			Concrete			Steel			Wood			
			L	W	LC	L	W	LC	L	W	LC	
a.	National Bridges											
1.	Alejawan Bridge	Alejawan	48	7.3	20							RCDG - Good
2.	Naatang Bridge	Naatang	5	7.3	20							RC Deck Slab-Good
3.	Tubod Mar Bridge	Tubod Mar	5	6.7	20							RCDG - Good
4.	Nausok Bridge	Nausok	5	7.3	20							RCDG - Good
5.	Pangdan Bridge II	Pangdan	5	7.3	20							RCDG - Good
6.	Pangdan Bridge I	Pangdan	10	7.3	20							RCDG - Good
7.	Pagina Bridge II	Pagina	23.4	7.3	20							RCDG - Good
8.	Pagina Bridge I	Pagina	12	7.6	20							RCDG - Good
9.	Bunga Mar Bridge II	Bunga Mar	21	6.7	20							RCDG - Good
10	Canjulao Bridge	Canjulao	18	7.3	20							SPG - Good
11	Carmoli Bridge	Tubod Monte	15	7.3	20							RCDG - Good
12	Lubcanan Bridge	Tubod Monte				15. 2	4.2	3 T				SS Bailey- Temp
13	Pangas Bridge	Tubod Monte	8	6.7	20							RCDG - Good
14	Tubod Monte Bridge	Tubod Monte	7	6.7	20							RCDG - Good
15	Carapagan Bridge	Can-ipol	50	7.3	20							SPG - Good
16	Mayana Bridge	Mayana	42	7.3	20							RCDG - Good
b.	Provincial Bridges											
1.	Cabungaan Bridge	Cabungaan	25	7.3	20							Steel Modular- Good
2.	Odiong Bridge	Odiong							7	4	3 T	Timber - Good
3.	Can-okso Bridge	Cambugason	7	6.7	20							Box Culvert - Good
4.	Lonoy-Cansuhay Br.	Lonoy-Cansuhay (Duero)	30	7.3	20							Steel Modular - Good
c.	Barangay Bridges											
1.	Capahan Bridge	Calabacita							1 0	3.6	1 T	Timber - Passable
2.	Larapan-Tubod Mar	Larapan-Tubod Mar							7	3.6	1 T	Timber - Good

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Municipality of Jagna

3.	Kaparian Bridge	Alejawan-Cambugason						6	3.6	1 T	Concrete box Box culvert
d.	Municipal Bridges										
1.	Quezon Bridge	Pagina(Seawall)-Looc(Market)						15	4.2	1 T	Bailey/Timber- Passable
2.	Acha Bridge	Pagina-Canjulao						15	3.6	1 T	Bailey/Timber Passable
3.	Calmayon Bridge	Poblacion (Pondol)-Pagina						18	4.2	1 T	Bailey/Timber- Passable

Source: DPWH, PEO, MEO

Legend :

L = Length (meters)

W = Width (meters)

LC = Load Capacity (metric tons)

Table 3.8. Bridges by Type of Administration CY 2007

Type of Administration	Number	Length by Type			Total Length (l.m.)	Percent to Total
		Concrete	Steel	Wood		
National	16	274.40	15.24	-	289.64	67.4%
Provincial	4	62	-	7	69.00	16.0%
Municipal	3	-	-	36	36.00	8.4%
Barangay	3	-	-	35	35.00	8.2%
TOTAL	26	336.40	15.24	78	429.64	100%

Land Transport Vehicles

The municipality is highly accessible either by means of land or sea transportation. In the year 2007, there were 15,243 transport vehicles regularly carrying on their routes in the different national, provincial, municipal and barangay roads within the municipality. Fourteen thousand two hundred forty six (14,246) of these were privately owned, nine hundred eleven (911) were public utility vehicles and eighty six (86) were government-owned. The number is expected to rise annually, considering the distance from Tagbilaran City to Jagna with a concreted paved road.

One can easily reach this town after approximately 1½-hours of travel from Tagbilaran by bus, van-for-hire (V-hire) or jeepney. There are thirty nine (39) bus lines like Dory Jagna Transit, Duero Transit, and Saint Jude Transit as well as transient buses plying the Jagna route at regular intervals. Transportation from the town proper to the hinterland barangays are available by means of hired motorcabs, single motorcycles popularly known as “habal-habal” and small buses or jeepneys. However there are still sitio’s in the barangays that are not accessible during rainy days like sitio balikbayan in mayana which still only has earth roads.

Table 3.9. Inventory of Land Transport Vehicles CY 2007

Municipality of Jagna

Type of Vehicle	Private	Public Utility	Government	Total
Light Vehicles	1,929	220	40	2,189
Truck	486	3	14	503
Motorcycle	11,208		32	11,240
Bus	553	39		592
Tricycle	55	649		704
School Bus				
Medium Size Bus				
Trailer	15			15
Heavy Trucks				
Others				
TOTAL	14,246	911	86	15,243

Source: Land Transportation Office (LTO)

Bus Terminal and Parking Space

The available bus and jeepney terminals and parking facilities are located in the Looc Public Market and the Poblacion/Pangdan reclamation area which is the proposed terminal. The existing terminal has no facilities except for parking space, which is also a temporary condition and is made of concrete pavement. This situation has worsened because of the lack of terminals and parking areas in Metro Jagna, is a major concern which should be considered in the infrastructure development plan.

Sea Transportation

Presently, the Philippine Port Authority (PPA) is envisioning to modernize its port facilities in the country. Fortunately the Port of Jagna had constructed a state-of-the-art passenger terminal, cargo terminal, the roll-on-roll-off port and the back-up area construction for container vans. This is actually part of President Arroyo’s STRONG NAUTICAL HIGHWAY PROJECT as reflected in its national 10-point agenda.

The port facilities in Jagna are the only ones in the Southeastern part of Bohol that serves as the gateway to Northern Mindanao. The PPA has managed the seaport that straddles a major

Visayas-Mindanao Sea-lane with ferryboats regularly plying from Jagna to Cagayan de Oro, Butuan City, Camiguin routes and vice-versa. Among the shipping lines that cater to the passengers and cargos are Sulpicio Shipping Lines, Cebu Ferries, South Gothong Shipping Lines, Para seacat (fast craft) and Shuttle Ferries. Aside from this, commercial cargo ships and barges regularly ply the routes transporting copra, cement, feeds, fertilizers and rice.

With the inclusion of the Jagna Port as part of the nautical highway project of the current national development agenda being one of the flagship projects, the ongoing improvement of the area will greatly benefit the municipality. However, to complement the ongoing modernization program of the port, the Local Government Unit should also look into the upgrading, maintenance and “beautifying” of the cluttered vicinity.

Water Supply

Level III Water System

The waterworks system in the municipality is classified as Level III, meaning a point source with individual household connections. The source is the natural Tinubdan Spring located in barangay Lonoy and Malbog spring with capacities of 4,147 cubic meters/day and 3,012 cubic meters/day respectively. The existing municipal waterworks system provides water service to the upland barangay of Cambugason and the Metro Jagna residents which exclude the barangays of Bunga Mar and a portion of Pangdan.

Majority of the existing water distribution lines having a total length of 9.4 kilometers are made of GI pipes and are still in very good condition. Records show that still 30 percent of the household population of Jagna has no access to safe and potable water. The municipal waterworks system upgraded the old and small pipes into bigger ones with a diameter of 6” which are blue pipes (PVC) with a length of 4 kilometers. A bigger water reservoir will be constructed in order to better provide for the effective and efficient delivery of water services to the whole populace including the coastal barangays and Metro Jagna from barangay Ipil to Pangdan.

Table 3.10. Inventory of Waterworks System

Name of Water Sources	Location & Number of Pumps	Capacity (cu.m./day)	Barangay Served
1. Tinubdan Spring	Lonoy	4,147 cu.m./day	Cabungaan, Cabugason, Canjulao, Can-upao, Looc, Pagina, Pangdan, Tejero Poblacion, Tubod Mar
2. Malbog Spring	Malbog	3,012 cu.m./day	Canjulao, Looc, Malbog
3. Anislag Spring	Cantuyoc	2,143 cu.m./day	Canjulao, Looc
4. Odiong Cave	Odiong	4,752 cu.m./day	Odiong

5. Can-upao Underground	Can-upao (1 pump)	997 cu.m./day	Can-upao, Looc
6. Poblacion Underground	Poblacion (1 pump)	618 cu.m./day	Poblacion, Tejero
7. Canjulao Underground	Canjulao (1 pump)	313 cu.m./day	Canjulao

Source: Jagna Waterworks System

Water Consumption by Type of Consumer

The number of domestic water connections in the municipality has been accounted to be 1,738 consumers, with an average monthly water consumption of 273 cubic meters. Domestic consumers occupy the larger number of connections but the average monthly consumption is lower compared to the commercial consumers as represented in *Table 3.11*.

Table 3.11. Number of Connections and Average Water Consumption by Type of Consumer

	Type of consumer				Total
	Domestic	Commercial	Industrial	Others	
Number of Connections	1,705	12	-	21	1,738
Average Monthly water Consumption	18 cu.m	255 cu.m.			273 cu.m.

Source: Jagna Waterworks System

Level II Water System

The municipality of Jagna has fourteen (14) Level II water systems serving 1,890 households within the 14 barangays. However there are still 487 households which are not being served by the water system.

Table 3.12. Inventory of Level II System

Municipality of Jagna

Location of water Sources	Capacity (Liters/sec.)	Barangay Served	HH Population Served		HH Population Unserved	
			Number	%	Number	%
Balili		Balili	100	47%	112	53%
Boctol		Boctol	200	80%	20	10%
Calabacita		Calabacita	200	76%	62	24%
Cantagay		Cantagay	131	97%	4	3%
Cantuyoc		Cantuyoc	130	80%	26	20%
Kinagbaan		Kinagbaan	70	90%	7	10%
Laca		Laca	50	84%	16	16%
Larapan		Larapan	100	86%	15	14%
Lonoy		Lonoy	150	72%	57	28%
Malbog		Malbog	150	90%	16	10%
Mayana		Mayana	300	86%	85	14%
Nausok		Nausok	54	100%	-	-
Tubod Mar		Tubod Mar	105	100%	-	-
Tubod Monte		Tubod Monte	150	69%	67	67%
		Total	1,890		487	

Source: Jagna Waterworks System

Level I Water System

Based on the data from the Municipal Water, Sewerage and Sanitation Master Plan (MW4SMP), Jagna has a total of 625 Level I water systems located in the thirty-two (32) barangays and it is broken down as follows: 473 shallow wells, 47 deep wells and 105 improved springs. This indicates that shallow aquifers are dominant in the municipality, while deeper aquifers occur in elevated areas. The free flowing wells indicate artesian aquifers. The deepest well in the Level I system is located in Barangay Tubod Mar in the Sierra Bullones Limestone at an elevation of 20-m amsl, which penetrates to 200-m below ground or about 180-m below main sea level.

Table 3.13. Inventory of Level I Water System

Municipality of Jagna

BARANGAY	SHALLOW WELL			DEEP WELL			IMPROVED SPRING		
	Number	HH Pop. Served		Number	HH Pop. Served		Number	HH Pop. Served	
		No.	%		No.	%		No.	%
1. Alejawan	39								
2. Balili	1								
3. Boctol	1								
4. Bunga Ilaya	32								
5. Bunga Mar	39								
6. Buyog	2						4		
7. Cabungaan	5						4		
8. Calabacita	1						6		
9. Cambugason	12						1		
10. Can-ipol	1						5		
11. Canjulao	14								
12. Cantagay	3						1		
13. Cantuyoc	1						6		
14. Can-uba	9			5			1		
15. Can-upao	23								
16. Faraon	3			9			2		
17. Ipil	2			1			1		
18. Kinagbaan	1						7		
19. Laca							5		
19. Larapan	5			6					
20. Lonoy	1						5		
21. Looc	35								
22. Malbog	1						7		
23. Mayana	1						9		
24. Naatang	56								
25. Nausok				8					
26. Odiong	14			1			8		
27. Pagina	48								
28. Pangdan	42			3			2		
29. Poblacion	39								
30. Tejero	28								
31. Tubod Mar	9			6					
32. Tubod Monte	5			1			6		
TOTAL	473			47			105		

Source: Jagna Waterworks System

Although the town is served with Level III, II and I water systems, the municipality is still facing problems of inadequacy of potable and safe water supplies in some barangays. Steps should have been taken to develop and upgrade the existing water supply facilities, converting Level II to Level III systems, constructing additional reservoirs and developing new water sources considering that the municipality has a lot of potential sources for water development.

The potable water demand including domestic, industrial, institutional and commercial both in the urban and rural populations was estimated to be 3,615 cubic meters/day in 1998 and it is projected to increase by 8,887 cubic meters/day by 2030. In 1998, the part of water demand for urban population was 51% and it is projected to increase to 65% by 2030.

Power

Power is very essential in the development of the municipality of Jagna. The growing demand for electricity is evident which is brought about by the increase in population, the expanding commercial activities and the setting-up of the much needed industries. The Bohol II Electric Cooperative Incorporated (BOHECO II) barangay electrification program had energized the 33 barangays covering 100% of the total barangays in the municipality.

Households Served and Not Served with Electricity

Based on the 2007 NSO census population, the total number of households in Jagna is 5,957. About 95 percent or 5,636 of the total households had already been served with electricity while the remaining 5 percent or 321 households are still to be tapped with electricity. The cost of recovery is difficult for the utility operators to provide the services in addition to the scattered houses in the remote and highly elevated barangays pose a big problem to power services.

Table 3.14. Household Served and Not served with Electricity

Municipality of Jagna

	NUMBER OF HOUSEHOLDS (Rural and Urban)	PERCENTAGE (%) (Rural and Urban)
Potential	5,957 (6,637)	100%
Served	5,636 (8,266)	95%
Un-served	321(1,629)	5%

Source: Census of Population and Housing 2000/2009, BOHECO II

Power Utilities

A power facility is very imperative in a community. The electricity requirements in the municipality are served by BOHECO II through power generated by the National Power Corporation (NAPOCOR) and it is now managed by TRANSCO. All of the 33 barangays have access to electricity but there are many issues raised by the consumers due to high power or

electricity rates per kilowatt hour. Additional lighting facilities in some streets and places particularly in the commercial areas in Metro Jagna need to be addressed by the concerned agencies in coordination with the local government unit. The power utility providers like the electric cooperatives have been in the forefront of this effort to provide electricity to the upland or remote areas.

Table 3.15. Inventory of Power Utilities

Municipality of Jagna

Utility	Franchise Holder	Source of Power Supply	Location	Facilities (Number)				Service Area (Served/unserved Barangay)
				Sub-station	Metering Station	Electric Post	Street-light	
Electric	BOHECO II Electric Coop. Inc.	NAPOCO R Leyte geothermal plant	Leyte	Garcia-H S/S	Garcia S/S	1271	355	All barangays served

Source: NSO Census of Population and Housing 2000

Connections and Average Consumption by Types of Users

Among the consumers of electricity in the municipality of Jagna, residential areas are the most numbered although their level of power consumption is significantly lower compared to the industrial, commercial and institutional consumers. The total average consumption of the municipality is 2,360.53 kilowatt-hour per month, and the bulk of consumption goes to the industrial users with 1,824.28 kilowatt-hour per month. However, the possibility of an increase in households served by the cooperative is very admissible because of the continuing extension of power distribution lines to the different puroks in every barangay. The organization of Barangay Power Association (BAPA) and Electric Consumers Association (ECA) (a few consumers in the barangay that are far from the barangay proper) are instrumental in increasing household connections.

Table 3.16. Number of Connections by Type of Users and Average Consumption
Municipality of Jagna

Type of Connection	Number of Connections	Average Consumption (kwh/month)
1. Domestic	4,216	53.87
2. Industrial	22	1,824.28
3. Commercial	433	194.70
4. Public Building	193	227.68
5. Streetlight	355	12.09
6. Others: BAPA	1,303	37.15
ECA	25	10.76

TOTAL	6,547	2,360.53
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Source: BOHECO 2008

Households by Type of Fuel used for Lighting and Cooking

At present majority of the households in the municipality are using a combination of both electricity and kerosene for lighting with 95% and 5% of the total households respectively. However, in cooking, 78.26% of the total households are using firewood, 15.80% use LPG and 3.41% use kerosene as illustrated in *Table 3.17*.

Table 3.17. Household by Type of Fuel Used for Lighting

Type of Fuel Used	No. of Households	Percentage (%)
Electricity	5,636	95%
Kerosene	311	5%
Total	5,957	100%

Source: RHU Census 2005 and BOHECO II 2007

Table 3.18. Household by Type of Fuel Used for Cooking

Kind of Fuel Used	No. of Households	Percentage (%)
Electricity	67	1.12%
Kerosene	203	3.41%
Liquefied Petroleum Gas (LPG)	941	15.80%
Charcoal	75	1.26%
Wood/Bamboo	4,662	78.26%
Others	9	0.15%
TOTAL	5,957	100%

Source: NSO Census of Population and Housing 2007

Projected Power Requirements

The projected power requirements in relation to an expected higher level of consumption as a result of intensified economic activities during the plan horizon is expected to increase from 408,904.2 kwh in the year 2008 to 1,060,592.1 kwh by the year 2018. It has been a continued thrust of the local government as well as the electric cooperative to energize 100% of the total households in all barangays.

Table 3.19. Projected Power Requirements by Type of Connections in KWH

Municipality of Jagna

Connection /User	Projected Power Requirement										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Domestic	259,942	285,936	314,530	345,983	380,581	418,639	460,503	506,554	557,209	612,930	674,223

Industrial	35,149	38,664	42,530	46,783	51,462	56,608	62,269	68,496	75,345	82,880	91,168
Commercial	72,670	79,937	87,931	96,724	106,397	117,037	128,740	141,614	155,776	171,353	188,489
Public Buildings	36,948	40,643	44,707	49,178	54,096	59,506	65,456	72,002	79,202	87,122	95,835
Streetlights	4,193	4,612	5,073	5,580	6,138	6,752	7,428	8,170	8,988	9,886	10,875.5
TOTAL	408,904	449,794	494,774	544,250	598,676	658,544	724,398	796,838	876,522	964,174	1,060,592

Source: BOHECO II

Communication

The major types of communication systems in the municipality are now available at the urban center. Radio facilities include Bohol Law Enforcement Communication System (BLECS), Jagna Community Radio of LGU-Jagna in partnership with U.S. based health partner Philos Health and the Radio Natin FM station in Jagna owned by the Manila Broadcasting Company (MBC). Telecommunications and courier services are served by Luzon Brokerage Corporation (LBC), DHL, COMMEL Relay Station in Mayana, the Government-owned Telecom, the Cruz Telephone Company (CRUZTELCO), the San Miguel Cable TV, Smart, Sun Cellular Companies and Globelines Companies. Access to basic communication facilities such as telephone services, cellular phones including postal services is vital towards the development of a municipality.

Table 3.20. Inventory of the Existing Communication Facilities

Municipality of Jagna

Existing Communication Facilities	Location	Number of Facilities
Telephone Service: Public Calling Office (Cruztelco)	Pagina	1
Handheld Radio	All barangays	33
Post Office	Poblacion	1
LBC	Looc	1
DHL	Pagina	1
Smart Cell Site	Laka, Mayana, Pob.	3
Globe Cell Site	Larapan, Laca, Tejero, Alejawan	4
Sun Cellular	Mayana	1
Internet Cafe	Tejero, Pagina	2
Radio Communication :		
1. BLECS	Mayana	1
2. Jagna Community Radio (DYJP)	Poblacion	1
3. FM station (Radyo Natin)	Poblacion	1

Cable TV (San Miguel)	Poblacion	1
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The entry of modern communication facilities complemented by courier services, telecommunication facilities and tri-media networks has provided the people of Jagna with greater access to information and technology and faster business and personal contacts. However, the most pressing concern is the current communication facilities particularly the telephone network including the international networking (internet) and the facsimile services (fax). Most of the communication network facilities are owned by private firms. The best way to have better communication systems for the municipality is to open new telecommunication networks or to partner with other telecommunication networks and investors, and to upgrade the existing facilities to provide for a more efficient service to the public.

Telephone Services and Franchises

GLOBE Telecommunications Incorporated and Cruztelco have installed household telephone services in Jagna. All connections are served in the Poblacion area. Aside from the household connections, the same company has installed telephone units in the Office of the Municipal Mayor and the Sanguniang Bayan with trunkline connections to the different offices and fax machines within the municipal hall building. There is one (1) Public Calling Office of Cruztelco located in Barangay Pagina. The Cruztelco provider has extended its telephone line services up to 13 barangays namely: Ipil, Cantagay, Bunga Mar, Bunga Ilaya, Can-upao, Looc, Canjulao, Pagina, Poblacion, Tejero, Pangdan, Larapan and Nausok.

Mobile Phones

Smart and Globe Communications Incorporated have operated their cell sites in Jagna. With these mobile phone equipment, SMART connection users can already avail of the efficient and convenient cellular telephone facilities like in urban centers. With the GSM system installed by SMART in the municipality, the people can make use of the regular services of the system such as domestic and international calls, text messaging, voice messaging, internet connections and other features of the GSM and WAP system.

Postal Services

There are now three existing postal service facilities in Jagna; the LBC, DHL, also together with one postal circuit. It is operated by the Philippine Postal Corporation (PhilPost). The PhilPost office is undermanned or there is a lack of personnel to cater to the total population of 32,034. The municipality is in need of additional letter carriers and mobile services due to the increasing population and volume of transactions. At present, there are only 3 personnel, one (1) Postmaster and five (5) Letter Carriers (3 personnel = 1 postmaster + 2 lettercarriers) who are servicing the volume of transactions everyday with an average posted mails of 3,000 letters/month and package arrival of 2,800 pieces/month.

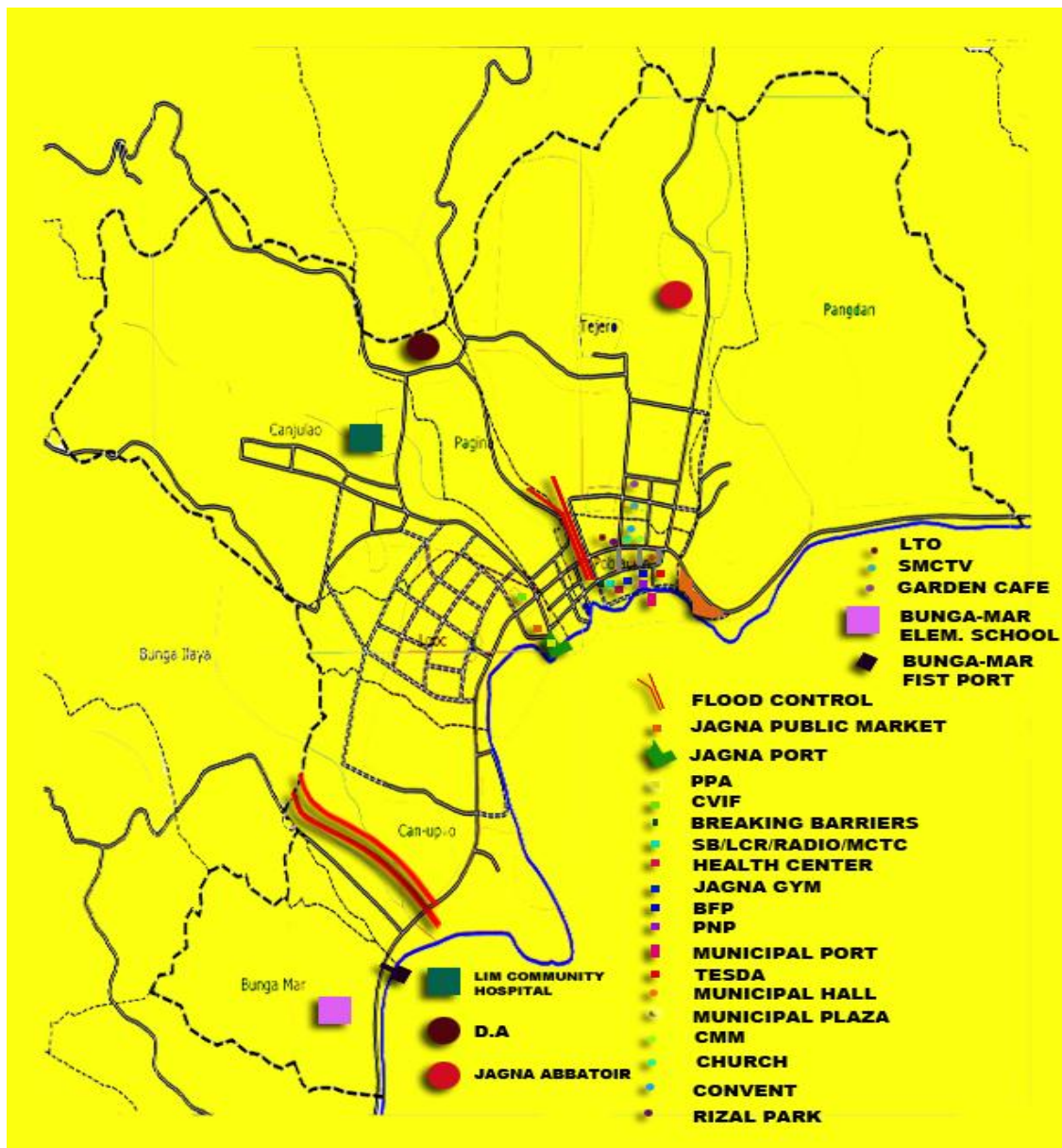
Projected Requirements for Letter Carriers

Using the standard ratio of 1-letter carrier per 5,000 of the total population, the municipality supposedly needs six (6) letter carriers considering the population of 32,034 in the year 2007. Based on the existing status, there are only 2 letter carriers in the office and it implies a backlog of four (4) personnel. The population projection in 2018 will reach to 34,101 and consequently it will require an additional of five (5) more letter carriers to ensure the speedy delivery of letters and packages to the 33 barangays in the municipality. The rationalization program of the Bureau of Port has caused the major decrease in postal services. The onset of information technology likewise affected the “snail mail” system of the said agency.

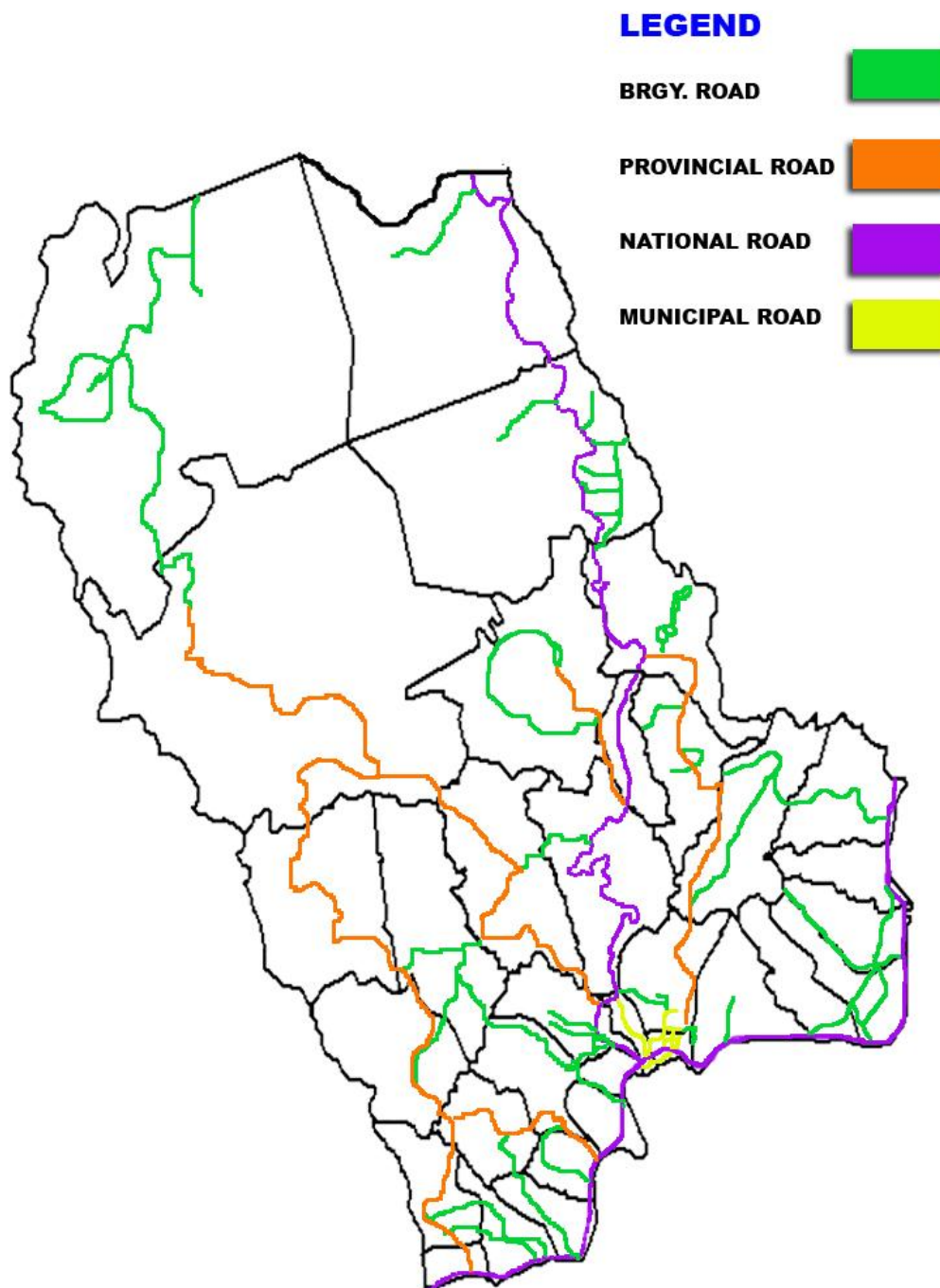
Table 3.21. Projected Requirement for Letter Carriers

Projected Population		Requirement for Letter Carrier		
Year	Population	Requirement for Letter Carrier based on Standard	Actual Number of Letter Carrier	Additional Personnel for Letter Carrier
2007	32,034	6	2	4
2008	32,249	7	2	5
2009	32,401	7	2	5
2010	32,560	7		5
2011	32,727	7		5
2012	32,901	7		5
2013	33,083	7		5
2014	33,271	7		5
2015	33,468	7		5
2016	33,671	7		5
2017	33,882	7		5
2018	34,101	7		5

Source: 2000 Census Population

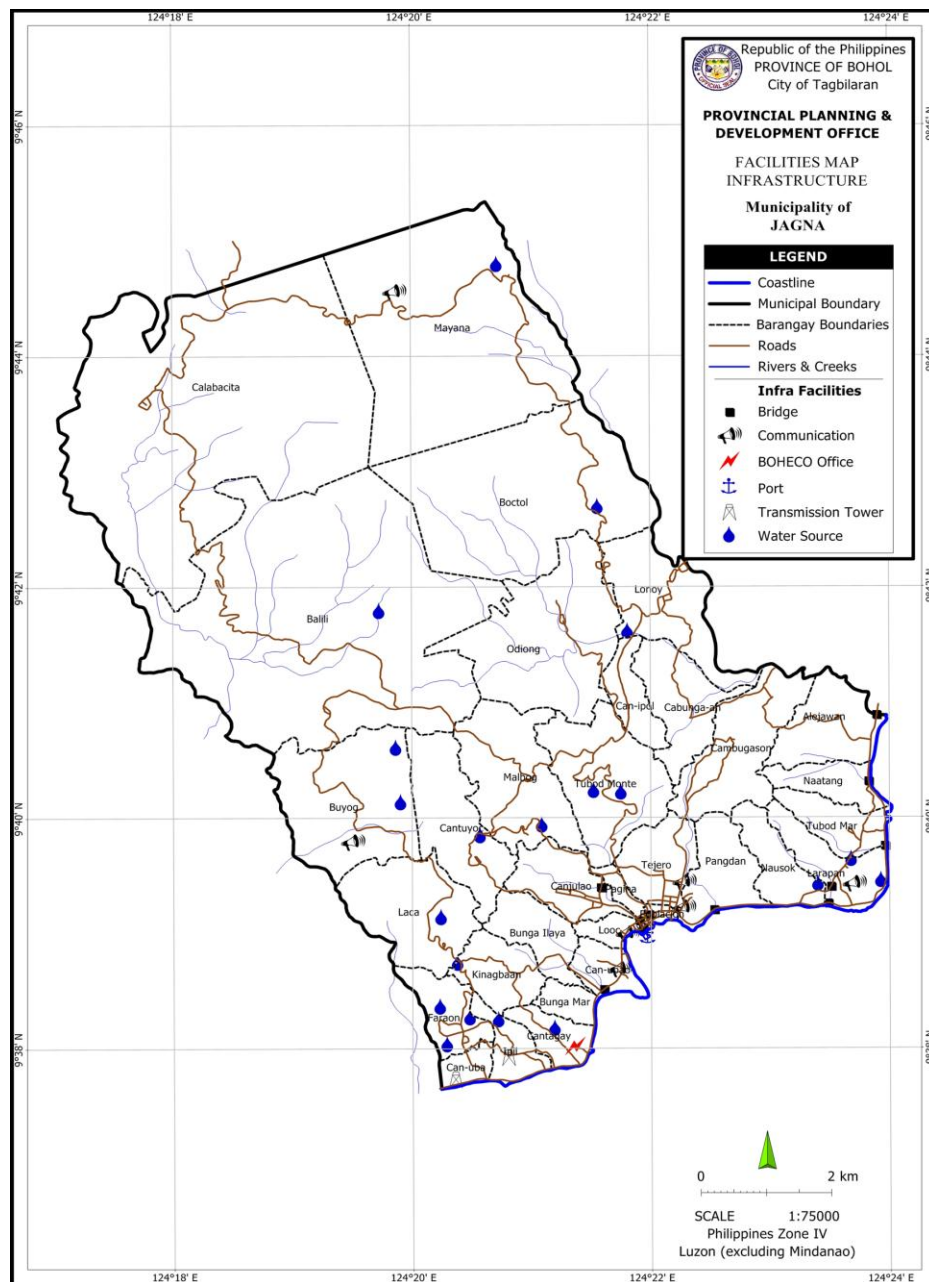


Map 3.1 ECONOMIC AND SOCIAL SUPPORT INFRASTRUCTURE



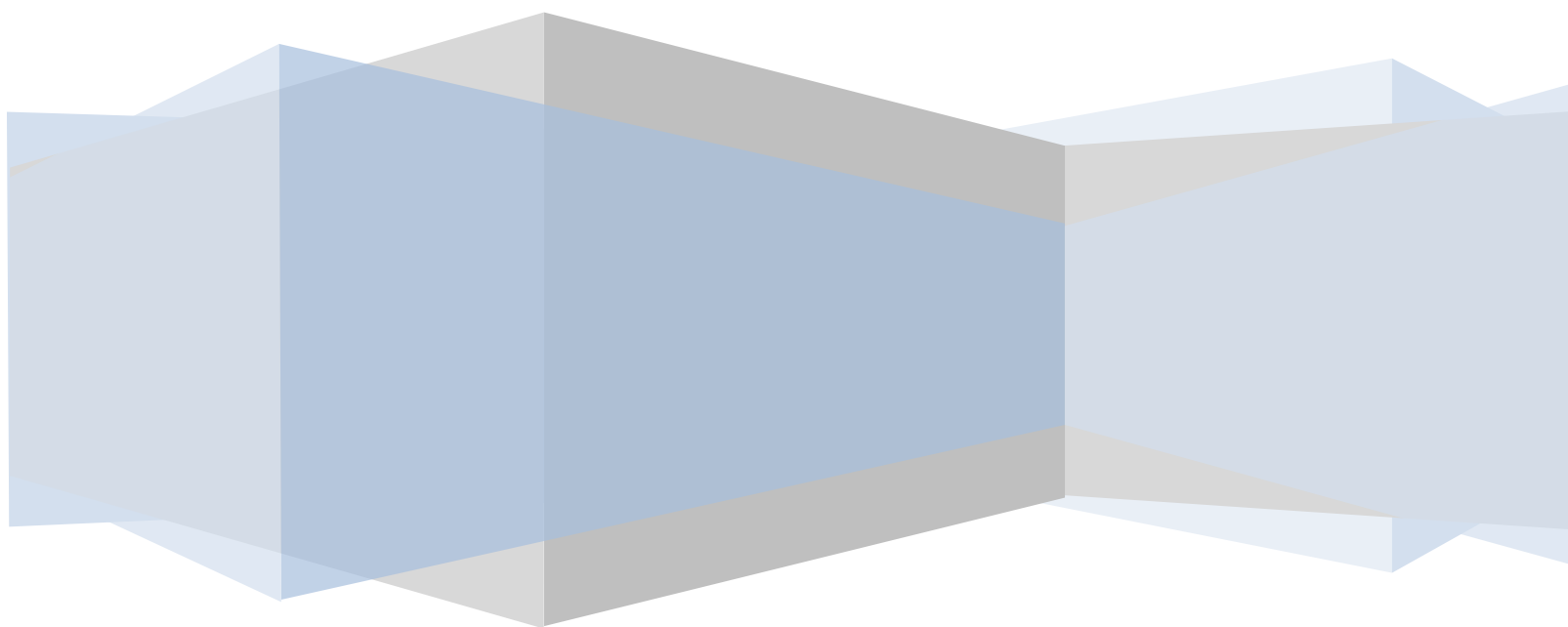
Map 3.2 ROAD MAP OF THE MUNICIPALITY OF JAGNA

Map 3.3 Infrastructure Facilities



Environment

A Sectoral Profile



Environment

GEO-PHYSICAL ENVIRONMENT

Geographical Location

Jagna is nestled along the southeastern coast of Bohol facing the Mindanao Sea. Located 63.2 kilometers from the capital city of Tagbilaran, this bustling town is bounded on the north by the municipality of Sierra Bullones, the blue waters of Jagna Bay on the south, and the towns of Duero and Garcia Hernandez on the east and west respectively. It has 33 barangays comprising a total land area of 12,063 hectares.

As a result of the process undertaken through the Barangay Development Planning through Participatory Rural Appraisal, the Municipality of Jagna is subdivided into three major categories.

The urban area of Jagna, appropriately called the Metro Jagna cluster is composed of the barangays of Bunga Mar, Can-upao, Looc, Pagina, Canjulao, Poblacion, Tejero and Pangdan. It covers a total land area of 316.05 hectares equivalent to 2.62% of the total area of the municipality.

The Coastal Jagna cluster is composed of barangays located along the coast fronting the Jagna Bay, other than those already classified as part of the Metro Jagna. It covers a total land area of 747.04 hectares or 6.19% and include Alejawan, Cantagay, Can-uba, Ipil, Larapan, Naatang, Nausok, Tubod Mar

Ninety one percent (91%) of the total land area of Jagna is considered to comprise the Upland Jagna cluster. With a total land area of 10,999.91 hectares, it covers the barangays of Balili, Boctol, Bunga Ilaya, Buyog, Cabungaan, Calabacita, Cambugason, Can-ipol, Cantuyoc, Faraon, Kinagbaan, Laca, Lonoy, Malbog, Mayana, Odiong and Tubod Monte.

Topography

The municipality is predominantly comprised of steep hills and mountains. The coastal areas are normally flat, but less than a kilometer away from the shoreline,(see Table 4.1) the slope changes from gently sloping to steep hills and mountains. 14.13% of the total land area is classified as level or nearly level. 28.62% on the other hand, is gently sloping to moderately sloping. While the rest of the area comprising the remainder of the 57.25% is classified as hills to steep mountains. Based on the slope classification, those areas identified as moderately sloping to mountains are classified as public or forestland areas. And for those level or gently sloping areas, they are classified as Alienable and Disposable lands. Forestlands using this classification will cover 59.42% of the total land area of the municipality.

SLOPES (%)	DESCRIPTION	AREAS (has)	% TOTAL
0 – 3	Level to nearly level	1,704.664	17.25
3 – 8	Gently sloping to undulating		
8 – 18	Moderately sloping to rolling	3,425.04	28.62
18 – 30	Rolling to hills	2,076.256	17.18
30 – 50	Steep hills and mountains	2,821.956	23.39
50 – above	Very steep hills and mountains	2,011.884	16.68
TOTAL		12,063.00	100.00

Table 4.1. Slope Category

Based on the slope category (see Table 4.1) , those areas having slopes of 18% and above area classified as public or forestland. Those areas with slope of below 18% are classified as Alienable and Disposable (A&D) lands. Forestlands using this classification will cover 59.42% of the total land area of the municipality. Areas with slope of 50% and above will be categorized as protection forests. Protection forests would then cover 17% of the total land area.

Geology

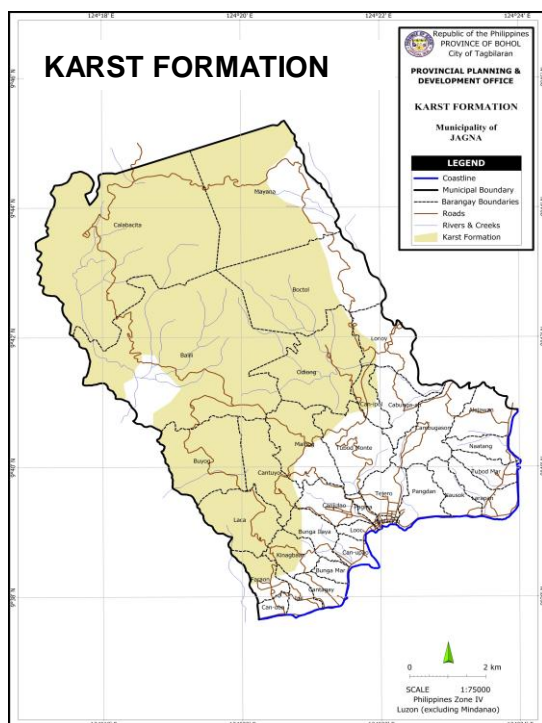


Figure 4.1

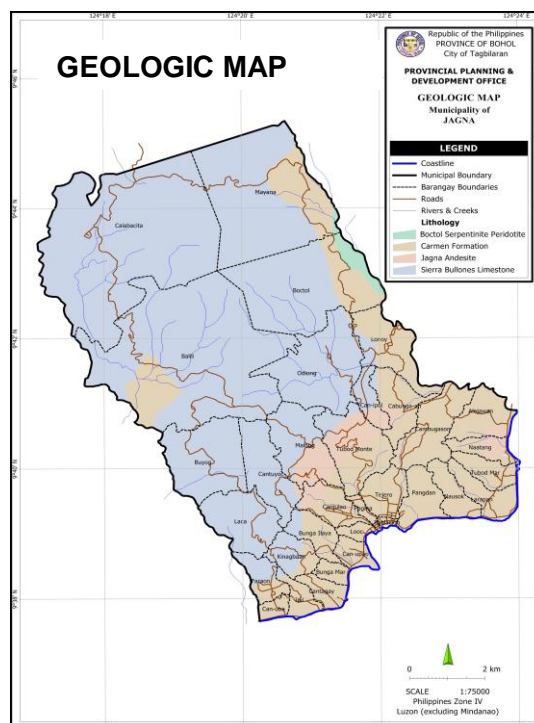


Figure 4.2

Soil Type

Soil composition in the area is of two types, namely, Calape Clay Loam and Annam Clay as indicated in the table below. Calape clay loam comprises 5.71% and occupies most of the urban area, while Annam clay covering 94.29% of the total land area.

SOIL TYPE	AREA (sq.m.)	% TOTAL
<i>Calape Clay Loam</i>	689.38	5.71
<i>Annam Clay</i>	11,373.52	94.29
	12,063.00	100.00

Table 4.2. Soil Type

Karst

Karst is defined as a terrain with special landforms and drainage characteristics due to greater solubility of certain rocks in natural waters than is common.

KARST formation, one of which is the Sierra–Bullones limestone, occupies 63.77% of Jagna’s Land Area. It is capped by a massive limestone strongly correlating with the *barili* formation of South Central Cebu. It is overlain with white marl.

Five Classifications of bedrock formation covers the municipality, namely: Sierra Bullones, Maribojoc, Carmen, Bocol Serpentine and Jagna Andesites.

GEOLOGIC CATEGORIES/CLASSIFICATION OF BEDROCK FORMATIONS		
TYPE	AREA (SQ.M.)	% TO TOTAL
Sierra Bullones (Usb)	7,555.22	62.63
Maribojoc (Pm)	137.26	1.14
Carmen (Mc)	3,771.44	31.26
Bocol Serpentine (Ptb)	59.86	0.5
Jagna Andesites (Mj)	539.22	4.47
	12,063.00	100.00

Table 4.3. Geologic Categories/ Classification of Bed Rocks

The Sierra Bullones formation occupies $\frac{3}{4}$ of the planning area. It is capped by a massive limestone strongly correlating with the *barili* formation of south central Cebu. It is overlain with white marl.

The Boctol serpentine is found in Brgy. Boctol. This type of geologic formation is highly crushed and brecciated. Strong and younger shears assume steep dips while older shears appear to be moderately dipping and obscured. Fractures have diverse orientation, but most of these crisscrossing structures are filled with magnesite veinlets varying from a few centimeters to six inches in places.

Maribojoc limestone is the youngest tertiary limestone in the province, it is non-fossiliferous, porous limestone which exhibits poor bedding or none at all. In Jagna, it dips gently seaward and shows rubbly to conglomerate limestone beds suggesting shallow marine environment of disposition.

The Jagna andesite is best exposed in Palingkod hill, Caluyahan hill, Tubod Monte creeks, Ilihan hill and the northern portion of Jagna. The rock exhibits cellular and/or vesicular structure. Hornblends and plagioclase crystals are well developed with minor amounts of biotite crystals. The matrix is generally glassy denoting its extrusive nature.

The Carmen formation is essentially composed of shale, sandstone, slabby to clastic limestone beds conglomerate siltstone, mudstone and marl. East Ilihan hill, thin to medium beds of the fine to medium grained shales are noted to be highly inundated in places the beds are much overturned, fractured and contacted. At Tubod Monte, the Carmen rests on andesite breccia and displays moderate to gentle dip shoreward.

The Alejawan River Valley trends roughly NNW-SSE and is surrounded mostly by the Sierra Bullones Limestones. The northwestern and eastern boundaries of the valley for the most part are along structural lines which follow the trace of major faults. These faults normally bring thick cliff-forming limestones of the Sierra Bullones to form typical gray limestone walls, which stand out prominently. The gently rolling valley floors are underlain by the deeply weathered volcanoclastic rocks of the Carmen Formation and the Cretaceous to Paleocene Boctol Serpentinites south of Mayana.

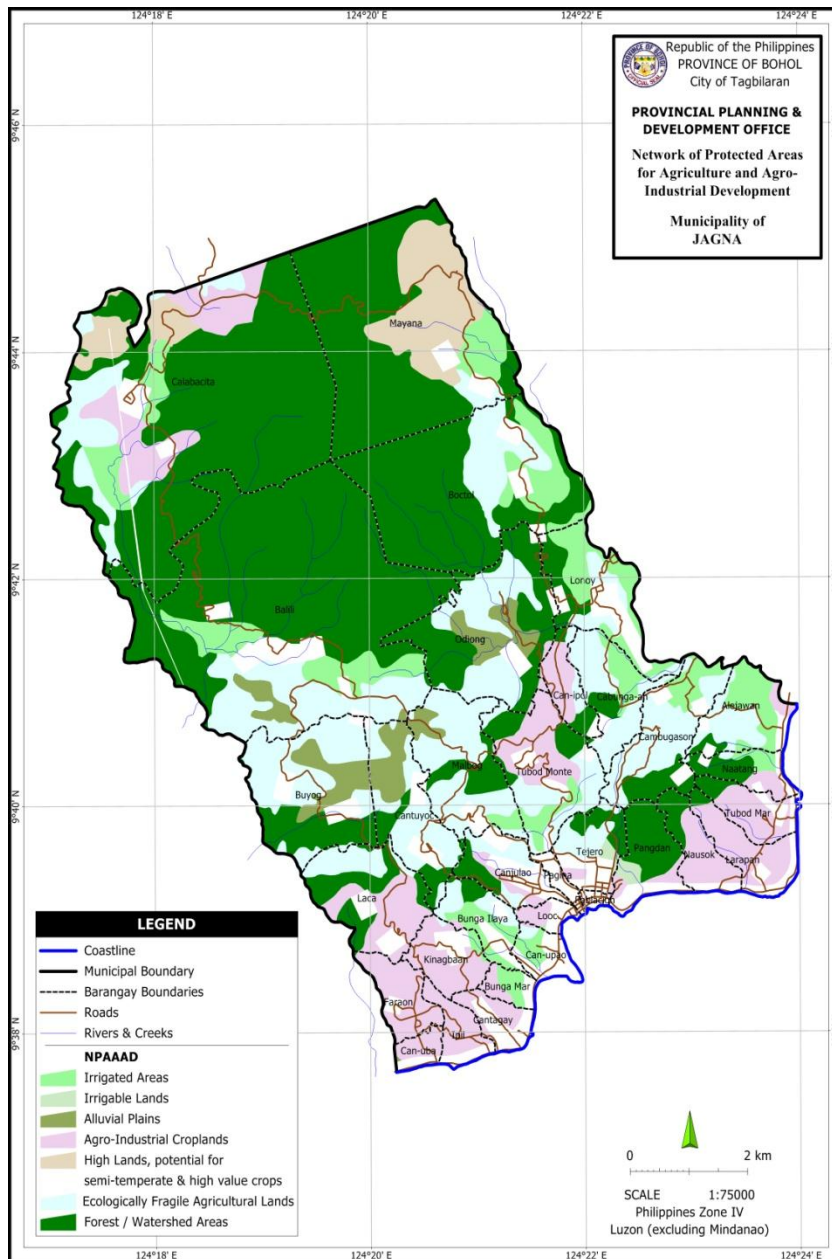
The Alejawan River Valley erodes along belts of volcanoclastic sedimentary rocks and limestones, and along fault zones. Rivers that cut through limestones generally have steep valleys. The landslide of July 2005 occurred in the upper part of the Valley where the elevations lie at 400 to 800 m, producing high hills.

Climate

Jagna falls under Type II climate classification described as having no pronounced dry season but with a very pronounced maximum rain period. Maximum rainfall is observed to occur on the months of August, September and October, even extending until December.

Located along or very near the eastern coast, as characterized by areas under Type II classification, Jagna is prone to the northeast monsoon (*amihan*). Based on the results of the Coastal Resource Management (CRM) survey in March 2002, the northeast monsoon

season is from October to May while the southeast monsoon (*habagat*) starts in June and ends in September.



Map 4.3 NETWORK OF PROTECTED AREA AND AGRO-INDUSTRIAL DEVELOPMENT

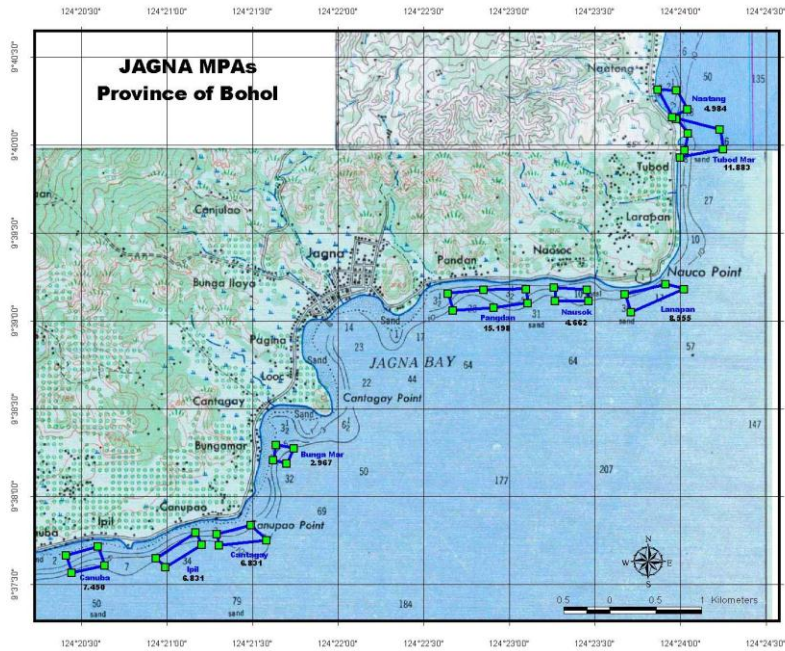


Figure 4.4



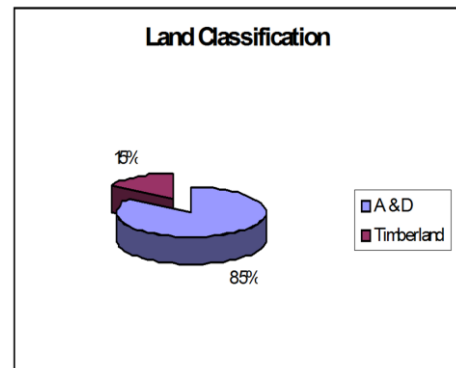
Figure 4.5

Land Resources

Based on PENRO Land Classification records, the Municipality of Jagna has a total land area of 12,063 hectares, which constitutes 2.93% of the total land area of the province. It is

generally classified into two: 1) alienable and disposable land is 10,200 hectares or 85 percent of the municipal area, and 2) timberland or forestland is 1,863 hectares or 15 percent of the total land area. However, the said existing land area used in planning is consistent with the NAMRIA, Land Management Bureau and is still subject to change if the municipality already approves its cadastral survey. The protection forests in the municipality are the areas declared as National Integrated Protected Areas System (NIPAS Act 7586) under Presidential Proclamation No. 881 otherwise known as Alejawan-

Cansuhay-Anibongan Watershed Forest Reserve (ACARWFR). The areas are situated in barangays Odiong, as National Park; Bockol, as Natural Monument; Mayana, as Wildlife Sanctuary; and Lonoy, as Strict Nature Reserve which comprises a total area of 1,863 hectares. All of the forestland areas are under the jurisdiction of DENR, CENRO Tagbilaran.



Mineral Resources

The municipality of Jagna has rich potential sources in limestone deposit, a very important component for cement production, all of these areas are outside the timberland or forestland area. The most part of the municipality is covered by Sierra Bullones bedrock formation, which is capped by massive limestone strongly correlating with the barili formation of South Central Cebu. In fact in previous years Barangay Malbog used to engage in quarrying of limestone for hollow block component production but due to the existing provincial law that prohibits any form of quarrying, the said practice has been stopped. Nickel, a hard malleable silvery metallic element that is resistant to corrosion and used in alloys is also found in the municipality.

Coastal Resources

The Municipality of Jagna has a total of 14 coastal barangays with a coastline of 14 kilometers stretching from Barangay Can-uba to barangay Alejawan with rich coastal resources, mangroves, sea grasses, corals and beaches. Among the known beaches of Jagna are Can-uba Beach, Bunga Mar Beach, Pangdan's Paseo del Mar, Delilah's Rock Resort, Batong-buhay Can-upao Beach and Alejawan Beach.

Record shows that the municipality has 146 fish species belonging to 27 families, of which 2.83% are target fish species while 96.78% are non-target species. (does not total 100%) The target fishes are those mostly favored by fishers either for food of their own or for the market. The non-target fishes are those which are not targeted for food because of their small size, but sometimes targeted for aquarium fish trade for export due to their colorful appearance. Damselfishes of family *Pomacentridae* and anthias of Anthiinae are the non-target species abundant in the area. Sea urchins (*tujom*) and sea stars, different species of

oysters, crown of fish sea star, sea cucumbers and giant clams are among the invertebrates thriving in the area. Based on the PCRA conducted by Bohol Environment Management Office (BEMO) and Coastal Resource Management Project (CRMP) in April 2002, 6 species of seagrasses were found in the coast of Jagna while 400 stands of *bakhaw* and 30 trunks of *pagatpat* are found along the coastline of Can-upao.

BENTHIC LIFE FORM ASSESSMENT

A. Tubod Mar Marine Sanctuary

Tubod Mar marine sanctuary is located opposite natural formations away from human settlements. The sanctuary characteristically covers an area along the reef flat to the reef slope and includes some areas covered with sandy substrate. The area under study is mostly covered with large colonies of soft corals while hard corals are sporadically distributed in the area at 8-10m deep. Based on the benthic assessment conducted, hard corals cover observed was only 7.8% inside the marine sanctuary as compared to 23% outside the sanctuary. Soft coral cover on the other hand, are higher inside at 66% and 50.8% outside the marine sanctuary.

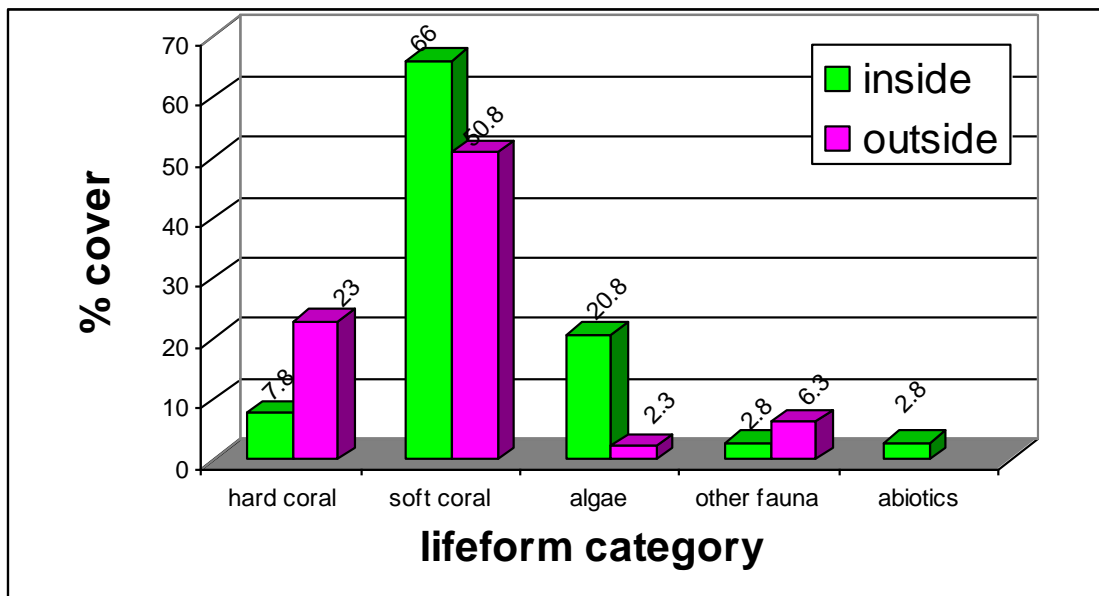


Figure 4.7. Comparison of life forms inside and outside Tubod Mar Marine Sanctuary

Among the live corals inside and outside the marine sanctuary, massive coral of the genera *Porites* has the highest count. Soft corals of the genera *Sarcophyton* and *Lobophytum* dominate the area of observation. Invertebrates observed along transects include anemones, feather stars, sea urchins and crown of thorn starfish.

Comparing the assessment data, there was a relatively higher live hard coral cover observed inside and outside the marine sanctuary in 2007 than the present study. Soft coral cover on

the other hand, has higher percent cover (66% inside and 58% outside the marine sanctuary) compared to the assessment conducted in 2007. Large discrepancies of observation of the different life forms with the previous monitoring could be attributed to the area where the transect lines are laid.

B. Pangdan Marine Sanctuary

The coral reef in Pangdan marine sanctuary exists in patches located in shallow water at 3-4 meters deep. The reef is generally flat and gently slopes towards the sandy bottom area.

The dominant lifeforms are coral branching (cb) and coral massive (cm) belonging to the *Porites* genera. Hard coral cover is 48.5% inside and 30.35% outside the marine sanctuary. Presence of algae both outside and inside the sanctuary is relatively high at 33.5% and 31.25%, respectively. Abiotics to include sand, rocks and coral rubbles is 15.5% and 29.9% inside and outside the sanctuary. Invertebrates observed include sea urchins, anemones, feather stars, giant clams, and crown of thorns starfish.

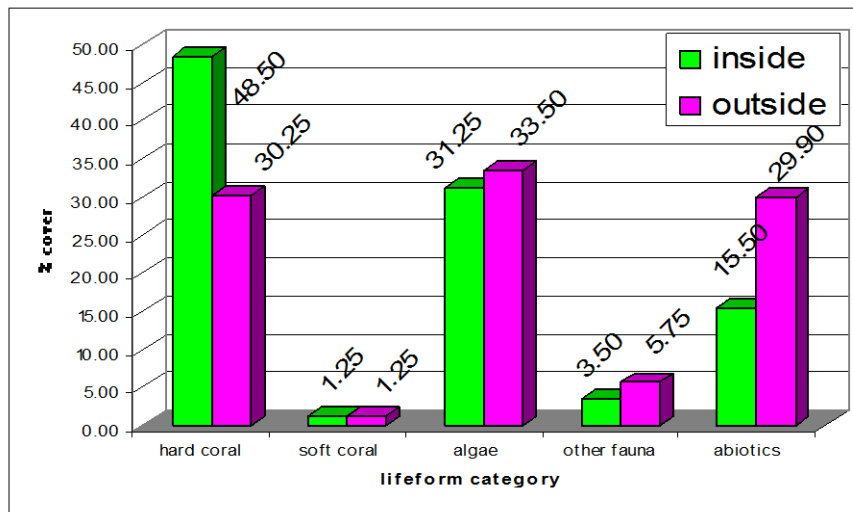


Figure 4.8. Comparison of benthic lifeforms inside and outside Pangdan Marine Sanctuary

In addition, the researcher counted the abundance of crown of thorns starfish and found out 48 individuals within 10m x 10m on both sides of the 50m transect. The large number of these coral-feeding animals could threaten the live hard coral cover of the sanctuary.

C. Naatang Marine Sanctuary

Naatang Marine Sanctuary is located adjacent to Tubod Mar Marine Sanctuary. The sanctuary covers patches of coral reefs in shallow waters at 3-5m deep sloping toward sandy bottom area. Due to time constraints, assessment was only conducted inside the sanctuary. Hard coral cover was 36% while soft coral was 20.50%. Algae covered 29.5% of which dead coral with algae is 21.5% (see Figure 4.9).

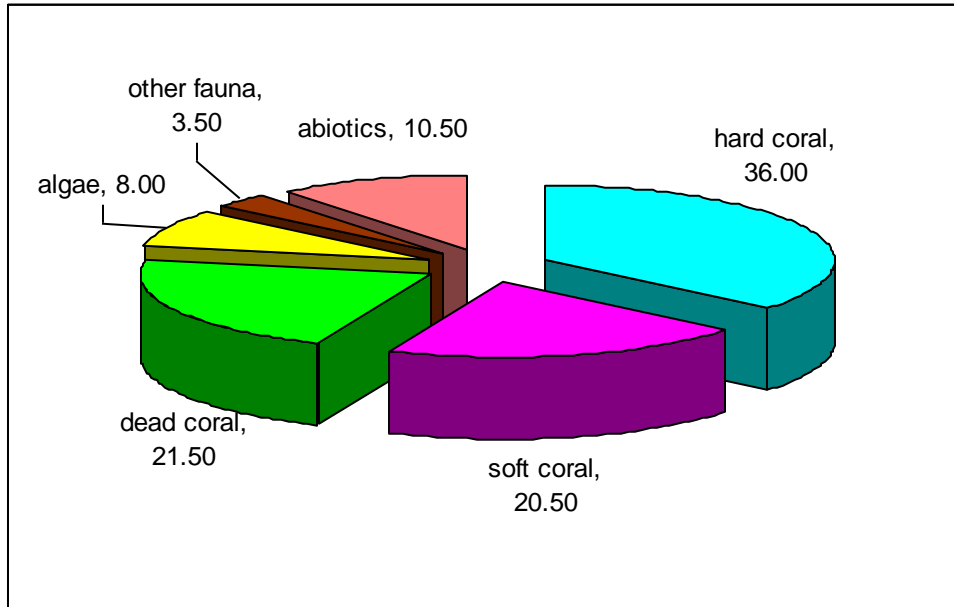


Figure 4.9. Percent benthic cover inside Naatang marine sanctuary.

During the study, horizontal and vertical visibility in the area was less than 10 meters. This may be because of the rain a day before the assessment. Increase in suspended solids flowing from the creek near the sanctuary. Solid wastes (e.g. plastic) and debris (e.g. wood, tree branches and coconut leaves) were also observed inside the sanctuary.

A total of 2,500 sq.m was observed with ten transects conducted inside and outside of the three sanctuaries. Fish individuals counted to a total 1,021 inside and outside Tubod Mar marine sanctuary. Pangdan had 938 fish individuals and Naatang had 818 fish individuals with the highest count despite that only two transects were established.

The most abundant fish species in most of the established transects were the Mollucca Damsel (*Pomacentrus molluccensis*) followed by Ring-tail cardinalfish (*Apogon aureus*), dark damsel (*Pomacentrus aguilus*) and black-tail sergeant (*Abudefduf lorenzi*). Fusiliers and acanthurids are quite abundant especially that they usually occur in schools in the deepest part of the transect.

Target species like snappers (Lutjanidae), groupers (Serranidae), surgeonfishes (Acanthuridae) and rabbitfishes (Siganidae) are less abundant or totally absent in some of our transects. This may be attributed to overexploitation.

Pangdan MPA is quite diverse in terms of fish population with the total of 938 fish species counted inside and outside the sanctuary. Again, family Pomacentridae has the highest number followed by Apogonidae and Labridae.

This Naatang marine sanctuary has the highest fish counted among the three sanctuaries with a total of 818 fish individuals. The team conducted transects only inside the sanctuary because the areas outside of the sanctuary were covered with sandy substrates with patches of hard corals and seaweeds (*Sargassum sp.*)

Freshwater Resources

The Municipal Government of Jagna is also conserving and protecting the abundant water resources of the municipality. This prompted the LGU to enact the following: the Environment Code, the Coastal Resource Management Code, the Local Fishery Code and the Marine Protected Area Plans. Fish wardens and Bantay Dagat Task Forces have been organized and deputized for the enforcement of these codes. Certainly, enactment and implementation of these codes attributed to the garnering of Jagna of the award as Best LGU on SWM Enforcement and Implementation and it becoming an appropriate learning site on SWM implementation in the province.

Table 4.4. Existing Surface Water

Municipality of Jagna

SURFACE WATER	LOCATION	CLASSIFICATION
Alejawan River	Boundary of Jagna and Duero	Public Water
Balili Spring	Balili	Public Water
Kinahugan	Cabungaan	Public Water
Lonoy Spring	Lonoy	Public Water
Odiong	Odiong	Public Water
Lonoy Creek	Lonoy	Public Water

Source: Municipal Engineer's Office LGU Jagna 2007

Biological Resources

Mangroves

Naturally grown mangroves of 400 stands of *Bakhaw* (*Rhizophora sp.*) and 30 trunks of *Pagatpat* (*Sonneratia alba*) exist only along the coastline of Barangay Can-upao. Assessment results show that majority (70%) of the *Bakhaw* species are classified matured while the *pagatpat* species has more or less equal percentage of young and mature trees.

Seagrass

Participatory coastal resource assessment results conducted by BEMO and CRMP TWG in April 2002 show that there are six (6) species of seagrasses in the coast of Jagna. Barangays Can-uba and Naatang have substantial seagrass cover as well as Barangay Ipil, Can-upao and Pangdan. These seagrasses grow mostly on rocks and rocky surfaces.

Estuaries

The municipality has five major estuaries. These are located in Barangays Alejawan, Pangdan, in barangay-boundaries of Pagina-Looc and Pagina-Poblacion, and in barangay Can-upao. Secondary small estuaries also exist in Barangays Poblacion, Larapan, Looc, Can-uba, Can-upao and Naatang.

Coral Reefs and Associated Organisms

An assessment of coral reefs in 10 out of 14 coastal barangays conducted by BFAR-7 revealed that the habitat condition of the areas is rated fair with an average live hard coral cover of 43.80%. Majority of the barangays have a fair rating of live hard coral cover ranging from 29.37% to 48.33%. Only two of the barangays assessed, namely Tubod Mar and Can-upao, have good and excellent habitat conditions, respectively. However, the CRA Technical Report (2002) pointed out that the reefs are threatened by human activities since there is a trace of dead corals with algae as well as coral rubbles in Barangays Ipil and Pangdan. Barangay Pagina, on the other hand, has no corals at all since the town's port is found in this area.

A total of 146 species from 27 families of coral reef fishes were observed within the reefs of Jagna. Majority of the fish species noted in the coral reef ecosystem were the non-target species. Non-target fish species such as damselfishes and wrasses were varied and diversified compared to other species. Conversely, target species, such as parrot fishes and surgeon fish, were common in the area. Jagna reef obtained a mean of 9.52 diversity rating.

Common invertebrates observed were mostly sea urchins and sea stars.

Other important marine species in the locality are the manta rays, which are considered the main source of income of fisherfolks in Barangay Bunga-Mar. The fishing of manta rays is totally banned after the said species was declared to be endangered by the DA-Bureau of Fishery & Aquatic Resources (BFAR). Flying fish (Bangsi) is considered a highly commercial species of which a great volume of annual fish catch has been noted especially during the months of April to May.

Figure 4.10

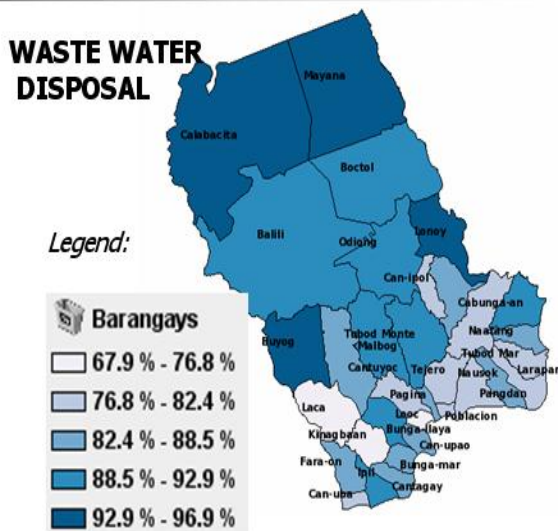
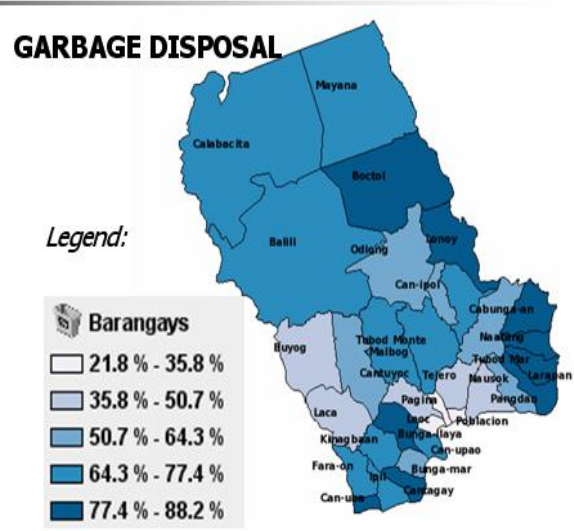


Figure 4.11



Waste & Garbage Disposal

PDMS Data 2009 shows that 3,948 HHs or 62.7% of household population is using Environmentally Unfriendly Garbage disposal which means that they are still practicing the burning and dumping of garbage. Meanwhile 5,463 HHs or 86.76% of household population is using Environmentally Unfriendly Waste Water Disposal meaning the water disposed flows from the sink to the ground either closed or an open pit.

Solid and Liquid Waste Management

Eight barangays within the metro Jagna (Poblacion, Pagina, Tejero, Canjulao, Pangdan, Looc, Can-upao and Bunga Mar) with a total of 1,316 households (HH) are into waste segregation and collection method of garbage disposal. These barangays which is 24% of the 33 barangays are availing the services of garbage truck, compactor and backhoe in the collection and waste segregation. The garbage collection services of the LGU are manned by twelve (12) staff hired by the LGU of Jagna. However, garbage collection services is hampered due to lack of waste and garbage disposal equipment.

Meanwhile, the rural barangays are still practicing Open Pit (250 HH); Compost Pit (66HH); and Open Burning (926 HH) which pose pollution problems and danger to the health conditions of the people of these barangays. However, the existing dumpsite has been ordered for closure since it violates R.A. 9003. The LGU in compliance to the law is now regulating the type of wastes being disposed into this facility. Only residual are allowed for disposal. At present, Jagna has a 1.5 hectares existing dumpsite located in Bunga Ilaya and Canjulao. Likewise, in compliance to R.A. 9003 the LGU has already a 4-hectare sanitary landfill at Barangay Tubod Mar where one (1) hectare has already been acquired for phase I

project implementation. The topographic map and design of the facility is already in-place. The sanitary landfill Phase I is soon to commence. However, there is an opposition from the local residents on the establishment of a sanitary landfill that still needs to be resolved. A series of consultation meetings have been made by the Local Government Unit at the barangay level down to the purok level. Majority of the municipal waste is generated from the households followed by the commercial establishments, institutions, service facilities and the establishments producing special waste. Eighty (80) percent of the households living in the urban barangays produces 10.7 tons of solid waste daily of which 67% are biodegradable which are disposed through various waste disposal methods such as open burning, throwing into creeks, rivers and canals, disposal through garbage collectors and selling to scrap and junk buyers. These practices would show that to a large degree, waste segregation is not performed especially at the rural areas. The non-segregation of waste and improper waste disposal have resulted to the further degradation of the environment.

Collection and disposal of waste is inconsistent. Coupled with the clogging problem due to poor drainage, all these factors effect negative impacts to the health of the people as well as to the marine resources. An efficient garbage collection and disposal system is the need of the municipality of Jagna. A massive campaign to educate the people in the barangays on the proper ways and management of waste shall be given priority by the LGU. Since the management of solid waste needs manpower and resources which largely depends on the financial resources of the LGU, waste segregation, recycling, reuse and reduction of solid wastes at source is helpful.

The waste collection route services the eight barangays. Garbage collection follows a system. Daily collection of biodegradable and residuals is done early in the morning in the market area in Barangay Looc of biodegradables and residuals is done early in the morning. Municipal sweepers collect segregated garbage from each stall using a push cart with two compartments.

The waste are right away brought to the Central Composting Facility in Barangay Pagina. Collection is done in Barangays Pangdan, Tejero, Poblacion and Pagina in the morning while Looc, Can-upao, Canjulao and Bunga Mar are scheduled in the afternoon. About an hour prior to actual collection, an announcement is made to alert households to bring their garbage to the nearest collection area.

Recyclables are collected in all eight urban barangays every 4th Saturday. Toxic and hazardous waste are collected every 4th Sunday of the month.

Liquid waste management also posses a major challenge for Jagna. The Municipality is currently utilizing an outmoded slaughterhouse without a proper liquid waste facility, making the vicinity unsanitary. What is worse is that it is very proximate to the public cemetery.

JAGNA, Solid Waste Management Learning Sites

Jagna is one the municipalities which is a recipient of the technical assistance from Enviropnmental Governance (EcoGov), a USAID funded project in cooperation with Bohol Environmental Management Office (BEMO) and Department of Environment and Natural Resources (DENR). This aims to enhance transparency, accountability and participatory decision-making in public sector efforts to reduce threats to the sustainable use of resources and to improve the delivery of environmental services specifically on efficient solid waste management system. Jagna was a pilot LGU in Region 7 for the social marketing campaign on solid waste management making the municipality a learning site of Iakbay-aral for national and even Asian groups. The 10-Year Integrated Solid Waste Management Plan and the ISWM ordinance are all in place. These lead in the implementation of proper management of the solid waste of the municipality.

VULNERABLE RISKS AND HAZARDS



Map 4.12



Map 4.13

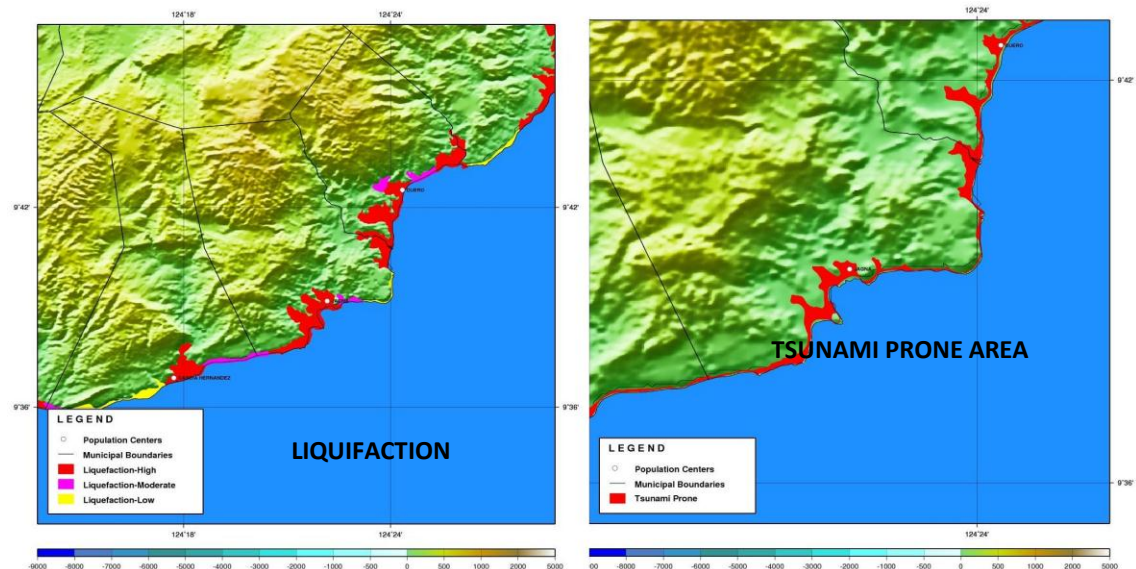
- a) Environmentally Constrained Areas prone to natural hazards like flooding, earthquake, rain-induced landslide, tsunami and liquefaction as shown in Table 4.12.

Table 4.5. Natural Hazards/Disaster Prone Areas

Type of Natural Hazards	Location	Remarks
1. Flood prone	Alejawan, Bunga Mar, Cabungaan, Can-upao, Looc, Naatang, Pagina, Poblacion, Tejero	
2. Rain-Induced Landslide	Faraon, Bunga Ilaya, Canjulao, Tejero, Pangdan, Cambugason, Naatang, Alejawan, Can-ipol, Cabungaan, Laca, Balili, Lonoy Tubod Monte, Cantuyoc, Ipil, Boctol, Malbog, Odiong, Nausok, Calabacita, Mayana	Highly susceptible to rain-induced landslide
	Bunga Ilaya, Pangdan, Alejawan, Cambugason, Cabungaan	Prone to landslide accumulation
3. Tsunami	Can-uba, Ipil, Cantagay, Bunga Mar, Bunga Ilaya, Can-upao, Looc, Poblacion, Pagina, Tejero, Pangdan, Alejawan, Naatang	
4. Liquefaction	Can-uba, Ipil, Cantagay, Bunga Mar, Bunga Ilaya, Can-upao, Looc, Poblacion, Pagina, Tejero, Cambugason, Alejawan, Naatang, Pangdan	Highly susceptible to liquefaction
5. Storm Surges	Tejero, Poblacion, Pagina, Looc	Inundations of 4-12 meters
	Poblacion, Pagina, Looc, Can-upao, Bunga Mar, Cantagay, Ipil	Inundations of 1-4 meters

Source: Administrative, NAMRIA, PHIVOLCS-DOST, OCD (READY Project)

- b) Environmentally Critical Areas. These areas shall be planned carefully where non-suitable land uses should not be allowed in the identified watershed area.



Map 4.14 Jagna Liquefaction and Tsunami Prone

HAZARD and DISASTER RISKS AREAS

Based on the rapid and community assessment conducted by PHIVOLCs and OCD under the READY project in February 2007, the municipality of Jagna is susceptible to some disaster and hazard risks. Among them are rain-induced landslide, storm surges, tsunami, liquefaction, flooding and ground shaking hazards. One of the mitigations identified to address the phenomena is by having LGU personnel trained who can make an analysis of the rainfall through a rain gauge particularly in the upland barangays like Mayana, Calabacita, Bocktol, Balili, Odiong and Lonoy and make recommendations for corrective measures. Flood control and river dikes are also monitored by the office of the municipal engineer ensuring safety and preventive measures for the flood prone barangays.

Tsunami and Liquefaction Prone Areas

Thirteen (13) barangays located in the coastal zone are exposed to tsunamis. These are located in Can-uba, Ipil, Cantagay, Bunga Mar, Bunga Ilaya, Can-upao, Looc, Poblacion (Pondol), Tejero, Pangdan, Alejawan, Naatang and Tubod Mar.

Rain-induced Landslide

Among the barangays highly susceptible to rain-induced landslide are Faraon, Bunga Ilaya, Canjulao, Tejero, Pangdan, Cambugason, Naatang, Alejawan, Cabungaan, Can-ipol, Tubod

Monte, Laca, Cantuyoc, Malbog, Balili, Odiong, Nausok, Lonoy, Bockol, Calabacita, Mayana and Ipil.

Storm Surges

There are eight (8) barangays in Jagna that are susceptible to storm surges. Barangay Tejero, Poblacion (Pondol), Pagina and Looc. They have inundations ranging from 4-12 meters while barangay Can-upao, Bunga Mar, Cantagay and Ipil have 1-4 meters inundations.

Flood Prone Areas

Most flooding in the municipality of Jagna occurs on floodplains. These are natural water storage areas containing rivers or creeks that flow continuously or intermittently. Historically, the easy access to water and the rich diversity and fertility of the flood plains have always attracted human settlements. Hence, with the ever-increasing human intervention in the upstream catchments, the downstream consequences and risks increase.

It is observed that the flood prone areas with state height of floods that range from 0.4 meters to 1.2 meters high during heavy rains, more so during high tide, are in the barangays of Looc (0.4m), Tejero (0.5m), Pagina (1m), Pondol, Poblacion (1m) and Bunga Mar (1.2m). Since flooding is a natural hazard and it is affected annually by intensive tropical weather patterns, it resulted to a very significant financial cost and personal hardship within the affected areas in the municipality. It is also often exacerbated by ignorant and negligent human intervention in the environment.

Nevertheless, floods are to a great degree predictable in terms of location, depth and extent and therefore appropriate measures can be taken to reduce flood risk and impact in the community.

Table 4.6. Flood Prone Areas

Municipality of Jagna

Barangay	Frequency				Remarks (state height of floods and other relevant information)
	Annually	Every 5 years	Every 10 years	Every 100 years	
Alejawan	✓	✓			0.60 m
Bunga Mar	✓	✓			0.25 m
Cabungaan	✓	✓			0.50 m

Can-upao	✓	✓			0.50 m
Looc	✓	✓			0.40 m
Naatang	✓	✓			0.60 m
Pagina	✓	✓			0.50 m
Poblacion	✓	✓			0.50 m
Tejero	✓	✓			0.25 m

Source: MPDC LGU Jagna 2007

Based on this information the LGU of Jagna can make better choices about residential environment and business investment. Therefore land use planning is recognized as being the best means of avoiding or minimizing future flooding problems that stress risk to life and property damage. Strict and uncompromising enforcement of strategies and controls to counter flooding is very vital.

There are so many issues that are of much significance as to warrant the national regional, provincial and local policy planning approach. While consequences will inevitably be felt at the LGU level, planning solutions should be driven from a higher authority. Coordination and integration are very imperative in order to achieve the goal. LGU through its development assessment and enforcement role can take positive action to minimize local impacts.

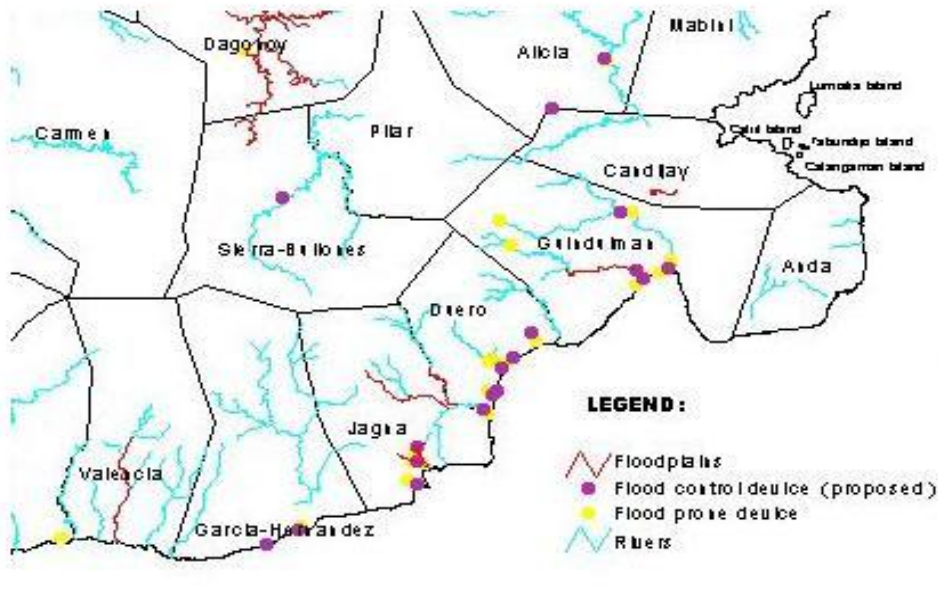


Figure 4.15

Potential Erosion Areas

With hilly and mountainous terrain and with soil composition predominantly clay, most areas in the Municipality are classified as having severe susceptibility to erosion, as this comprised 68.53% of the total land area. Almost all of the barangays in the municipality have portions having severe susceptibility to erosions.

Table 4.7 Erosion Potential

EROSION POTENTIAL		
DESCRIPTION	AREA (Hectares)	% to Total
Not Susceptible to Erosion	3,795.69	31.47
Very Highly Susceptible to Erosion	8,267.30	68.53
TOTAL	12,063.00	100.00

MAYANA LANDSLIDE INCIDENCE

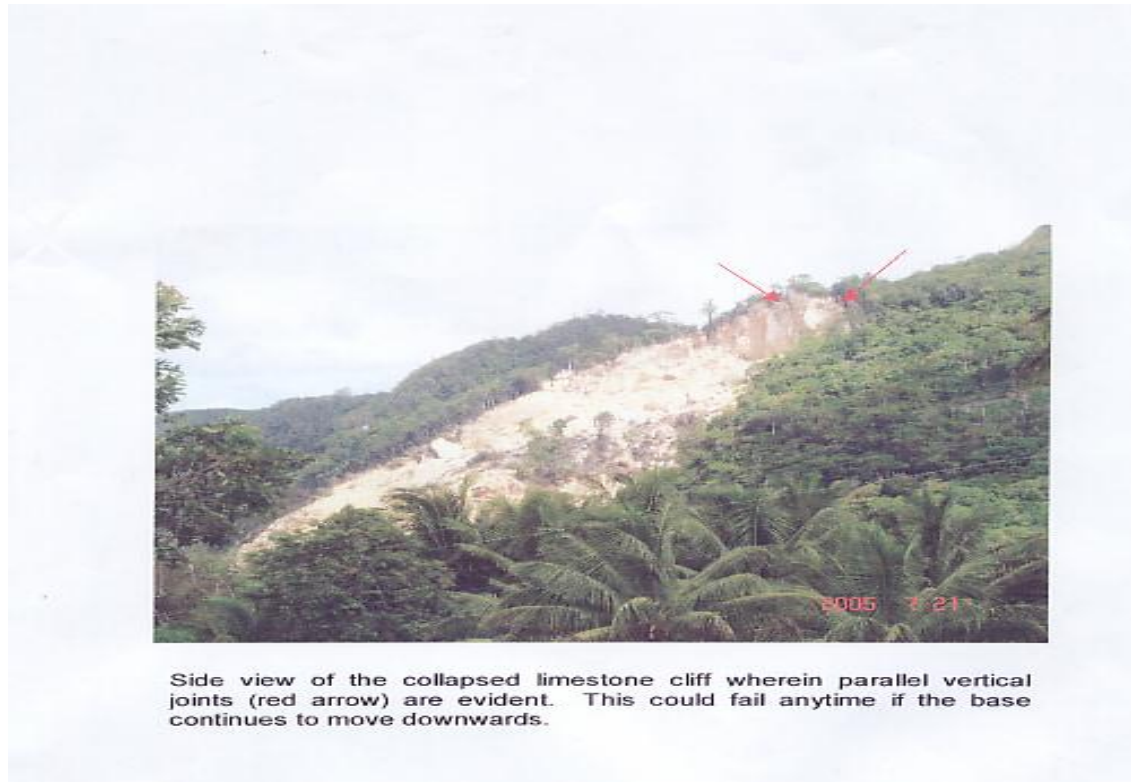


Figure 4.16 Mayana Landslide

Earthquake-induced Landslide

It was on July 11, 2005 a landslide incident occurred in Sitio Balikbayan, Mayana which immediately damaged 10 houses and about 16 farmlots. The landslide debris continued to move and the cracks stretched to 1 kilometer, approximately 50 meters from the national road. It continued to move towards two more sitios/puroks (Sitio Ilaud) and damaged more houses and agricultural crops as well as the Jagna-Sierra Bullones National Road and the barangay roads connecting Sitio Balikbayan and Sitio Ilaud.

The damage during the disaster was about 160 hectares or 38% of the land area of the Barangay. A total of 112 families or 28% of the total families in the barangay had damaged houses and farmlots which affected their agricultural production. About 800 meters affected Jagna- Sierra Bullones National Road while 200 meters that of the Balikbayan-Ilaud Barangay Road. The downward movement of the cracks from the national road has stretched to about a kilometer and is only 100 meters away from the river that serves as the municipal boundary of Jagna and Duero. Landmass growth is visible along the river path and national roads at about 20 meters high. The estimated cost of damages was Php

14,519,790.00 which includes houses, agricultural crops, infrastructure like roads (national and barangay), water system and solar dryer.

The Mayana landslide in 2005 was recorded as the most unforgettable natural disaster in Jagna that triggered the Local Government Unit and the Municipal Disaster Coordination Council (MDCC) in mainstreaming disaster response and management in the local development planning agenda of the municipality. A unified effort coming from different government agencies, private institutions, and non-government organizations to provide all out support to the affected families was done and facilitated in less than a year from the reopening of the national road which had been cut off and initially provided for the rehabilitation of agriculture and livelihood of the affected families. Linkages with the University of the Philippine – National Institute of Geological Sciences (UP-NIGS) and Mines and Geo-sciences Bureau (MGB) VII for post disaster coordination have been established and tree planting activities not only in watershed areas but also in landslide prone areas have been undertaken. Assistance for victims of natural and man-made disasters have been provided.

Technical Findings and Recommendations of the MGB, DENR R7:

1. There is an indication of a possible presence of a fault of which movement of this inferred fault in the past could have caused the development of fractures and joints in the limestone and the underlying rock formation;
2. Observed fracturing and minor rock falls on the limestone in the past indicate that the site has undergone minor slope or ground movement;
3. The earthquake which occurred in March 31, 2005 may have contributed to the instability of the rock formation
4. The main cause of the landslide is due to the presence of cavities within the limestone formation. The periodic lowering (caused by shrinkage and compaction) and increase in ground level (buoyant effect on rocks) which affected stability of the formation.

It was further recommended that the people should be restricted from venturing into the affected zone. The houses near the periphery of the affected area should be relocated immediately as well as those along the path of the landslide debris. There should be a regular monitoring of the advance of the landslide debris. Residents should be vigilant during the rainy period since this could trigger the debris to move faster. Presence or occurrence of new cracks/fractures should be reported immediately.

Assessment of Hazard and Technical Findings from UP-NIGS

The very large (52 ha. as of 13 August 2005) landslide originated as a rock fall along a very steep NW-trending fault scarp in the Sierra Bullones Limestone in Sitio Balikbayan. The rock falls started on 11 July 2005. Earlier, a surface-wave magnitude 4.9 earthquake with

epicenter in Sierra Bullones (about 46 km east of Tabilaran City) occurred at 8:25 p.m. on 31 March 2005. The epicenter is roughly only 8 km west of the site of the landslide occurrence and is probably related to the movement along the East Bohol Fault. No typhoon had affected the province more than half a year before the landslide. The earthquake probably triggered the landslide in Barangay Mayana. The debris fell on an area underlain by older limestone landslide debris and thickly weathered soils from the underlying volcanoclastic rocks of the Late Miocene Carmen Formation. The slope of the landslide is only about 13% ($7\frac{1}{2}^\circ$). The landslide is elongate, oriented east-west, and has a total length of 1.4 km as of 13 August, 2005.

The zone of depletion (proximal part) of the landslide debris occurs mainly in Sitio Balikbayan, has a width of about 400 m, and consists dominantly of blocks of limestones, whereas the debris in the zone of accumulation (distal part) in Sitio Ilaud, with a width of 260 m, consists of relatively intact soils derived from the weathering of the volcanoclastic sediments. The large blocks of limestones in Sitio Balikbayan are unlikely to be remobilized during the rainy season, but can have continued translational motion as they move as a single mass over a slip plane in the Carmen Formation; whereas, the landslide debris blocking the Mayana River is susceptible to remobilization as debris flows and cause landslide dam failure that could extend into populated areas on the lower reaches of the Alejawan River.

Possible Mitigation Options

People are advised not to cross the landslide debris during and shortly after a heavy and/or prolonged downpour.

Tension cracks in the ground are the surface manifestations of movements in the subsurface. In plan, they are commonly concentric or parallel, and have widths of a few centimeters and lengths of several meters. The formation of cracks and any increase in their rate of widening is a common measure of impending slope failure. These cracks have to be recognized, monitored, and local residents must be warned of impending slope failure over these cracks. If possible, cracks should also be monitored in the crown (source area).

A natural breach from an Alihauan landslide dam could quickly release a considerable volume of water. A flood generated by such a water release will flow at high velocities through the narrow valley, allowing little time to warn and evacuate downstream inhabitants. Downvalley in the broader floodplain, the effects of the flood are more difficult to estimate, but it will likely have detrimental effects. To minimize the impact of this flooding, a spillway could be excavated through the landslide debris that would reduce the volume in the impounded lake and reduce the size and effects of the potential flood.

A spillway will have to pass through the most likely breach point of the dam. It is important to monitor closely the filling of the lake to better gauge when the water will cause failure of the breach point and, therefore, when flood waters will flow down the Alihauan channel.

A spillway excavated across the landslide should be as deep as possible given the constraints on time before the lake fills, and the available equipment and resources. The deeper the spillway, the less water will be impounded in the lake.

As the lake level approaches the spillway elevation, all residents in the downstream parts of the Alihauan River (Boctol, Lanoy, Cambugason and Alejawan) should be warned and evacuated in advance of a flood. Finally, the landslide dam should be monitored regularly throughout the rainy season to constantly assess any significant changes in the dam's stability.

People should keep away from areas that could be flooded by this portion of the river if it reaches 6 m deep.

Effects of Flooding Downstream of the Alejawan River

In the absence of detailed flood-modeling study, coupled with the absence of hydrographs for this river, it is difficult to accurately assess the effects of a flash flood.

Catastrophic failure of an Alejawan dam would generate a potential flash flood. Upon failure, the flood could reach a maximum discharge of a few thousand cubic meters per second and velocities of a few tens of meters per second.

If the lake breaches naturally, the landslide dam would erode rapidly because it is composed primarily of soil. A dam breach would release a considerable volume of water from the lake and may cause downstream flooding that could threaten people and property in the lower parts of the Alejawan valley. Based on the estimated peak velocities, a dam breach would allow only a few minutes for the lake waters to reach the low lying Barangays of Lonoy, Cambugason and Alejawan.

At Brgy. Lonoy, the Alejawan valley abruptly widens, and the river flows onto the broad floodplain. In the confined, narrow bedrock valley, a flood will retain much of its velocity, energy, and erosive power, but in the valley's broad lower reaches, a flood will spread across the floodplain, dissipating its energy but inundating large areas of the floodplain. A flood with a peak discharge of a few thousand cubic meters per second could inundate most of the river's floodplain.

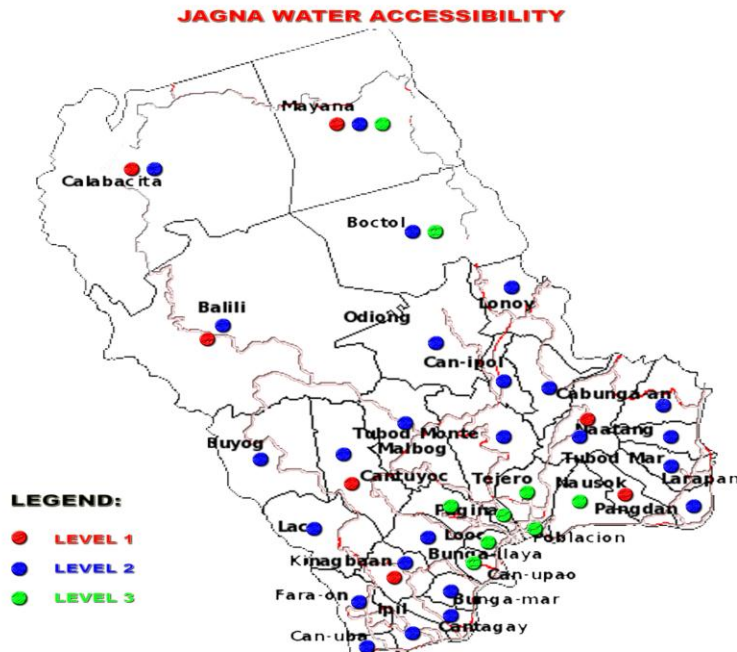


Figure 4.17 Jagna Water Accessibility

Jagna has an abundant supply of water but it flows to the tributaries of its neighboring towns. This condition has deprived many barangays for adequate potable water and water source for their farmlands.

Access to safe and potable water to many Metro Jagna barangays and a portion of an upland barangay is provided through the Jagna Waterworks System which is classified as Level III. Except for one barangay which has yet to install its water system and another barangay with a Level III water system, the rest of the barangays are in Levels II and I.

Yet, there is about 30% of the household population in Jagna which has no access to safe and potable water. Even the municipal waterworks system has yet to replace the old and small pipes with bigger ones and has to construct a bigger water reservoir to complete the ongoing rehabilitation work. The rehabilitation is necessary for the system to effectively and efficiently provide water service and expand service coverage to coastal barangays and Metro Jagna- from Brgy. Ipil to Brgy. Pangdan.

Surface water in Lonoy is one of the major water sources of the town proper. The Tinubdan Spring in Lonoy is the main source of potable water drawn by gravity down to the water reservoirs located in Barangay Canukso, Cambugason and in Tejero. Other use of surface water is for the irrigation of the rice fields and farms in the barangay. The municipality may experience water scarcity especially during summer time or in season where there were only few rains. During this time there is a schedule of water service delivery in some areas like Canjulao and Can-upao. The water system uses chlorine to purify water in the absence of filtration process to make it potable. One of the problems encountered during heavy rain

is the milky-like water due to the water source situation where the channels of water underground is prone to soil erosion where there are several channel of open caves above the water source and it goes to the Tinubdan Spring in Lonoy. The waterworks system has no filtration facility to address the issue on milky water supply but the administration is planning to establish one. Most of the barangays in Jagna has a Level II access of water with some few areas in the upland barangays having only a Level I water system wherein they collect water from undeveloped springs and open wells.

When it comes to the potability of water, the sanitary inspector of the municipality conducted a water bacteriological laboratory test regularly and it was found out that the water coming from Lonoy is not suitable for drinking and is positive of ecoli. Also, sanitary inspector would conduct an inspection to all food handling establishment that uses water and there were some who fail to comply with the recommendations of the sanitary inspector as far as sanitation is concerned.

Environment and Economic Opportunity

- Based on PDMS 2009 Results, 15.95 % of the populations are farm workers ; to mention are the victims of Mayana landslide in 2005 wherein their income depends largely on agricultural produce; their farm lots have been totally affected hence they are now unproductive;
- Lack of macroeconomic policies to attract investors to access their natural resources
- Depleted soil fertility due to excessive use of commercial fertilizer that resulted in fertilizer dependence
- Increase of growth rate per year might have an impact to resource degradation given the same yield of produce with less workers to go into farming

Environment and Security

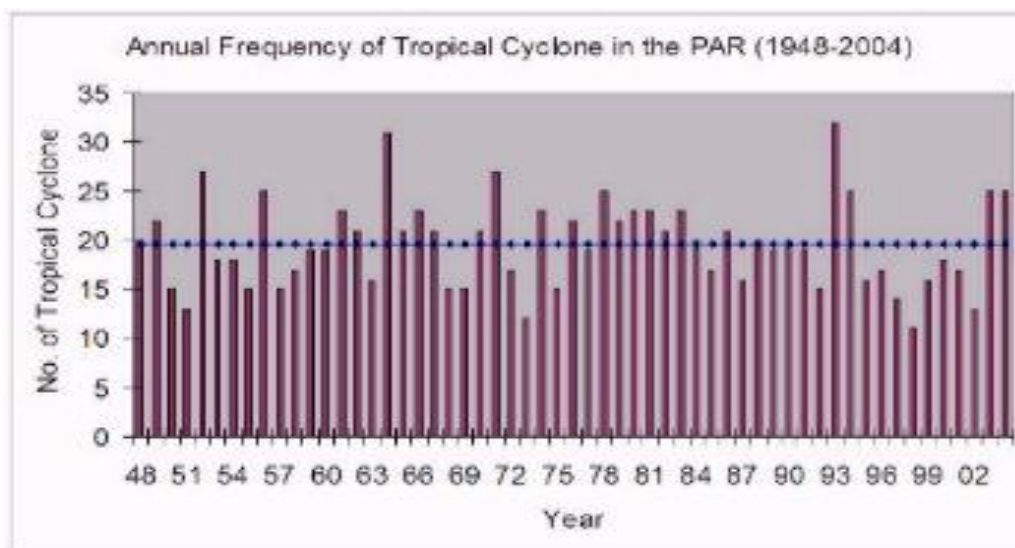


Figure 4.12

An average of 20 typhoons hit the Philippines every year, based on official statistics (official graph of frequency of typhoons courtesy of PAG-ASA, DOST.) There are two major seasons in the Philippines: (1) the rainy season, from June to November; and (2) the dry season, from December to May. According to PAG-ASA, the dry season may be subdivided further into (a) the cool dry season, from December to February; and (b) the hot dry season, from March to May. Typhoons usually happen during the rainy season. In 2007, for instance, almost all of the typhoons (except 1) happened between July and November.

It is then recommended for farmers to insure their crops regularly given the unforecast weather change.

Global Climate Change

The climate is changing. The earth is warming up, and there is now overwhelming scientific consensus that it is happening, and that it is human-induced. With global warming on the increase and species and their habitats on the decrease, chances for ecosystems to adapt naturally are diminishing. In Jagna, people are now aware of the change in temperature, like most of the farmers commenting that the rainy or dry seasons are now difficult to predict. Farm production may vary and there will also be a change of output potentials. Even to our fishermen, they also attest that the climate change affects their catches and the common fish catch in Jagna differs in season. Awareness of the concept of climate change for agriculture is now integrated and being considered in their production.

Development Administration

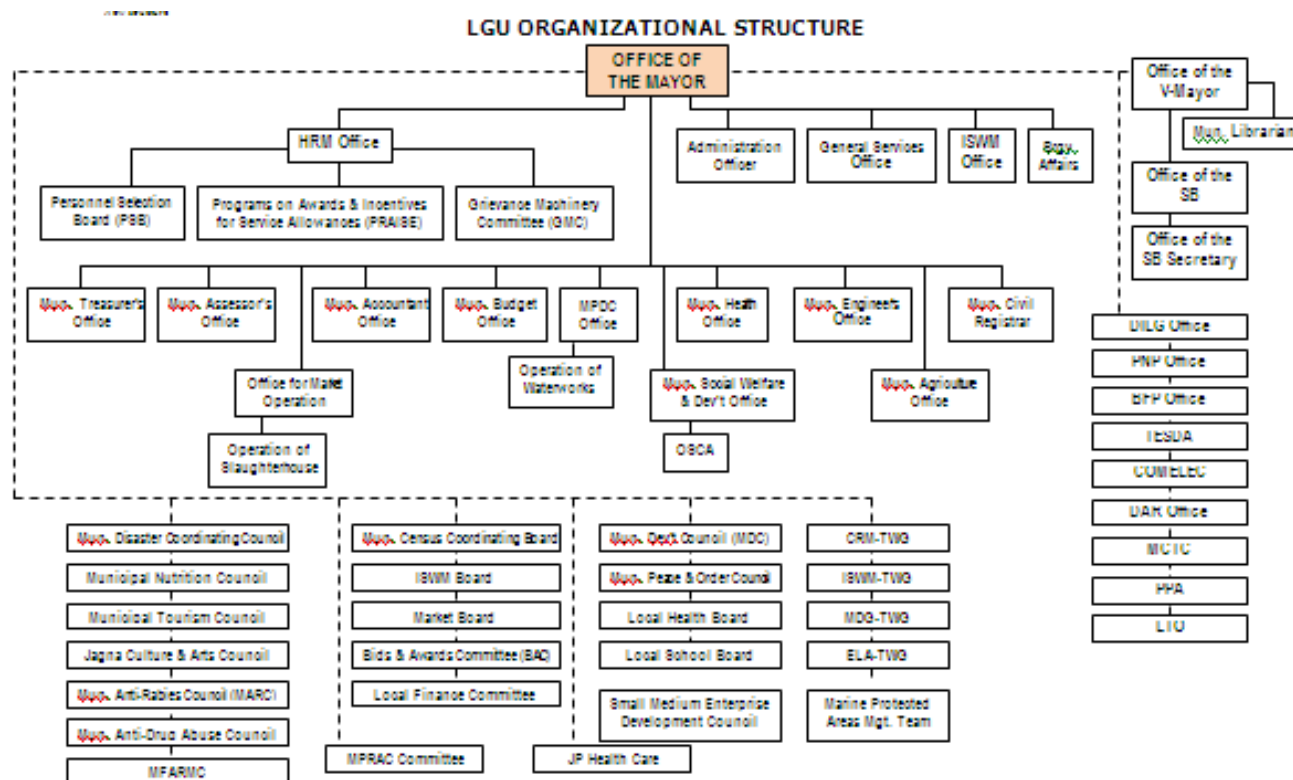
Municipal Organization

The municipality of Jagna's organizational structure (Figure 5.1) follows the traditional structure of hierarchy of authority and functions where the Office of the Mayor provides leadership, direction, guidance and coordination for the whole Municipal Government Organization. This office also enforces local policies and local legislative measures enacted by the Sangguniang Bayan. It also implements locally-initiated development plans and projects with the assistance of various executive offices under it.

Jagna's present structure showing a dotted line between the Mayor's Office & the Sangguniang Bayan Office (SBO) denotes "the coordinating line" of the two offices. Though not placed in one horizontal line due to space constraint, the offices placed horizontally manned by the mandatory and optional officers as provided in RA 7160, are considered to have equal importance. All mandatory positions are filled up except that of the Municipal Treasurer.

As of December, 2009, the municipality has a total workforce of two hundred thirty-five (235) of which fifty-three (53) or 22.6% are regular employees. Except for one (1) casual/plantilla personnel and twelve (12) elected officials, the rest of the workforce numbering one hundred sixty-nine (169) or 72% are employed on a job order basis. Apparently, the current regular employees having security of tenure cannot adequately meet the LGU's service requirements thus, the Local Chief Executive (LCE) hired employees on a job order basis.

The number of regular employees per office is insufficient to meet the service demands. Taking the Planning and Development Office for example where the Municipal Planning and Development Coordinator (MPDC) aside from his intrinsic function serves as Civil Defense Deputized Coordinator, Jagna Waterworks System Supervisor and Federation of Canadian Municipalities – Municipal Partnership Program (FCM-MPP) Coordinator, the personnel complement as shown in the organizational structure could not allow differentiated functions and sub-units within the office to complement the various roles and functions of the MPDC. Even if restructuring was done recently so that the Planning Office previously with no regular staffing complement, already has, still manpower is insufficient. This is also true for the Office of the Mayor which, based on the structure has only three (3) personnel complement including the Human Resource and Management Officer (HRMO). Positions/personnel in the said office based on organizational structure could not adequately cope with the service requirements needed in consideration of the enormous task of the Chief Executive. Thus, the need to look into the structure for possible augmentation of positions and the hiring of employees on a co-



terminus basis such as the Municipal Administrator. The Administrator plays a vital role in the LGU management and administration. Another glaring instance of personnel insufficiency which led to multi-tasking is that of the Market Administrator who also functions as the Integrated Solid Waste Management (ISWM) Supervisor, Environmental Management System (EMS) Coordinator and Business Permit and Licensing Officer (BPLO). This problem on personnel inadequacy must be looked into and acted upon through the review of the existing organizational structure and the conduct of human resource analysis. Nevertheless, considerations are still needed with some budgetary limitations imposed regarding personal services (PS) and the existing CSC policies.

Table 5.1 shows the vital data of the municipality of Jagna's regular personnel and elective officials including unfilled positions based on the organizational structure.

Table 5.1 VITAL DATA OF MUNICIPALITY OF JAGNA'S PERSONNEL AND OFFICIALS

As of December, 2009

As of December, 2005

OFFICE	APPOINTIVE-POSITION LEVEL				ELECTIVE		TOTAL		VACANT POSITIONS
	1 ST Level		2 nd Level		M	F	M	F	
	M	F	M	F					
Mayor's Office	1			1	1		2	1	1 Comp. Operator
Planning & Dev't. Office		1	1				1	1	2 Admin Aide

Comprehensive Development Plan
Municipality of Jagna

Sang. Bayan Office		2	1		10	1	3	11	None
SB Secretary's Off.			1				1		None
Engineering Office	2			1			2	1	None
Treasurer's Office	3	1	1				4	1	3 (Rev. Coll. Clerk & Mun. Treasurer)
Accounting Office		1		2				3	1 Acctg. Clerk
Budget Office		1		1				2	1 Budgeting Ass't.
Assessor's Office		1	1	2			1	3	1 Assessment Clerk
Agriculture Office		1	1	2			1	3	2 Agric. Technician
Civil Registrar's Office				1				1	1 Ass't. Reg. Officer
Social Welfare Office		1						1	1 SWO III
Health Office		9	1	2			1	11	1 Midwife
Market	4	1	1				5	1	1 Driver
Slaughterhouse	1						1		None
Waterworks	2	1					2	1	2 Plumber Ass't.
Total	13	20	8	12	11	1	24	41	17

Based on table 5.1, there are seventeen (17) vacant positions in the LGU where one is a mandatory position, that of the Municipal Treasurer. It could not be denied that the filling up of these positions is imperative taking into account the service requirements needed in the office as previously discussed and most importantly the vital role being played by the Municipal Treasurer in maximizing revenue generation to finance local government operations.

As to the participation of women in governance and in public service, out of the 12 municipal elective positions, only 1 position is occupied by a woman; the SK Federated President. While of the 53 municipal regular employees, 40 or 75% are women. Thus, the LGU's current structure is largely composed of women. This is a manifestation that equal opportunities were accorded to both men and women in the municipality of Jagna's government service.

The GAD Focal Point composed of some elected officials and some municipal functionaries/heads of offices ought to look at gender issues in the municipal organization as well as the corresponding interventions to these issues. While they have taken Gender Sensitivity Training and topics on local economic development and women economic empowerment, efforts are still to be done to conduct education and training for rank and file employees to promote awareness and common understanding of GAD issues. And to institutionalize in the municipal organization support systems and other mechanisms in furtherance of men and women welfare. The Jagna Women in Governance Service (JAWIGS), a group of all women employees is also organized but at present, seems to be inactive thus, the need to encourage members for its activation.

Human Resource Management

In order to ensure competent and effective local government personnel, an effective Human Resource and Management Development Program must be in place which includes Human Resource Planning, Recruitment and Selection, Performance Evaluation, Human Resource Development, Career Development, Incentives and Awards System and Grievance Machinery. According to the Human Resource Management Officer (HRMO), the municipality adopted a Personnel Mechanism which has five (5) components namely Performance Evaluation System (PES), Sexual Harrassment, Grievance Machinery, Merit Selection Plan and Program on Awards and Incentives for Service Excellence (PRAISE).

The LGU adopted the Civil Service Commission (CSC) prescribed PES. Performance evaluation is done in the LGU every six (6) months ending on June 30 and December 30 of every year. The PES provides an objective performance rating which serves as a basis for personnel actions, incentives and rewards and administrative sanctions. The PES is the basis in the granting of productivity allowance.

Under Sexual Harassment, a Committee on Decorum and Investigation was constituted in the LGU to receive complaints of sexual harassment, investigate complaints, submit a report on its findings with the corresponding disciplining authority for decision, and lead in the conduct of discussion about sexual harassment within the LGU based on Civil Service Resolution No. 01-0940 and RA 7877. Since the constitution of the committee, no complaint on sexual harassment was lodged in their level.

Jagna adopted a Grievance Machinery to address grievance (issued verbally or in writing) between or among government employees through the organization of a Grievance committee chaired by the HRMO. From 2007-2009, no verbal or written complaint was received by the committee.

Under the Merit Selection Plan, a Personnel Selection Board (PSB) is institutionalized in the LGU which adopts a formal screening procedure and criteria for selection as a basis for the selection/promotion of employees for appointment in the government service which shall be open to men and women without discrimination and according to merit and fitness. Based on observation the PSB has no hand in the selection/promotion of employees.

Under the PRAISE, a PRAISE committee shall be organized which shall be responsible for the development, administration, monitoring and evaluation of the awards and incentives system of the LGU. Awards that can be granted are the Best Employee Award, granted to individual/s who excelled among peers in the group/profession; Gantimpala Agad Award given outright to employees commended by clients for their courtesy, promptness, efficiency and dedication to duty; Exemplary Behavior Award based on the eight norms of conduct under RA 6713; Best Organizational Unit Award granted to the top organizational unit; Cost Economy Measure award granted when contributions results in savings in terms

of manhours or cost or benefit the agency; and Service Award, conferred upon retirees. This is done to encourage creativity, innovativeness, efficiency, integrity and productivity in public service by recognizing and rewarding officials and employees individually or in groups for their suggestions, inventions, superior accomplishments and other personal efforts which contribute to the efficiency, economy or other improvement in government operations, or for other extraordinary acts or services in the public interest. For the last three years, 2007-2009, only the Service Award from the awards mentioned was conferred. The LGU also conferred loyalty award for those employees reaching ten years in government service by giving out loyalty pay.

On the otherhand, other undertakings conducted for human resource management and enhanced customer service were the following:

- 1) Streamlining of HRMD services in terms of reduction in processing time, requirements, signatories and steps;
- 2) Enhancing service standards through the Jagna Citizen's Charter containing frontline services, step by step procedures in availing the services, the officer responsible for each step, the maximum time to conclude the process, the documents to be presented, and the amount of fees;
- 3) Utilization of biometric machine to keep track of employee attendance and work punctuality;
- 4) Having an Officer of the Day/Public Information and Customer's Welfare Desk.

It is noted that the LGU has no plan for human resource development which would specify capacity-building initiatives for career development in order that employees will be more effective in fulfilling organizational goals. Most capability building activities participated by employees are those initiated by the Civil Service Commission (CSC) and those sponsored by the private groups and aggrupations of department heads/heads of offices. The LGU however has initiated a training/seminar for employees on proper decorum/code of conduct like those provided in RA 6713 through the conduct of Organizational Development (OD) Seminars in 2007 but only in two batches. Thus, other employees haven't attended it yet.

Despite the implementation of the Citizen's Charter, some offices have not yet posted their office performance standard, the services in their office and the general flow of transaction. Performance standard ought to be publicly displayed to reinforce employee accountability. While services in the office and the general flow of transaction must be posted for clients' information and convenience.

It is also observed that heads & employees are not clear on management & supervision as well as the imposition of sanctions/discipline. Generally, personnel policies are not institutionalized. And, there's no forum for ventilation of organizational concerns/sentiments, such as meetings for the department heads and for all the employees. Feedback mechanism regarding client's satisfaction of services is not also institutionalized which may include among others suggestion/complaint box and customer

feedback form. While, good performance of employees must be recognized through awards.

The Human Resource Management Officer (HRMO) is instrumental in addressing the abovementioned issues on human resource management. But the HRMO admitted that she lacks the competency and that she needs technical assistance in conducting workforce assessment, determining competencies, skills, knowledge, types & number of personnel needed for the organization. The HRMO also needs technical assistance in conducting training needs assessment (TNA) to determine priority training needs of employees including provision of basic customer service skills. Aside from the technical assistance, personnel complement is also needed by the HRMO.

Development Planning

Based on Republic Act 7160, the planning function of the LGU is lodged in the Local Development Council. Thus, the Municipal Development Council (MDC) was constituted/organized by the Mayor through an Executive Order. The composition of the MDC as specified in Sec. 107 of RA 7160 was strictly complied with, including the representation of NGO/POs. Of the 48 MDC members, 12 are women where 6 come from the NGOs, an indication that women/women's groups are given opportunities to take part in the planning process. The MDC is able to carry out all its functions as mandated in Sec. 109 of RA 7160 except the formulation of local investment incentives to promote inflow and direction of private investment capital.

The Executive Committee was also organized to represent the MDC and act in its behalf when not in session. Sectoral or functional committees were organized as well to assist the MDC in the performance of their functions. The sectoral and functional committees, which serves as ad hoc or standing committees are currently assisting the MDC in the updating of the Comprehensive Development Plan and the Comprehensive Land Use Plan (CLUP) making use of sex-disaggregated data to incorporate Gender and Development (GAD) and Women Economic Empowerment (WEE) in Planning.

The sectoral and functional committees in the previous terms 2001-2004, 2005-2007 took an active part in the conduct of the Barangay Development Planning-Participatory Resource Appraisal (BDP-PRA) which became the basis in the coming up of the Comprehensive Development Plan for 2005-2015. Participatory process was employed in that CDP formulation and the said document was reflective of the bottoms-up planning approach since it was a consolidation of the plans from the barangay level which came about through multi-sectoral and participatory means. However, periodic monitoring and evaluation was not an integral component of the plan, which is necessary to check as to the progress of the planned programs and projects.

The CDP is a useful tool guiding the LGU in its development efforts. An evaluation in 2009 revealed that about 50% of the plans and programs in the CDP were accomplished from 2005-2009. Said plans and projects although not all were completed, but at least, were started. Instrumental to CDP accomplishment are the implementing instruments which are the Executive Legislative Agenda (ELA), the term-based plan and the Annual Investment Plan (AIP) which programs and projects are culled out from both the CDP and the ELA.

The Municipal Planning and Development Coordinator (MPDC) serves as the technical arm and head of the MDC Secretariat. In such capacity, he coordinates the different programs of the LGU departments and national agencies operating locally and coordinates the different functional/sectoral committees that provide detailed inputs to the CDP. Jagna's Planning and Development Office has only three support personnel and considering the other vital functions and roles being played by the MPDC previously mentioned, the MPDC needs to have an adequate and competent personnel support.

As to the database to support planning, available data of the Municipal Planning and Development Office are from the Poverty Database Monitoring System (PDMS) as of 2005. PDMS data are currently updated to generate up to date and sex-disaggregated data. Comparing data indicators of the PDMS utilized in the 2005 and 2009 survey, the latest survey is more comprehensive containing twenty (20) poverty indicators. Data from survey can also be easily retrieved for use and is available through electronic means.

Development Legislation

Generally, the 6th Sangguniang Bayan is development oriented as evidenced by the number of legislative measures enacted/passed. With the end in mind of setting policies and legislations that ensures high quality service delivery, the Sangguniang Bayan of Jagna had enacted 36 ordinances (including Codes) and three hundred twenty (320) resolutions since July, 2007 until December, 2009.

All revenue-raising measures of the Sangguniang Bayan are products of consultation. Consultation was employed by the SB prior to legislation, in the form of public hearings. The Sangguniang Bayan's consultation with the planning body usually pertains to the CLUP containing zoning regulations and on planning matters with CDP as the reference. SB members also get inputs for legislations from their participation in sectoral committee meetings and from barangay activities such as sessions & assemblies

Table 5.2 shows the breakdown of the legislative measures of the Sanggunian from July 2007 to December, 2009.

Table 5.2. BREAKDOWN OF LEGISLATIVE MEASURES FROM JULY, 2007-DECEMBER, 2009

SECTORS/CLASSIFICATION	NUMBER OF ORDINANCES	NUMBER OF RESOLUTIONS
Social	14	34

Economic	8	25
Environment	4	7
Administration	10	100
Infrastructure	-	5
Miscellaneous/Others	-	149
Total	36	320

Codes enacted from 2007-2009 which supports economic and social development and environmental management are the following:

1. Modified GAD Code (Ordinance No. 14-14-12-2009)
2. Revised Investment Code (Ordinance No. 12-12-2007)
3. Modified Fishery Code (Ordinance No. 12-08-2008)
4. Jagna Modified Environment Code (Ordinance 5-06-2008)
5. Jagna Solid Waste Management Code (Ordinance No. 4-02-2008)

Other codes enacted from 2003-2007 are the following:

1. Revenue Code (Ordinance No. 6-04-2003)
2. Market Code (Ordinance No. 3-11-2004)
3. Children's Code (Ordinance No. 3-01-2006)
4. Code of General Ordinances (Ordinance No. 7-06-2006)
5. Jagna Code of Public Safety, Security and Order (Ordinance No. 1-01-2007)

Taking into account the relevancy of the codes to present times, the Revenue Code enacted in 2003 and the Market Code enacted in 2004 needs to be updated.

Other ordinances enacted from 1999 to 2009 are reflected in Table 5.3 shown below.

Table 5.3. OTHER ORDINANCES ENACTED

SECTOR	CONTEXT/PARTICULARS
Social	
3-03-2003	Video game regulation
6-08-2004	Banning of smoking for minors and the selling of tobacco to minors
4-06-2008	Curfew for minors
1-03-2008	Creation of the Council for the Protection of Children in the municipal and barangay levels
8-07-2006	Jagna Youth Development Council
7-05-2003	Anti SARS measure
11-09-2003	Cleanliness for municipal building and premises
1-03-2004	Senior Citizen's Council Creation
12-11-2004	Service Provider's Clearance
15-11-2004	Smoking regulations
16-11-2004	Rugby selling prohibition to minors
19-11-2004	Salt iodization campaign

10-03-2005	Mask requirement for port labourers
2-03-2008	Institutionalizing Directly Observed Treatment (DOT) for Short Course Chemotherapy for TB
18-11-2008	Setting Proper Guidelines for Safe Motherhood Program
19-11-2008	Institutionalizing Local Policy Promoting Healthy Lifestyle Program
1-01-2009	Infant and Young Child Feeding Program
7-09-2009	Institutionalizing the Operation of Stimulation and Therapeutic Center (STAC)
1-03-2008 5-04-2009	GAD Focal Point Creation
26-11-2005	Anti Trafficking
2-02-2007	PHILHEALTH Capitation Fund
5-02-2005	Penalizing Domestic Violence Offender
4-12-99	Dog Registration and Fee
7-09-2007	Providing for Municipal Rabies Prevention and Eradication Program
3-03-2004	Fraternity measure
17-11-2004	Prohibition of Blackmarketing of boat tickets
4-02-2005	Penalizing fake cell card sellers
2-09-2000	Traffic Regulation
24-12-2004	Citation ticket for traffic violation
7-02-2005	30 KPH speed limitation
13-03-2005	Amendment to traffic enforcers authority
16-10-2008	Against the operation of colorum vehicles
22-12-2004	MCH tricycle unit markings
23-12-2004	Vehicle silencer provision
20-12-2008	Housing board enactment
10-1-2005	Franchising Board
Economic 6-04-2009	Promotion and development of organic farming
4-03-2004	Revised Buso Ordinance
5-08-2007	Penalizing the gathering of milkfish and fries
15-05-2005	Bantay Dagat Task Force
9-09-2007	Adoption of Marine Protected Area Management Plan
4-04-2003	Antique Buyer's Regulation
9-08-2003	BMBE registration and fee
18005-2005	Professionalizing porters and canvassers
27-11-2005	Modified calamay production measure
6-08-2007	Skilled workers to secure competency permit
2-01-2009	Fish port regulation
7-08-2004	Electrical installation permit requirement
25-12-2004	Professionalizing meat butchering operation
2-01-2006	Centralized weighing of hogs for sale
10-10-2007	Declaring all days of the week as market days
8-05-2003	Culture and Arts council
6-02-2005	Official foundation day celebration
16-05-2005	April 7 Local heroes day commemoration
Administration	

9-09-2006	Designating an area for freedom park
17-11-2008	Requiring government buildings to turn off airconditioning units at 4:30 P.M.
19-05-2005	Adoption of Ten-Year Development Plan
3-02-2007	Organization of different vendors association at the public market
21-12-2004	OFW Affairs Committee Creation
Environment	
7-10-2001	Hunting of animal life
1-01-2002	Oil spill at sea prohibition
2-01-2005	Burning of hills and grassland prohibition
3-04-2008	Jagna Re-greening Ordinance
22-09-2005	Bats preservation
15-09-2008	Waterways Task force

One of the SB committees which is the Committee on Social Services, Gender and Family Welfare is functional as evidenced by the legislative measures enacted. A notable legislative output is the GAD Code enacted in 2006 and modified in 2009. Creation of GAD Focal Point was also embodied in Ordinance No. 11-03-2005 and amended in 2009. Other gender responsive ordinances enacted aside from the two (2) being mentioned are reflected in *Table 5.4*.

Table 5.4 OTHER GENDER AND DEVELOPMENT (GAD) RESPONSIVE ORDINANCES

ORDINANCE NO.	PARTICULARS/CONTEXT
5-02-2005	Penalizing Domestic Violence Offender
26-11-2005	Anti Trafficking Ordinance
CC 3-01-2006	Children's Code
5-05-2006	Early Childhood Care and Development
1-3-2008	Creation of Councils for the Protection of Children in the municipal and barangay levels
18-11-2008	Setting Proper Guidelines in implementing Safe motherhood program
1-01-2009	Implementing Infant and Young Child Feeding Program
7-09-2009	Institutionalizing the operation of Stimulation and Therapeutic Activity Center (STAC) for children and youth with disabilities

Existing legislative tracking system is computer aided and is capable of generating information of existing local rules and regulations complementing national laws, status of draft ordinance in the legislative process and existing local rules thereby avoiding duplication. However, said system is not capable of generating information on local rules and regulations which are being enforced or not. Said legislative tracking system must be computer-based.

Due to the substantial and relevant measures enacted by the Sangguniang Bayan, it was declared as 2009's Provincial winner, Regional winner and National finalist in the Local

Legislative Award, a competition which aims to recognize outstanding legislative bodies. It also emerged as national finalist in the 2006 Local legislative Award.

For enhanced performance and for development, the SB may consider the following:

- Update codes (Revenue & General Ordinances)
- Codify health ordinances
- Enact disaster management code
- Establish legislative tracking system/oversight in the enforcement of ordinance for ordinance amendment/revision
- Utilize media such as the LGU owned community radio for information of legislative measures

Not all the legislative measures enacted by the Sangguniang Bayan are implemented or fully implemented for the reason that the Local Chief Executive is attending to many functions and he has no staff to focus on this. Structural mechanisms may be employed by the Mayor for the effective enforcement of ordinances, with the group formulating administrative provisions or drafting Executive Order providing for rules and regulations/guidelines in the implementation of ordinances.

Civil Society Participation in Governance

With a governance philosophy of “expanding governance base through broadening participation of the civil society”, the incumbent Local Chief Executive has made possible the active participation of the civil society in governance through their participation in the local special bodies which are Municipal Peace and Order Council (MPOC), Municipal Health Board, Municipal School Board, and the Municipal Development Council (MDC). Participation of the different sectors in governance including the marginalized sector was fostered by the present administration.

In October, 2007 there were only 17 Non-Governmental Organizations (NGOs)/People’s Organizations (POs) accredited by the Sangguniang Bayan. Of the 17 NGOs/POs, 10 were represented by women. The representatives of the accredited POs/NGOs were called for a meeting to select their representatives to the local special bodies on October 25, 2007 by the MLGOO. Of the seventeen (17), only ten (10) were represented, the rest were absent. During the said meeting, the following were the points agreed upon: 1) all accredited NGOs/POs will be members of the MDC, the MPOC will have three (3); Health Board will have one NGO/PO member as well as the School Board.

However, based on the current set up, the following are the NGOs/POs which are members of the MDC:

Ms. Rooseveltita Macarayan	- People’s MPC
Ms. Nimfa Lloren	- Jagna LCW
Ms. Jocelyn Apag	- Bohol Initiatives on Migration and Community Dev’t.

Inc.

Engr. Jesus Acedillo	- Jagna Parish Pastoral Council
Mr. Rowel Ortiz	- Jagna Porters MPC
Ms. Brigida Acheron	- Canjulao League of Women
Ms. Gloria Tapangan	- Jagna Officials and Employees MPC
Mr. Arturo Bulias	- Northeast Luzon Foundation
Anacleto Bayron	- Small Coconut Farmers Organization
Alfreda Pangilinan	- Tejero Women's Organization
Lorenzo Acheron	- Jagna PTA
Panfilo Asares	- FCB Foundation
Atty. Bonifacio Virtudes	- Jagna MPC

The following persons with their corresponding organizations are also members of the Municipal Peace and Order Council (MPOC), Municipal Health Board, Municipal School Board:

MPOC

Ms. Nimfa Lloren	- Jagna LCW
Mr. Rowel Ortiz	- Jagna Porters MPC
Engr. Jesus Acedillo	- Jagna Parish Pastoral Council

School Board

Mr. Lorenzo Acheron	- PTA President
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Health Board

Ms. Nimfa A. Lloren	- Jagna Local Council of Women (LCW)
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In its efforts for participatory governance, organizations which are represented in other committees/councils are not only limited to those accredited by the Sangguniang Bayan. Other sectors which are empowered though not able to get an SB accreditation are the children/youth, agricultural sector, differently-abled and senior citizens.

The process of accreditation by the Sangguniang Bayan was guided by the provisions of RA 7160. For a big municipality, the 17 POs/NGOs who applied for accreditation and were duly accredited, is only few. An existing inventory of existing POs/NGOs in the barangays revealed a total of ninety (90) organizations in the municipality excluding organizations in four (4) barangays who have not submitted their list through the Barangay Secretary. Of the ninety (90) organizations, not all are functional.

In 2007, no inventory of POs/NGOs was made which ought to be the basis of the call for accreditation, which could be one of the reasons why only 17 POs/NGOs submitted for accreditation.

It is noteworthy to mention however that every barangay has organizations, though most common are people's organizations (POs). These groups are bonded together due to their common means of livelihood such as farming, fishing and others. Others are also bonded with their religious affiliation. Other organizations are those of the women, senior citizens, and irrigators. These organizations were strengthened and provided technical assistance by the municipality such as the JACAMAVEA, the farmers and fisherfolks associations through the Municipal Agriculture Office. Other organizations are already registered with the Cooperative Development Authority (CDA), Department of Labor and Employment (DOLE) and the Securities and Exchange Commission (SEC) but only very few. There is a therefore a need to provide assistance to these organizations to be strengthened for them to acquire legal personality and to avail of services and assistance.

For the reconstitution of local special bodies in 2010 after the national and local elections, the municipality must be guided with the following provisions of the IRR of RA 7160:

- 1) In the case of Local Health Board, the organization is involved in health services;
- 2) In the case of Local School Board, representative organizations shall be limited to parents-teachers association, teacher's organization and organization of non-academic personnel of public schools
- 3) In the case of the Local Peace and Order Council, organizations shall come from the academe, civic, religious, youth, labor, legal, profession, business and media organizations,
- 4) No organization or representative shall be a member of more than one local special body within the municipality;
- 5) Designated representatives of selected organizations which are members of the local special bodies shall designate their principal and alternate representatives

Aside from POs/NGOs previously mentioned, the municipality forged partnership with other private entities for the delivery of basic services. In Jagna, one good partnership of the LGU is that with PHILOS Health for the delivery of health services. Through the PHILOS, a group based in the United States of America, the LGU established the Rural Health Unit 2 catering to the health/medical needs of the eleven upland barangays. The said group provided a funding counterpart for the RHU 2 building. It also provided vehicle for use of the RHU 2 health officer, medical facilities not only for RHU 2 but even at the Congressman Tedoro B. Galagar District Hospital. It also provided over the counter medicines for free including that for hypertension and diabetes. With PHILOS Health and the LGU, the establishment of a radio station came into fruition.

Inter-Governmental Relations

Consistent with the policies and principles of decentralization provided in the Local Government Code of 1991, all national agencies with project implementation functions operating locally, must coordinate with the Mayor and the Sanggunian in the implementation of their programs and projects. Consultations are also conducted prior to project and program implementation.

Also anchored on the principle of decentralization, the Municipal Mayor is empowered by RA 7160 to exercise general supervision over component barangays to ensure that said barangays act within the scope of their prescribed powers and functions. On the said legislation, Mayors are also entrusted the function of reviewing executive orders promulgated by Punong Barangays within his/her jurisdiction. Ordinances enacted by the Sangguniang Barangays also go through review of the Sangguniang Bayan to see to it that the barangays are legislating within their prescribed powers and functions.

Considering that the barangay exercises executive, legislative and judicial powers and functions as provided in RA 7160, the barangays are in a strategic position to perform the critical role in policy-making, planning and delivery of basic services and facilities, administering barangay justice system and building partnerships with the various stakeholders working within the locality. With these critical and wide-ranging roles in governance, the barangay officials need the guidance of higher local government units such as the municipality.

In Jagna, Punong Barangays seldom issue Executive Order (EO) and if there is, such EO is seldom passed to the Local Chief Executive for review. On the otherhand, barangays are already practicing the submission of their barangay ordinance to the Sangguniang Bayan for review.

FISCAL MANAGEMENT

Fiscal management involves the management of financial affairs, transactions and operations of the local government unit. This is governed by fundamental principles set forth by the Local Government Code of 1991 or RA 7160 and other pertinent laws. The challenge for LGUs in fiscal management, especially those belonging to the lower class is to fully exercise its power of taxation to maximize collection of locally generated revenues.

Revenues of the municipality of Jagna derived from local sources are classified into local taxes and operating and miscellaneous revenues. Local taxes consist of the amusement tax, business tax, community tax, franchise tax, real property tax and fees on weights and measures. While operating and miscellaneous revenues is composed of permit fees, registration fees, clearance and certification fees, garbage fees, inspection fees, medical, dental and laboratory fees, income from economic enterprises, landing and parking fees, rentals and interest income. Among the local taxes, the top three (3) sources in the proper order are business tax, real property tax and community tax. With regards to operating and miscellaneous revenues the top three sources are the income from the market, waterworks system and permit fees, respectively. This is true from 2005-2009. *Figure 5.2* presents the local revenues from 2005-2009.

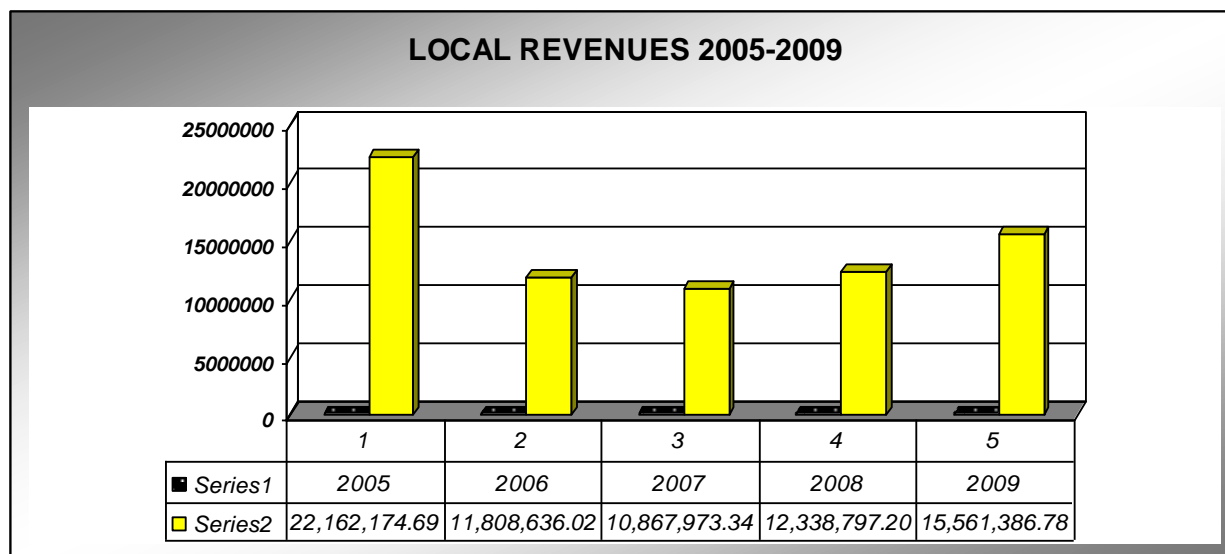


Figure 5.2

Figure 5.2 shows that local revenue decreased by 47% in 2006 comparing it with 2005. In 2005 the LGU yielded a high revenue, even the highest among the revenues presented in five (5) years, due to the occupancy fees exacted by the LGU with the operation of the public market. The said occupancy fee is a one-shot revenue which the LGU yielded from the occupation of the newly built market. The previous market building was gutted down by fire in May 1999 and it was in 2005 that the newly constructed market was made operational.

With the previous year as reference, a slight decrease in local revenue of 8% can be noted in 2007. In 2008, an increase of 12% can be noted and in 2009 increase is at 21%.

Based on the records in the Treasurer's Office, the targeted collection for business tax in 2009 was P1,775,000.00. Actual revenue generated was P2,337,579.00 or 134%. For fees and charges, targeted collection for 2009 was P3,290,000.00 and actual revenue generated was P2,828.146.05 or 86%.

Table 5.5 shows the real property tax collection efficiency. However, data presented regarding this, only covers 2008 and 2009.

Table 5.5. Real Property Tax Collection Efficiency 2008 & 2009

BARANGAY	2008				2009			
	YEARLY BASIC COLLECTIBLE	TOTAL ACTUAL COLLECTION	COLLECTION EFFICIENCY	RANK	YEARLY BASIC COLLECTIBLE	TOTAL ACTUAL COLLECTION	COLLECTION EFFICIENCY	RANK
ALEJAWAN	29,422.60	14,453.76	49%	14 th	54,019.10	31,485.07	58%	14 th

Comprehensive Development Plan
Municipality of Jagna

BALILI	77,284.61	43,290.21	56%	9 th	131,313.60	77,586.96	59%	13
B-ILAYA	24,512.80	13,399.39	55%	10	40,914.50	24,037.82	59%	13
B-MAR	16,756.50	8,171.42	49%	14	20,885.70	12,546.81	60%	12
BOCTOL	40,426.33	9,984.62	25%	19	82,143.90	18,661.84	23%	25
BUYOG	35,239.73	16,551.97	47%	15	61,713.70	32,576.23	53%	17
CABUNGAAN	22,081.10	9,428.11	43%	17	37,882.30	20,482.25	54%	16
CALABACITA	56,422.90	17,011.00	30%	21	95,807.10	33,871.27	35%	24
CAMBUGASON	31,431.00	19,742.42	63%	7	52,241.80	31,920.12	61%	11
CAN-IPOL	8,991.96	5,971.67	66%	6	16,101.30	8,054.59	50%	19
CANJULAO	70,664.10	82,853.24	117%	1	150,369.90	124,350.07	83%	7
CANTAGAY	30,243.10	21,332.00	71%	5	43,530.40	38,986.00	90%	2
CANTUYOC	27,537.90	15,282.55	55%	10	48,118.80	29,674.73	62%	10
CAN-UBA	15,190.70	4,320.81	28%	20	13,881.60	6,985.10	50%	19
CAN-UPAO	86,569.60	44,011.58	51%	12	117,294.80	124,306.15	106%	1
FARAON	20,529.50	7,115.30	35%	19	32,658.80	17,890.60	55%	15
IPIL	15,799.91	6,896.63	44%	16	25,550.20	12,446.20	49%	20
KINAGBAAN	13,723.70	7,175.34	52%	11	23,875.00	14,808.15	62%	10
LACA	17,209.00	7,186.87	42%	18	29,432.10	13,189.10	45%	22
LARAPAN	15,214.21	6,661.20	44%	16	29,215.90	14,698.62	50%	19
LONoy	40,894.30	12,874.67	31%	20	69,834.50	26,039.00	37%	23
LOOC	80,136.86	56,639.80	71%	5	126,331.60	105,543.50	84%	6
MALBOG	19,144.50	9,444.75	49%	14	32,847.30	16,317.65	50%	19
MAYANA	56,880.60	28,369.15	50%	13	107,613.30	56,890.64	53%	17
NAATANG	12,022.30	6,300.78	52%	11	18,177.70	11,337.15	62%	10
NAUSOK	13,953.60	8,214.46	59%	8	23,619.40	18,299.10	77%	8
ODIONG	39,787.80	17,610.28	44%	16	72,164.70	34,848.93	48%	21
PAGINA	55,088.54	50,160.88	91%	2	60,088.40	52,649.24	88%	4
PANGDAN	35,109.90	28,216.36	80%	4	56,288.60	35,142.36	62%	10
POBLACION	57,975.80	50,677.73	87%	3	89,705.80	79,771.98	89%	3
TEJERO	54,655.20	43,763.34	80%	4	84,056.50	72,925.92	87%	5
TUBOD-MAR	6,722.70	5,359.43	80%	4	12,665.70	9,633.30	76%	9
TUBOD-MONTE	43,580.80	24,301.30	56%	9	78,386.00	40,574.58	52%	18
TOTAL	1,171,204.15	702,773.02	60%		1,938,730.00	1,248,531.03	64%	

As shown in *Table 5.5*, in 2008 it's barangay Canjulao which ranked first in collection efficiency posting a 117% rating. Next are barangays Pagina and Poblacion posting 91% and 87% collection efficiency rating, respectively. On the contrary, it's barangay Boctol which posted the least collection efficiency of 25%. Followed by barangays Can-uba and Calabacita, with 28% and 30% collection efficiency, respectively.

In 2009, its barangay Can-upao which posted the highest collection efficiency of 106%. Followed by barangays Cantagay and Poblacion with 90% and 89% collection efficiency, respectively. Adversely, barangay Boctol has the least collection efficiency of 23%. Next are barangays Calabacita and Lonoy, with collection efficiency of 35% and 37% effectively.

Collection efficiency exceeded 100% in barangays Canjulao and Can-upao due to the collection of previous year's receivables. It is noted that barangays Boctol and Calabacita are consistent in yielding a low collection efficiency. Accordingly, all efforts have been exerted by the Treasurer's Office but still some people in these barangays refuse to pay giving the reason that their area is a watershed area and even due to poverty. On the overall, the municipal collection efficiency of 60% increased by 4% in 2009. This happened even if new RPT rates were imposed in 2009 due to revision.

Efforts undertaken by the Treasurer's Office for tax collection included the Information Education Campaign (IEC) during barangay assemblies, tax campaign for information and collection, demand letters and publication/auction.

To maximize revenue generation, the municipality has to update its Revenue Code which was enacted only in 2003. Some of the observations of the Treasurer's Office regarding the Revenue Code implementation are the following:

- Most of the types of businesses operating in the locality fall under the retailing/contracting category and 2.2% tax on their gross sales is imposed, however the problem is that most of these business owners do not divulge their real gross sales;
- Only a lower imposition of (1/2) of the rates prescribed when the retailers are engaged in the business of rice/corn retailing, meat, dairy, sugar, salt, marine products, cooking oil, cooking gas, laundry soap, detergent, medicines, agricultural farm inputs/feeds, school supplies and cement;
- A fixed rate is imposed throughout the year for business under the contracting type, where mostly in the locality are into the motorela and other related type, even if gross sales increase, the municipality cannot increase the imposition;
- A very minimal amount is imposed for newly established/operated business, that is $\frac{1}{2}$ of 1% rate of their initial capital;
- Difficulty in collecting the occupation or calling fee imposed on all individuals engaged in the exercise or practice of their occupation or calling;
- Civil remedies for delinquent taxpayers is the distraint of personal property but with limited personal properties and considering that those tools primarily employed in their occupation cannot be part of it, there's a difficulty in imposing this.

On the overall, to enhance revenue generation there's a need to appoint a Municipal Treasurer, a mandatory position which shall take charge of the Treasury Office. Filling up of the two vacant positions in the Treasurer's Office, that of the Revenue Collection Clerk is

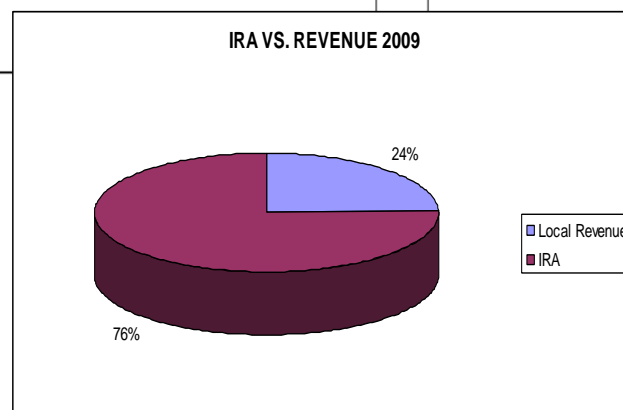
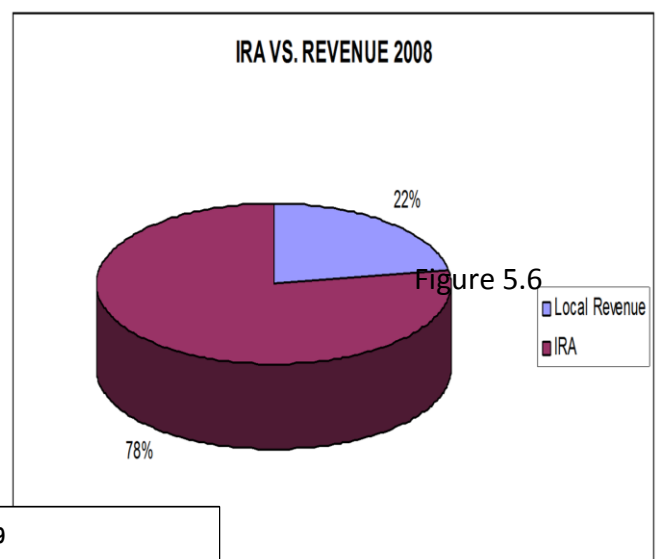
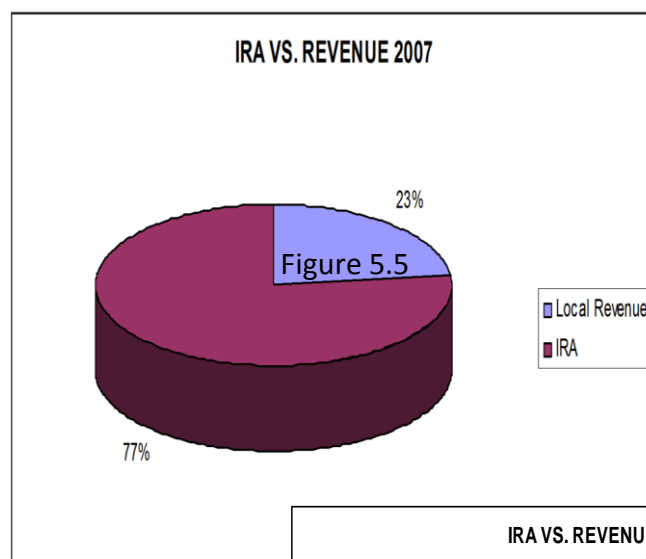
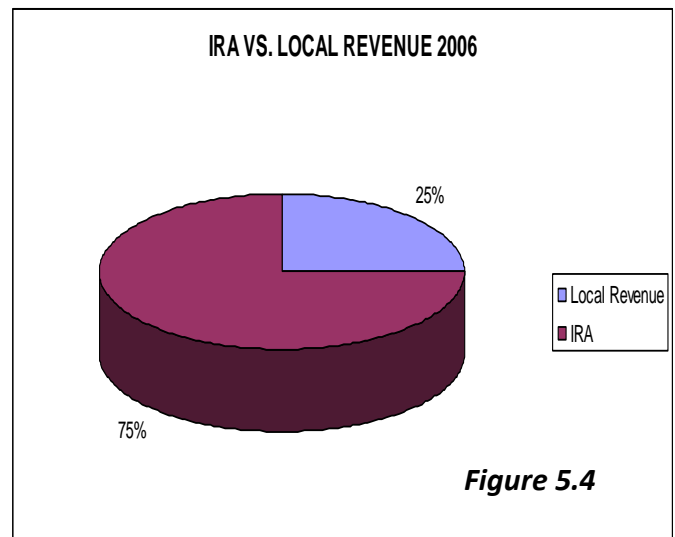
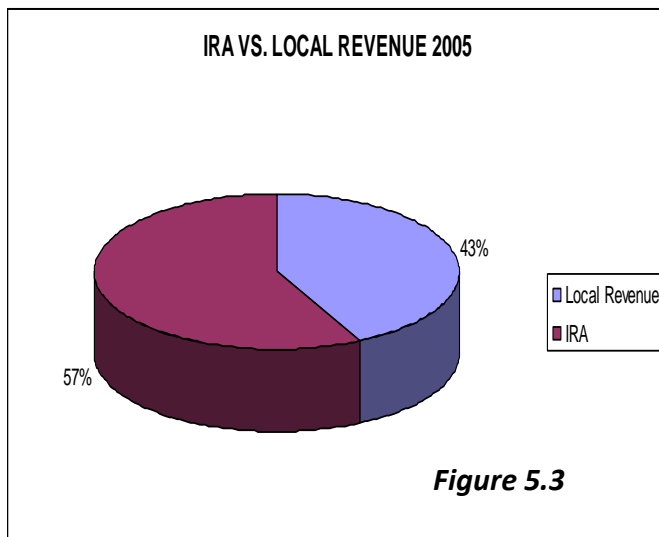
also needed, installing a system for revenue generation connecting the Treasurer and the Assessor's Office, maximizing the newly installed Customized Tax Revenue and Assessment Collection System (CTRACs) that keeps a database of all taxpayers with corresponding payables and offers an incentive program for employees and taxpayers. Incentives being offered are confined only to taxpayers availing discounts for prompt payment of taxes.

With regards to the viability of economic enterprises, the data shown in table 5.6 illustrates that the economic enterprises are viable on the account that expenditures did not exceed the income for all the three (3) enterprises, however, personnel of the slaughterhouse are charged to the general fund and not to its income. But such charging is only for six months and not the entire year. For the market and slaughterhouse, income does not follow an upward trend. There are noted decreases in 2006 and 2007 for the market and slaughterhouse, but the waterworks' income is increasing per year.

Table 5.6. INCOME AND EXPENDITURE OF ECONOMIC ENTERPRISES
Market, Slaughterhouse and Waterworks System
2005-2009

YEAR	ECON. ENTERPRISE	INCOME	TOTAL EXPENDITURE	BALANCE	BREAKDOWN OF EXPENDITURE	
					PS	MOOE
2005	Market	16,016,169.50	2,716,687.65	13,299,481.85	849,554.82	1,867,132.83
2006		4,160,322.45	3,428,493.91	731,828.54	1,339,693.19	2,088,800.72
2007		3,624,817.80	3,231,919.56	392,898.24	1,598,910.90	1,633,008.66
2008		4,128,368.69	3,121,114.40	1,007,254.29	1,617,226.59	1,503,887.81
2009		4,479,403.00	4,179,329.78	300,073.22	1,686,491.45	2,492,838.33
2005	Slaughterhouse	258,024.00	186,784.34	71,239.66	183,745.65	3,038.69
2006		226,528.00	208,263.08	18,264.92	194,552.08	13,711.00
2007		223,890.00	212,990.78	10,899.22	199,486.78	13,504.00
2008		277,277.50	253,129.24	24,148.26	247,704.24	5,425.00
2009		275,307.00	275,047.59	259.43	255,629.57	19,418.00
2005	Waterworks	791,544.66	767,230.55	24,314.11	431,420.75	335,809.80
2006		954,937.33	744,433.75	210,503.58	491,468.06	252,965.69
2007		1,125,791.94	744,463.68	381,328.26	480,263.22	264,200.46
2008		1,207,709.00	1,024,564.02	183,144.98	635,463.13	389,100.87
2009		1,557,219.96	1,149,991.64	407,228.32	605,161.95	544,829.69

Revenues derived from local sources cannot substantially finance all budgetary requirements of the municipality, thus the LGU relied on the Internal Revenue Allotment (IRA). Nevertheless, maximizing local revenues is targeted to lessen IRA dependency considering that the IRA fluctuates and to fully exercise the LGU's revenue-raising powers. Figures 5.3-5.7 show a comparison of the IRA and the local revenues/receipts of the municipality of Jagna from 2005-2009.



Based on the figures shown, the LGU has a high dependency on the IRA which ranges from 75-78% of the total revenue generated. In 2005, the IRA only constitutes 57% of the budget due to the high revenue from the market occupancy fee.

Due to huge budgetary requirements, the IRA and the local revenue are not substantial to finance LGU operations, such as financing development projects/government infrastructure which include among others, acquisition of heavy equipments, repairs and maintenance of public buildings, road networks, waterworks rehabilitation systems and health and agricultural programs. Thus, the municipality of Jagna through its officials sought financial assistance from higher LGUs and from the national government to finance other programs and projects. Financial counterpart was generated as well from its partner Non Governmental Organization (NGO) in the delivery of health services. Such monies coming from public and private entities go to the LGU's trust fund. A trust fund shall only be used for the specific purpose for which it was created.

Some of the public and private monies which formed part of the of the LGU's trust fund, is reflected in *Table 5.7* including the programs/projects/purpose for which it's intended.

Table 5.7. PUBLIC & PRIVATE MONIES FORMING PART OF THE TRUST FUND

YEAR	PROGRAMS/PROJECTS/PURPOSE	AMOUNT
2006	Aid to Mayana	P 200,000.00
	Financial Assistance –PCSO Medicines	400,000.00
	Aid from AKBAYAN	2,000,000.00
	Financial Assistance – Nebulizer	173,250.00
	Aid to 375 th Foundation Day	85,000.00
	Aid to Various Development Projects	P 150,000.00
	Financial Assistance - Marine Sanctuary	20,000.00
	Financial Assistance -Municipal Nursery	50,000.00
2007	Provincial Aid –Marine Sanctuary	40,000.00
	Financial Assistance – Health Care Program	150,000.00
	Financial Assistance – Socio Cultural Activities	30,000.00
	Financial Assistance – Foundation Day	10,000.00
2008	Financial Assistance – Cultural Affairs	30,000.00
	Financial Assistance Tanod Kits	265,000.00
	ECCD Projects	290,000.00
	Socio Cultural Activities	177,000.00
	Financial Assistance – Medical Mission	10,000.00
2009	Great Women	450,450.00
	Registration – Great Women Seminar	74,202.00
	Marine Protected Area	20,000.00
	Football Sports Equipment	20,000.00
	Socio Cultural Activities	45,500.00
	Calamay making contest	221,738.00
	DUGJAN NPA network	150,000.00

	Kilos Asenso	636,595.00
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Aside from sourcing out fund by accessing financial assistance, the LGU also opted to avail of loan/borrowings from financial institutions. It's only in 2008 that the LGU incurred borrowings to finance the completion of the Jagna Public Market, the construction of the Virgin Coconut Oil (VCO) Processing Plant and for the purchase of the dump truck. No arrear was incurred by the LGU considering that the loan principal and its interest is automatically deducted from the IRA released monthly in the LGU's depository bank.

On the other hand, a vital part in administering financial affairs is the effective allocation of resources through the budget. The budget reflects the Projections of Income and Expenditures so with the LGU established priorities. The budget is a vital link for the planned programs and projects' implementation. All contractual obligations and other budgetary requirements which include 45% Personal services (with Jagna as a 3rd class municipality), 20% Development Fund, 5% Calamity Fund, and 2% Discretionary fund (RPT) are set aside, prior to the appropriation for maintenance and other operating expenditures. 5% of the total appropriation is also allocated for GAD related programs, projects and activities (PPAs). From 2005-2009, expenditures/disbursements were in accordance with the budget. Thus, the expenditures did not exceed the budget. Furthermore, the principle of "zero budgeting" is employed. From this, it can be deduced that the LGU operated on a balanced budget as opposed to deficit spending. *Figure 5.8* reflects the LGU budget from 2005-2009.

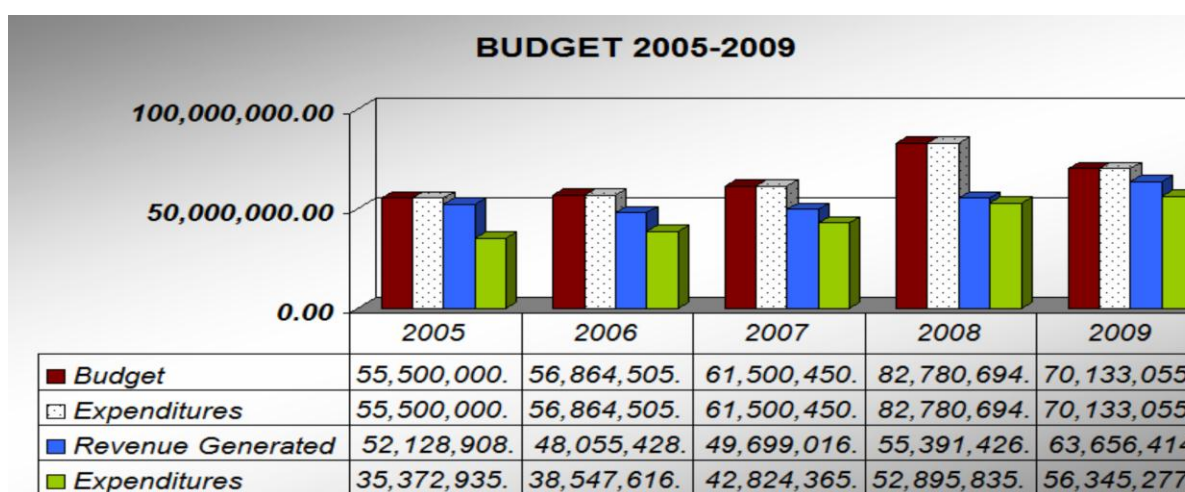


Figure 5.8

For the 5% GAD Allocation, the table below shows the yearly 5% GAD allocation from 2005-2009. These amounts were expended for supplemental feeding, trainings/seminars, health and agriculture programs, improvement of roads and bridges, provision of potable water and for proper garbage disposal. Although there's always a 5% allocation for GAD from the total appropriation per year, there's a need to make a further study and review of this

allocation if the programs, projects and activities being funded by this 5% allocation are really gender responsive addressing gender issues and concerns.

Table 5.8 - 5% GAD ALLOCATION

2005-2009

YEAR	GAD ALLOCATION
2005	P3,881,800.00
2006	3,588,000.00
2007	3,881,800.00
2008	3,881,800.00
2009	2,779,000.00

On the other hand, comparing the LGU income and expenditure in a span of five (5) years, *Figure 5.9* bares that expenditures did not exceed the total revenue or receipts generated. It was also noted that expenditures follow an upward trend. It increased from year to year but in no way did it exceed the revenue/receipts generated. The balances were utilized to finance various priority development projects.

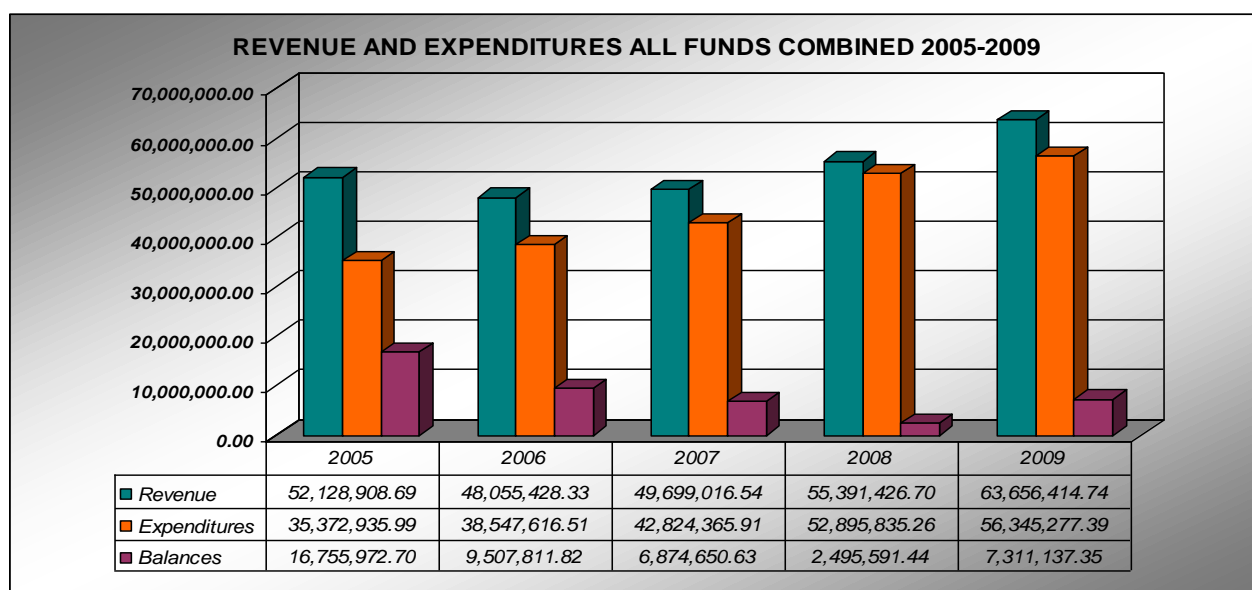


Figure 5.9

By comparison, the spending for the last five years related to personal services is the highest compared to other expenditure functions. This high spending is caused by the continuous implementation of the Salary Standardization Law and the mandatory percentage increase in salary per year. All contractual obligations and other budgetary requirements are set aside, prior to the appropriation for maintenance and other operating expenditures. Maintenance and Other Operation Expenditures (MOOE), Capital Outlay (CO)

and other Non Office Expenditure follow the CO respectively in the order of the LGU expenditure. Data regarding this can be glimpsed in *Figure 5.10*.

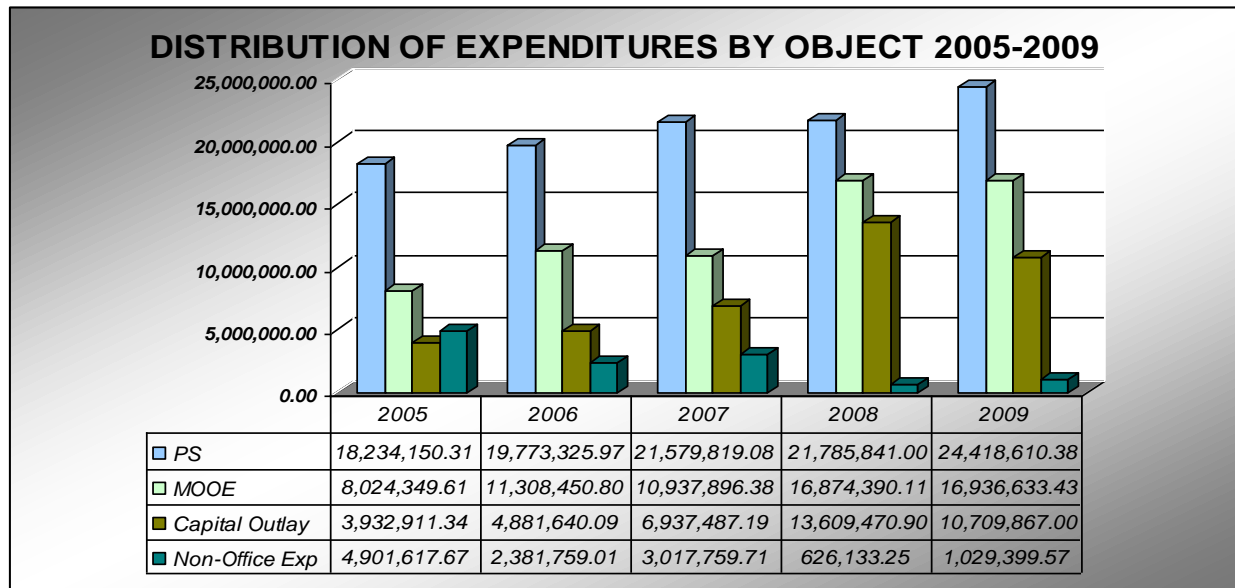


Figure 5.10

Issues and Concerns

Based on the ecological profile of the five preceding chapters, an analysis was conducted to prioritize significant issues and concerns affecting the development of the Municipality of Jagna. These issues and concerns are segregated into five (5) thematic areas that characterized Jagna's current reality – economic, social, infrastructure, environment, and development administration, with the intention of getting a better grasp of the different current realities affecting the municipality in the last three to five years.

ECONOMIC DEVELOPMENT ISSUES

The following are the highlighted economic development issues covering different areas as trade and industry, agriculture, and tourism.

1. Insufficient Irrigation Facilities

The total production area for rice in Jagna consists of 682.5 hectares. Only about 358.5 hectares or 52.52% is irrigated and the remaining 324.0 hectares are non-irrigated rice land. Water sources were identified as potential sources for irrigation development but they have not been fully harnessed and developed to serve portion of the rainfed areas.

2. High Cost of Production.

High cost of production is directly affected by the increasing prices of prime agricultural inputs. This is usually experienced when prices of petroleum products relatively increase since inorganic fertilizer and some synthetic chemicals are petroleum-based products.

3. Resistance of Farmers to Adopt Sustainable Farming System

Farmers are presently practicing conventional farming system. They are highly dependent on inorganic farm inputs in agricultural production. Despite high price and its detrimental effects to the environment, farmers are likely resistant to adopt sustainable farming system.

4. Poorly Maintained Farm to Market Roads

Farm-to-market Roads are sufficiently established in all the barangays in Jagna however they need to be maintained and rehabilitated because they are all gravel road which are usually destroyed during rainy season. Opening of new roads to serve some of the potential production areas would definitely encourage increased production.

5. Limited Varieties of Cutflowers

Jagna, particularly barangay Mayana, is famous for cutflower production. Growers mostly women were organized and provided technical assistance in cutflower

production. Due to limited variety of cutflower in the area, they only grow the traditional varieties such as anthurium, rose gladiola, baby's breath and azucena. LGU- assisted cutflower demo farm was established to showcase technologies and production of other varieties of cutflower, however it needs funds for its maintenance and upgrading.

6. **Lack of High-yielding and resistant variety of coconut for seedling.** There are still old and unproductive coconuts that need to be rehabilitated and be replaced with high-yielding and resistant variety of coconut to enhance production. There have been requests made to the Philippine Coconut Authority (PCA) to provide the seedlings but the requests have yet to be granted. Thus, there is still lack of the source of planting material. This should be looked into since coconut is a major crop in the area covering a huge production area of 1,440.43 hectares.
7. **Lack of Capital for Farmers to Implement Multi-cropping Technology in Coconut Based area.** There are more coconut areas that are not maximized due to the lack of capital. Other areas have become idle and unproductive.
8. **Lack of marketing support to Value-added and by-products of Coconut .** Generally, oil palm is an emerging commodity which offers additional opportunities to hasten local economic growth and development but it is not yet a proven viable agricultural crop in in Bohol. Farmers in sitio Cabungaan in barangay Calabacita and Balili are embarking on the oil palm plantation with a total area planted reaching to 112 hectares. The plantation is a joint undertaking between the land owners and the First Consolidated Bank (FCB) Foundation. In addition, Jagna is geologically karst and the presence of the said plantation poses threat to the environment according to experts at the Soil and Water Conservation Foundation (SWCF). With this, it is encouraged to involve farmers with production of coconut by-products, thereby providing them with new sources of income, like virgin coconut oil processing, which is a very promising alternative source of income aside from copra. Cutting of coconuts for lumber also remains to be a concern, which consequently decreased coconut production.
9. **Local tourism attractions are substandard.** Jagna has existing or actual local tourist attractions but attract only minimal domestic tourism arrivals because of substandard qualifications based on tourism parameters.
10. **Potential tourist attractions are underdeveloped.** There are also a number of identified potential tourism destinations in Jagna but local officials particularly those from the barangays where these attractions are located failed to develop them.
11. **Absence of Local Tourism Development Plan.** Even if the LGU has the data such as the inventory of tourist attractions both actual and potentials, tourism statistics data and humanware but without a concrete tourism development plan, local tourism industry has no clear direction.

12. Other issues include low productivity of rice, insufficient processing technology and facility, lack of sources of certified planting material, post harvest technologies and facilities, capital of farmers to venture on livestock production.
13. There are also issues on the laxity of enforcement of fishery laws and the lack of livelihood alternatives to marginal fishermen and patrol boats and other paraphernalia for regular patrolling.

SOCIAL DEVELOPMENT ISSUES

- There is **lack of hospital facilities, supplies and medicines**. Patients at the TBGDH are advised to procure the required supplies and medicines for their hospitalization. This situation is a burden especially to the indigents who has still to look for money before treatment is administered.
- There are **medical equipments** at the district hospital, an ultra-sound at the RHU which are donated by Philos Health and some basic equipments (e.g. weighing scales) at the barangay health centers whose uses **are not maximized** because of lack of technical know-how of health personnel.
- **Balancing between two important concerns of rural health providers** (doctors, nurses and midwives): attending important health-related seminars and conferences outside of the municipality and attending to the daily consultations of patients at the health centers. This issue has to considered in prioritizing what is more important at a given time and situation.
- **The TBGDH and the Rural Health Centers do not have dentists**. Dental care in the municipality is only provided by private practitioners and the public schools through its School Dentist. The populace particularly the marginalized sectors and those living in the upland cluster do not have access to dental health care.
- The **position of RHU 2 doctor is vacant** after the contract of the assigned doctor expired. While there is a temporary replacement, a permanent doctor is needed to sustain the services of the new health center based in the upland barangay.
- The **result of the National Achievement Test Mean Percentage Score of the Grade Vi pupils from Jagna is below the planning standard which is 75%**. The highest in the Grade VI level is only 71.3% and in the Grade III level is 61.4%. Related to this poor standing is the high percentage of failure and repetition rates. These can be accounted to several factors: the teachers and their techniques; the home environment of the children concerned and the parents.
- With the creation of Preparatory classes in the barangays where there are existing public schools, there is a **need of additional classrooms to accommodate the enrollees**. Currently, classes are held in vacant spaces/makeshift structures within the school premises.
- There is the **not enough financial support to the public school system for facilities, equipments and supplies** necessary to improve education. Included also is the lack of perimeter fences and security guards to ensure the safety of the students and the equipments.

- There is a **decrease in the Day Care enrollment in the 2009-2010** as a result of the creation of preparatory classes in barangays where there are public schools. Parents in these areas prefer to send their children to the latter as a better foundation when the child enters formal school.
- The **Municipal Social Welfare Office lacks the manpower to perform its varied functions**. The position of Municipal Welfare Officer is on an Officer-In-Charge (OIC) capacity who handles the different sector concerns under its mandates. There is also no Daycare Officer who should supervise and monitor the Day Care Workers and Day Care Centers.
- The **Php 4,000.00 standard honorarium of Day Care Worker as provided for evaluation and accreditation purposes has not been achieved in the LGU**. Since the Day Care is under the barangay, the municipality cannot cover the increase requested by the barangay Councils. However, the barangay councils cannot pay honoraria to any of its employees more than what they are receiving. At the moment, the Punong Barangay is receiving less than the Php 4,000.00 standard rate.
- There are **sector organizations which are not yet consolidated and functional**. The out-of-school youth at the barangay level are constantly being re-organized because of the fluidity of the sector. Two-thirds (2/3) of the barangay women organizations are not yet accredited. Some have already processed their requirements with the accrediting agency and others are working on it, there are a few which have yet to formally organize their ranks. The association of persons with disabilities has to be assisted in the accreditation of their documents. Related to this is the low level of understanding and awareness of organizational as well as sectoral concerns.
- **Lack of physical structure for the concerns of some sectors**: lack of temporary shelter for cases of Children in Conflict (CICL) with the Law and VAW-C. In most cases, the victim-survivors of VAW-C are sent home while in cases where protection is needed, they are accommodated by the Social Welfare Officer or police women in their homes. For CICL cases, there are times that they are jailed at the PNP station. The Senior Citizens Building is not yet completed. Requirements have yet to be complied for the 1st release of the fund before the next tranche can be made available.
- **The need of additional staff of the Stimulation Therapeutic Activity Center (STAC) to attend to clerical work**. It will be difficult if the therapists will still attend to this function.
- There is **lack of documentation of the utilization by the beneficiaries of the Aid to Individuals in Crisis Situation (AICS)**. There is also the need to review the process and procedure in availing the AICS so this can really benefit the indigents.
- There is **no mechanism in place for the LGU (municipal and barangay) to further support more enrollees** and how current enrollees can be sustained.
- The **question of suitability as a cemetery of the lot acquired by the Muslims as burial ground for their deceased**. This issue has to be resolved together with the Department of Environment and Natural Resources (DENR) so they can start with the necessary construction.

- The relocation sites particularly of those occupying the lot of the Philippine Ports Authority (PPA) in Barangay Pagina and the landslide victims in Barangay Mayana. For the informal settlers in Barangay Pagina, the need of the Barangay Council to identify the relocation area and mechanism for the purpose of transfer and relocation of informal settlers needs to be hastened. While those in Barangay Mayana, negotiation for the identified lot need to commence very soon.

INFRASTRUCTURE ISSUES

- **Insufficient funds for road maintenance, infrastructure and building facilities**
 - Limited amount of fund allocation for maintenance of roads and building which includes labor, materials and fuels for equipment. Barangay funds are mostly allocated in buildings rather than road improvement.
- **The unavailability of equipment and lack of funding of the provincial government for the maintenance of the provincial roads**
 - Due to the limited resources and considering that the whole province is being maintained using a limited number of provincial equipment, requesting the use of these equipment to rehabilitate Jagna roads is difficult and oftentimes response is delayed. The roads become hardly passable during rainy days because there were portions that the gravel was being eroded during heavy rainfall considering the terrain /slope of the road, most especially the portions Buyog-Balili road. However few of these roads are not passable only during rainy days.
- **Inefficient mode of bridges accessibility**
- There are some bridges cannot serve as alternative re-routing area when it is needed because it cannot carry loads more than one ton. Repair of these bridges is also on schedule basis due to lack of funds.
- **Improper designation of parking areas**
 - The parking space identified by the LGU has already been established but the parking shed has not been constructed yet.
- **Old water distribution pipes network**
 - Most of the existing pipe networks are very old. Some were already rusted and corroded that resulted to burst and leaks in some areas of Tejero, Poblacion, Pagina and Canjulao.
- **Insufficient distribution of water supply to the consumers**
 - The water supply from its source remained constant or slightly decreasing in recent years but the number of consumers and consumer applicants is increasing. As a result, the supply of water is insufficient and not available twenty-four hours a day. Brgy. Canjulao in particular experiences scheduling of water service delivery especially during summer time.
- **Insufficient funds for water development**

Funds for water system development is very limited; development funds of the municipality was allocated mainly to construction of public market. Given also the

the fact that very minimal revenue rate is charged as water tariff, revenues are insufficient to further develop potential water sources to increase water volume.

ENVIRONMENT SE CTOR

- **Fully depreciated garbage compactor**
- Current condition of garbage compactor is now fully depreciated resulting to high costs for repair and maintenance . Recently a dump truck has been acquired to alternate the garbage collector but this is not sufficient.
- **Excessive catch of manta ray in Bunga Mar**
Brgy Bunga Mar is known all throughout the province as place where Manta Ray fishing is rampant. There are prohibitions contained in RA 8550 but monitoring and enforcement is still a problem that is why there is a continued catching of manta ray. Given that the said species are now endangered, there is now a great challenge on how to minimize, if not stop fishing of manta ray.
- **Siltation that causes sedimentation to coastal areas**
Soil erosion problems result to contaminate rivers and creeks down to the coastal areas.
- **Illegal hunting of wild species both flora and fauna**
There are noted cases of illegal activities like bird and wildlife hunting. DENR also does not regularly monitor the presence or absence of these violators and their activities in the forest areas resulting to the proliferation of these activities in the protected sites.
- **Encroachment of commercial fishers**

Commercial fishers are rampant in the municipal waters during season; some were coming from Mindanao and other places in the Visayas. Instead of local fishermen benefitting from the coastal resources of the municipality, they lose out to commercial fishers encroaching on municipal waters.

- **Rice hull issue in DES Rice Mill**
Rice hull and waste disposal of DES Rice Mill has been a long time issue but this has not been resolved yet. Nearby residents complaint about health risk concerns. Currently the LGU looks for remedies on how to resolve this problem.
- **Unregulated extraction for treasure hunting is most of the barangays**
Treasure hunting is reported in some of the barangays in Jagna without permits from the Department of Natural Resources. This poses risk to people and the environment.
- **No proper drainage System in Metro Jagna**
There are flood prone areas in Metro Jagna caused by the absence of a proper drainage system outflow. The flow of water is not clearly analysed despite the fact that elevation is below sea level. Proper planning was also not done prior to the establishment of built up areas and there are continuing development projects

within the areas where flooding occurs.

- **Practice of Solid Waste Segregation in Metro Jagna needs strict implementation**

Though Jagna is a learning site in the enforcement of solid waste segregation there are still households in the barangay who do not practice segregation at source. Barangay enforcers are also inefficient in monitoring because they only collect garbage fees without looking for garbage violators. Some residents are also not yet disciplined to properly manage their waste and end up throwing garbage or waste anywhere.

- **Constant burning of agricultural crop residues and household wastes**

Farmers still practice burning of rice hay during after harvest season . There is lack of enforcement of the Clean Air Act and also related regulations prohibiting the burning of agricultural waste that cause damage to the environment.

- **Slaughterhouse wastewater problems**

The current slaughterhouse is a more than 20-year-old facility without proper waste water disposal system. Waste at present goes to the creek while neighboring households keep complaining about the bad odor. The current septic tanks needs rehabilitation. Also there is no facility available to treat waste and effluents.

- **Constant use of chemical agriculture inputs**

While Jagna is on promoting Organic Agriculture, use of chemical fertilizer is still commonly practiced. There is a need for more IEC and advocacy of the negative impact of inorganic farming.

- **Non-observance of 20-meters (salvage zone) environmental protection by DENR**

There are informal settlers in the shoreline areas. However, there are no relocation sites identified for them.

- **Weakness of existing laws and inadequate enforcement of environmental laws, codes, and regulations**

There is lacking enforcement of Fishery Laws constrained also by a weak MFARMC and the inadequacy of enforcement paraphernalia's like serviceable patrol boat. There is also a weakness in the regular monitoring of illegal fishing activities and in the implementation of forestry laws and other environmental ordinances

- **No Disaster Risk warning system**

The LGU has not yet installed rain-gauge apparatus to monitor susceptibility to rain and water induced natural risks. The LGU also do not have a GPS Unit and GIS software tools for disaster risk monitoring.

- **No MENRO assigned/Front Desk Officer on the Restoration of Forest and Watershed Protection.**

There is a need a personnel to monitor and implement environment related activities such as tree planting, clearing of estuaries, rivers and creeks, coastal cleanup and watershed areas preservation and protection. There is a need to create a MENRO Office and hire a MENR Officer

- **Poor Regulation on the Establishment of Pig Pens near the households**

There are pig pens in the barangays with no proper disposal of waste and it creates foul odor resulting to air pollution. There should be inspection of waste disposal

ensuring septic tank is in-placed.

▪ **Main problems facing the Marine Reserve**

There is poor implementation guidelines of Marine Protected Areas. The fish wardens are not functioning because of the absence of honorarium.

▪ **Marine sanctuary issues**

- COT infestation in all sites; most prevalent inside Pangdan marine sanctuary
- Siltation in Naatang marine sanctuary
- Garbage and debris observed in Naatang MPA
- Lack of community participation in all marine sanctuary sites
- Implementation of user fees
- Encroachment of fishers inside the MPA's

DEVELOPMENT ADMINISTRATION

- ❖ **Funds are insufficient to implement development projects**, offer scholarship grants, hire competent personnel, and acquire heavy equipments. There are limitations in government infrastructures, desk and rehabilitation centers, repairs and maintenance of public buildings, road networks, waterworks rehabilitation systems, and in full implementation of needed health and agricultural programs and activities.
- ❖ **Lack of implementing guidelines** in giving Assistance in Crisis Situation or AICS, in accommodating more Philhealth care beneficiaries, and in the usage of government ambulance.
- ❖ **There are national laws and mandates that the LGU can not implement** outright. An example of this is the provision of 5% allocation for GAD and 1% for Sr. Citizen.
- ❖ **Lack of complement personnel/ permanent collectors.** LGU need to appoint mandatory personnel like the Municipal Treasurer and revenue collectors. LCE also needs to hire Administrator and competent personnel for the department complement of HRMO, MPDC and Market Supervisor. The committee or action officer to enforce the implementation of local ordinances is also needed to be organized.
- ❖ **Absence of LGU plan for human resource development.** To address issues on human resource management, HRMO needs technical trainings assistance and personnel complement in conducting workforce assessment to determine competencies, skills, and knowledge, as well as the types and number personnel needed for the organization.
- ❖ **No forum for ventilation of organizational concerns/sentiments** and there's no feedback mechanism regarding client's satisfaction of services (suggestion box and customer feedback form).
- ❖ **Lack of enforcement committee or action officer of local ordinances.** There have been several ordinances passed but the monitoring of the enforcement of these laws is deficient.
- ❖ **Poor teamwork building among heads of offices and staff.** With the observations that some employees and heads of offices are not well informed on the lines of authority and communication for employee direction and supervision and on accountability, there is a need for an orientation to be conducted for all employees. There's also a need for regular meetings among department heads/heads of offices and among employees to

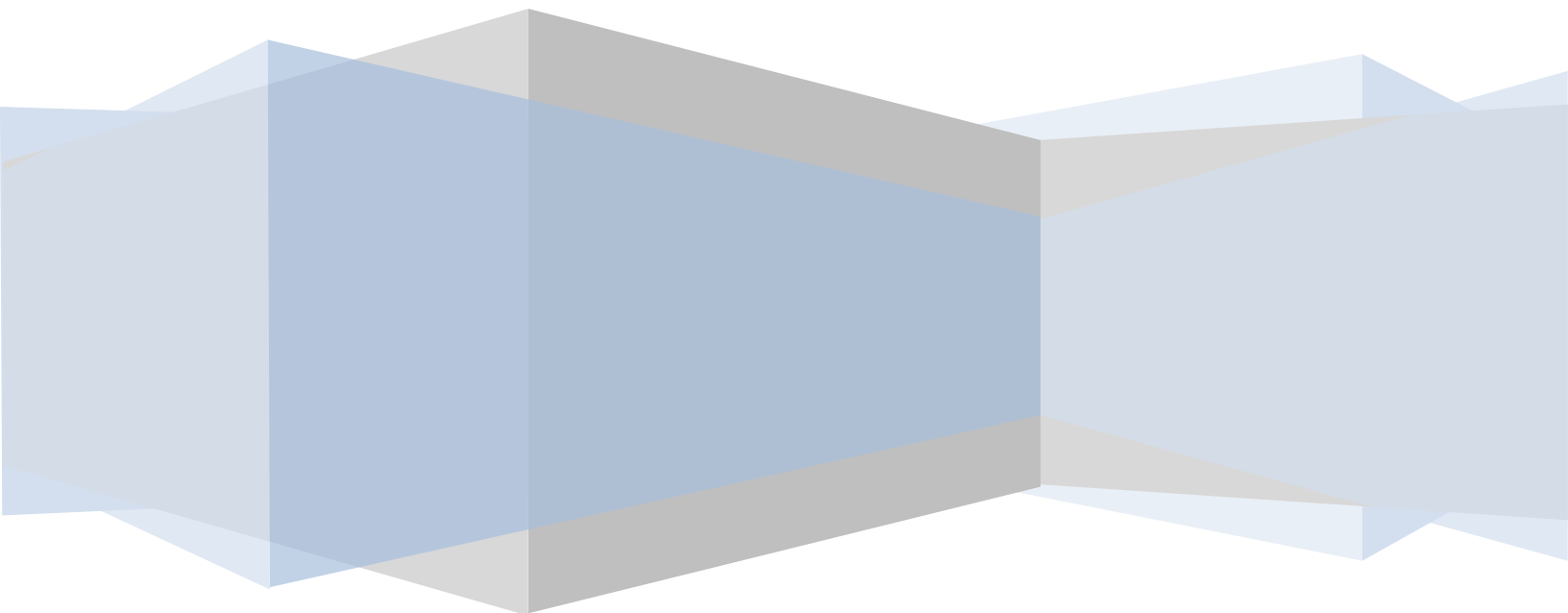
clarify roles and responsibilities and immediately address organizational issues. Adopt sport fest activities among employees at least once every week as prescribed by the Sanggunian Bayan Resolution.

- ❖ **Long overdue Local Revenue Code which has expired last 2008.** The Local Revenue Code needs updating, especially with recent developments in local enterprises, tax measures, and other related revenue measures of the municipality.
- ❖ **Delinquent taxpayers, undetermined lot owners/administrators.** There is a need to install a system for revenue generation connecting the Treasurer and the Assessor's Office, and maximizing the newly installed Customized Tax Revenue and Assessment Collection System (CTRACS). This is to ensure that all delinquent taxpayers will be able to pay their taxes promptly as well as identify the lot owners and administrators of properties that have not been identified yet.

Municipality of Jagna

Vision, Mission, and Goals

Articulating Jagna's Future in the Next 6 Years



VISION, MISSION, GOALS, AND STRATEGIES

This section of the document highlights the directions that the Municipality of Jagna would like to pursue in the next six years. While the vision and mission are long-term in nature, the goals and strategies outlined herein are translations of the long-term direction into achievable targets within the planning time frame of this CDP.

VISION

Jagna is the leading center of trade, sustainable agro-processing and eco-tourism in southeastern Bohol, with self-reliant men and women living a better quality of life, preserving their cultural heritage and efficiently managing natural resources through good governance.

MISSION

In order to realize our vision and fulfill our aspirations, we therefore commit ourselves:

- ❑ to the institutionalization of good governance by transforming the local government unit into one that is committed to uphold, promote, and protect, the interest, rights, and welfare of its people;
- ❑ to the preservation of our rich cultural heritage and foundational values by embodying, respecting, and espousing the traditions, practices, and beliefs that characterized Jagna's history, and built its present
- ❑ to the promotion of Jagna as a municipality conducive to initiatives for economic development, tourism promotion and environmental protection.

GOALS

In the next six years, the Municipality of Jagna will strive to achieve the following goals:

Economic Goals	<ul style="list-style-type: none">• sufficiency in food and agricultural products
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	<ul style="list-style-type: none"> • institutionalized sustainable farming systems • sustainable and viable livelihood and micro-enterprises • enhanced security of farmers as related to land tenure • Vibrant climate for economic opportunities
Social Goals	<ul style="list-style-type: none"> • Improved quality of life of the people in the municipality • Increased access to health care especially by the marginalized sectors • Improved academic performance and reading comprehension skills of the pupils in the public elementary school • Enhanced access to social welfare services by the disadvantaged groups • Improved public order and safety
Infrastructure	<ul style="list-style-type: none"> • Improvement/restoration and construction of various infrastructure projects to support economic, environmental , development administration, and social goals
Environment	<ul style="list-style-type: none"> • Make the community environmentally-sound and responsive to climate change • Sustained, vibrant, and rich coastal and marine resources
Institutional	<ul style="list-style-type: none"> • GAD-oriented, morally upright, productive, and competent LGU officials and employees • Responsive and effective local legislation • Maximize collection of local revenues • Promotion of transparency and customer satisfaction

ECONOMIC SECTOR

A. AGRICULTURE

A.1. DEVELOPMENT GOALS: Sufficiency in food and agri-products

OBJECTIVES:

1. Increase rice production (irrigable area, production volume)
2. Increase production area for vegetable, spices and cutflower
3. Provide high-yielding, resistant variety for coconut, banana, ubi and cutflowers
4. Expand production area for banana to upland Barangays
5. Develop area for coffee and cacao production
6. Sustain corn production area
7. Sustain livelihood program

TARGETS:

1. a. Increased by 20% of the current volume of rice production
b. Increased by 10% of the total irrigable area for rice
2. a. Increased by 30% of the current production area for vegetables, spices and cutflowers
3. a. provided 6,000 seeds nuts, 6,000 banana suckers, 6 tons ubi planting material
b. Provided 3 varieties of quality cutflowers
4. a. Increased by 30% of the current production area for banana
5. a. Established nursery and budwood garden for Coffee and Cacao seedlings production
b. Developed 30 hectares for coffee production and 30 hectares for cacao production in 6 years
6. a. Developed and sustained corn production area in 4 upland barangays.
7. a. Increased by 15% farmers' income of recipient livestock dispersal, seaweeds production and inland fishery

PPA	Success Indicator	Budgetary Requirements	Time Frame						Ensurer	Legislation/Executive Functions	Fund Source
			1	2	3	4	5	6			
1. Conduct of inventory & actual	a. 5 water sources inspected &	-	X						MAO	-	-

site validation to water sources available	validated (Calabacita, Mayana, Odiong, Buyog, Balili)											
2. Develop new communal irrigation projects	a. 6 communal irrigation projects constructed (Calabacita, Mayana, Odiong, Buyog, Balili, Lonoy)	6 M	X	X	X	X	X	X	MAO	Resolutions & Project Proposals	DA / NIA	
3. Rehabilitate existing communal irrigation system	a. 2 irrigation system rehabilitated (B-Ilaya, Tejero)	2 M		X				X	MAO	Resolutions & Project Proposals	DA / NIA	
4. Conduct rice technology demonstration project	a. 5 rice techno demo projects conducted (Tejero, Mayana, Looc, Calabacita, Balili)	250 T	X	X	X	X	X		MAO	Project Proposals	LGU / DA RFU 7	
5. Sustain and expand vegetable, spices & cutflower production area	a. 6 existing pilot areas sustained (Mayana, Buyog, Odiong, Balili, Alejawan, Calabacita)	360 T	X	X	X	X	X	X	MAO	Project Proposals	LGU / PAO	
6. Replicate vegetable & spices	a. 7 demo farms replicated (Ipil,	210 T	X	X	X	X	X	X	MAO	Project Proposal	LGU funds	

production area	Boctol, Upper Cansuhay Lonoy, Cabungaan, Larapan, Naatang, Nausok											
7. Purchase & disperse quality planting materials	a. 6,000 seed nuts, 6,000 banana suckers, 6 tons ubi planting material purchased & dispersed	Coco180T Ban=90T Ubi=210T	X	X	X	X	X	X	MAO/ PCA/ PAO	Project Proposal	DA/LGU	
8. Conduct 2 marketable varietal trials for cutflower production	a. Identified 3 varieties suitable in Mayana and Buyog	150 T		X			X		MAO/DA	Project Proposals	Local fund source	
9. Expand banana production area	a. 8 new banana production area developed (Boctol, Calabacita, Balili, Buyog, Tubod Monte, Alejawan, Cambugason, Odiong)	250 T	X	X	X	X	X	X	MAO/DA	Project Proposals	Local fund source	
10. Develop area for	a. 6 areas for coffee &	300 T	X	X	X	X	X	X	MAO/	Project Proposal	LGU/DA RFU 7	

<i>coffee and cacao production</i>	<i>cacao production developed (Balili, Buyog, Calabacita, Odiong, Mayana, Boctol)</i>								<i>APC/DA</i>		
<i>11. Livestock dispersal</i>	<i>a. 90 goats, 3000 ducks, 40 carabaos and 30 cattles distributed (upland)</i>	<i>Goats =225T Ducks =135T Cara =800T Catt =540T</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>MAO</i>	<i>Project Proposal</i>	<i>LGU/DA RFU 7</i>
<i>12. Tilapia dispersal</i>	<i>a. tilapia fingerlings dispersed to Calabacita, Mayana, Boctol, Lonoy, Balili, Odiong, Cabungaan, Cambugason, Alejawan,</i>	<i>30T</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>MAO</i>	<i>Activity Design</i>	<i>LGU/BFAR</i>
<i>13. Seaweeds Production Livelihood Project</i>	<i>a. 7 Production sites established and effectively managed.</i>	<i>350T</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>MAO/ BEMO/ BFAR</i>	<i>Project Proposal</i>	<i>MLGU/BFAR</i>

A.2. DEVELOPMENT GOALS: Sustainable Farming System promoted and institutionalized

OBJECTIVES:

1. Implement Organic Agriculture (OA) as the agricultural development direction in Jagna through legislation
2. Promote awareness and advocacy on Organic Agriculture

TARGETS:

1. a. Drafted and enacted legislations that support OA program
2. a. Technology disseminated to 33 barangays
- b. Implemented 2 barangays pilot for organic corn production
- c. Implemented 2 barangays pilot for organic rice production

PPA	Success Indicator	Budgetary Requirements	Time Frame						Ensurer	Legislation/Executive Functions	Fund Source
			1	2	3	4	5	6			
1. Formulate municipal ordinance to support OA	a. OA ordinance formulated	-	X						MAO/SB	Municipal Ordinance	
2. Conduct orientation on OA	a. 2 batches (mun and brgy level) oriented	20 T	X						MAO	Activity Design	Local Fund Source
3. Conduct IEC on OA	a. IEC on OA conducted to 33 brgys	35 T	X	X	X	X	X	X	MAO/FITS	Activity Design	Local Fund Source
4. Conduct techno demo on organic corn production	a. 2 pilot areas (Buyog, Balili) conducted	60 T	X		X				MAO	Activity Design	Local Fund Source

5. Conduct techno demo on organic rice production	a. 3 pilot areas (Cabungaan, Balili) conducted	180 T		X		X		X	MAO	Activity Design	Local Fund Source
6. Installation of Green houses & crop protection facilities	a. Installed 6 units Green houses and UV rain shelters	1 M	X	X	X	X	X	X	MAO	Project Proposals	LGU/DA RFU 7/ APC

A.3. DEVELOPMENT GOALS: Sustainable and Viable Livelihood/Micro-enterprises

OBJECTIVES:

1. Develop Value-Chain Analysis for agri-fishery products
2. Conduct continuous Capability Building to Jagna micro-enterprises
3. Conduct continuous R&D to agri-based products
4. Provide livelihood alternatives to farmers, fisherfolks and women's organization
5. Establish certified food safe micro-enterprises

TARGETS:

1. a. Value Chain Analyzed to 5 agri-fishery products
2. a. Skills training conducted to 6 micro-enterprises
3. a. 6 LGU-assisted agri-based products standardized, analyzed and enhanced
4. a. Provided 3 batches of handicraft training to women organization
5. a. 6 Jagna micro-enterprises accredited to BFAD

PPA	Success Indicator	Budgetary Requirements	Time Frame						Ensurer	Legislation/Executive Functions	Fund Source
			1	2	3	4	5	6			
1. Conduct Value Chain Analysis	a. value chain analysis on	120 T	X	X	X	X	X		MAO	Project Proposals	Local Fund Source

	vegetables, fish, livestock, coconut, ubi conducted										
2. Conduct Entrepreneurial Skills Training	a. entrepreneurial skills training conducted to 8 LGU-assisted agri micro-enterprises b. LGU-assisted agri micro-enterprises capable in managing their business	50 T	X	X	X	X	X	X	MAO	Activity Design	LGU / PAO
3. Product Standardization	a. products produced conform to established product specifications	50T	X	X	X	X	X		MAO/ITS SAFE/Food Handlers	Project Proposal/Activity Design	LGU/DOST/ ITS SAFE/ PAO
4. Packaging and Labeling Enhancement	a. Created 6 new packages & labels to salabat, mais kape, tableya, VCO, ubi, calamay in accordance with standards	180 T		X	X	X	X		MAO/FITS/ DOST	Project Proposals	LGU/PAO/ITS SAFE/DOST

5. Conduct Product Analysis	a. microbial & nutritional facts identified and printed in the product's label	180T		X	X	X	X		DOST	Project Proposals	LGU/DOST
6. Food Safety Trainings	a. 3 batches w/ 100% of the trained participants practiced and implemented Food Safety	30 T		X		X		X	MAO/FITS	Activity Design	LGU/PAO/ ITS SAFE/ DOST
7. Conduct survey on training needs from POs & women organizations	a. priority trainings identified and on file	5T	X	X	X	X	X	X	MAO	Activity Design	Local Funds
8. Conduct skills training on handicraft	a. 3 women groups produced handicraft items	30T			X	X			MAO/DTI	Activity Design	LGU/PAO/ DOST
9. Coordinate with DOST & FDA agencies on the registration process	a. BFAD registration documents placed on the wall of the processing areas	20T	X	X	X	X	X		MAO/FITS	Activity Design	LGU/PAO/ITS SAFE/DOST

A.4 DEVELOPMENT GOALS: *Enhance security of farmers as related to land tenure*

OBJECTIVES: 1. *Update data bank on tenurial status*

TARGETS: 1. a. *All land tenure data from LAMP collected by the LGU*
b. *100% sharing mechanism between owner and tenant verified*

PPA	Success Indicator	Budgetary Requirements	Time Frame						Ensurer	Legislation/Executive Functions	Fund Source
			1	2	3	4	5	6			
1. Collection of data	a. updated profile of tenancy status on file	-	X	X	X	X	X	X	MAO/DAR/LAMP 2	-	-

B. TRADE & INDUSTRY

B.1 DEVELOPMENT GOALS: *Vibrant climate for economic opportunities*

OBJECTIVES: 1. *Set into operation the 2nd floor of the public market*
2. *Upgrade market facilities*
3. *Improve financial transactions in the municipality*
4. *Establish linkages for investment package*
5. *Increase marketability of agri-based products*

TARGET: 1. a. *2nd floor of the public market fully operational*
2. a. *1 serviceable standby generator in placed*
3. a. *1 Bancnet or fast teller accredited financial institution fully operational in Jagna*

4. a. MOA signed between Jagna and Bohol Investment Promotion Center (BIPC)
5. a. 6 Agri-based products advertised daily in DYJP and in other media (print)
b. 6 Agri-based products displayed at the Jagna Tourism Lounge
c. 6 LGU-assisted micro-enterprises promoted outside Jagna

PPA	Success Indicator	Budgetary Requirements	Time Frame						Ensurer	Legislation/Executive Functions	Fund Source
			1	2	3	4	5	6			
1a. Schedule & announcement of public bidding	<ul style="list-style-type: none"> Plugged-in to radios and posted announcements 	5T	X						Market Office		Market Budget
1b. Conduct bidding	<ul style="list-style-type: none"> Fully operational 2nd floor of public market 	3T	X						Market Office	Revised market code	Market Budget
2. Purchase and install standby generator	<ul style="list-style-type: none"> Serviceable standby generator in placed 	1M			X	X	X	X	Market Office		General Fund
3a. Re-invite Land Bank and invite other Banks to open a branch in Jagna	<ul style="list-style-type: none"> Invitation served 		X						Mayor's Office/SB	Resolution & Mayor's Endorsement	

3b.1.Facilitate the negotiation of possible site	<ul style="list-style-type: none"> Site identified and agreed upon 			X					Mayor's Office/SB		
3c. MOA Signing between LGU and Bank	<ul style="list-style-type: none"> MOA Signed 			X					Mayor's Office	Resolution	
3d. Issuance of Mayor's Permit	<ul style="list-style-type: none"> Bank Fully Operational 	2T			X				Mayor's Office	Mayor's Permit	General Fund
4a. Submit proposal to Bohol Investment Promotion Center	<ul style="list-style-type: none"> Proposal served to BIPC 			X					Mayor's Office	Resolution and Endorsement	
4b. MOA Signing	<ul style="list-style-type: none"> MOA Signed/linkage established 			X					Mayor's Office	Resolution	
5a.Create promotional materials for each of the 6 LGU assisted enterprises a. Brochure/Flyers b. Broadcast c. Tarpaulin	<ul style="list-style-type: none"> Promotional Materials printed Regular slot over DYJP 	25T	X						MAO/Marketing Arm		General Fund

5b1. MOU on consignment	<ul style="list-style-type: none"> Terms and condition agreed upon 			X						Tourism Officer		
5b2.Display of products	<ul style="list-style-type: none"> Participated in local and national trade fairs and exhibits Sales from 6 LGU assisted agri-based products 		X	X	X	X	X	X	X	Tourism Officer/ Coordinator or Marketing Arm		
5c1.Creation of a marketing arm for the promotion of Jagna products outside Jagna	<ul style="list-style-type: none"> Functional LGU Marketing Arm 		X							LCE	EO	
5c2.Establish market linkages outside Jagna	<ul style="list-style-type: none"> Linkages identified 			X	X	X	X	X	X	Marketing Arm		
5c3.Presentation of products to identified partners	<ul style="list-style-type: none"> Products displayed in different tourism sites 			X	X	X				Marketing Arm		

SOCIAL DEVELOPMENT SECTOR

GOALS, OBJECTIVES AND TARGETS

Overall Goal: Improved quality of life of the people in the municipality

Sectoral Goals:

1. Increased access of health care especially by the marginalized sectors;
2. Improved academic performance and reading and comprehension skills of pupils in the public elementary schools;
3. Enhanced access of social welfare services by the disadvantaged groups; and
4. Improved public order and safety in the municipality

HEALTH CARE

A. Maternal and Child Health

Goal: Improved maternal and child health in the community

Objectives:

1. To attend to all pre-natal and post natal consultations and deliveries;
2. To increase family planning acceptors;
3. To increase coverage of fully immunized children;
4. To attend to all under-five children growth monitoring;
5. To reduce the prevalence of malnutrition for children aged 0-6 years old; and
6. To reduce the incidence of acute respiratory infections in children

Targets:

1. 100% of Ante Partum are fully immunized
2. 100% of Ante Partum and Post Partum are handled by skilled health workers
3. 70% of married women of reproductive age avail more effective methods of family planning
4. Children 0-12 years of age are 100% fully immunized
5. Growth chart of all children 0-6 years of age are monitored
6. 0% malnutrition rate for children aged 0-6 years
7. Decrease incidence of acute respiratory infection cases among children 0-5 years of age

PROGRAMS/PROJECTS/ AIVITIES	SUCCESS INDICATOR	Budgetary Requirement	Funding Source	TIME FRAME						Ensurer	Legislation/Execu tive Actions
				Yr 1	Yr 2	Y3	Y4	Y5	Y6		
1. Pre-natal /Post Natal /Deliveries a. Referrals for dental care of all pre-natal	AP X 3% =1,076 PP =1,076 Deliveries =1,076 100%	P 300,000.00	LGU	ON-GOING THROUGHOUT THE TIME FRAME						RHU Staff	Ordinance and Facility-based Delivery
2. Motivation for Family Planning	Married women of reproductive age	P 30,000.00	LGU	ON-GOING THROUGHOUT THE TIME FRAME						RHU Staff trained on FP	
3. IEC on Family Planning a. NFP-RPM seminars b. Pre-marital counseling	Couples and prospective couples in the 33 barangays aware about reproductive health	P 15,000.00	Populat ion Commis sion, DOH, LGU	ON-GOING THROUGHOUT THE TIME FRAME						RPM-NEP Team. PMC Team	
4. Under Five Clinic	1,076	P 37,660.00	LGU	ON-GOING THROUGHOUT THE TIME FRAME						RHU Staff	

5. Expanded Program on Immunization (BCG,DPT, Polio, Hepa, Measles)	969 children fully immunized	P 50,000.00	LGU/D OH	ON GOING THROUGHOUT THE TIME FRAME	RHU Staff	
6. Nutrition Program a. OPT (annual & semi-annual) b. Giving of micro-nutrients c. De-worming d. Mass Feeding e. BNS evaluation	All children aged 0-5 are served All Barangays are evaluated on their Nutrition Program	P 65,000.00 P 15,000.00 P 20,000.00	LGU	ON-GOING THROUGHOUT THE TIME FRAME	RHU Staff, BHWs and BNS	1 YCF Policy
7. Acute Respiratory Infection Program	All 0-5 years old are served	P100,000.00	LGU	ON-GOING THROUGHOUT THE TIME FRAME	RHU Staff	
Subtotal		P632,660.00				

B. National Tuberculosis Program

Goal: To eradicate tuberculosis cases

Objective: To increase findings and treatment of all TB positive cases

Target: All positive cases treated and cured

PROGRAMS/PROJECTS/ ACTIVITIES	SUCCESS INDICATOR	Budgetary Requirement	Funding Source	TIME FRAME	Ensurer	Legislative /Executive Actions
1. a. Case Finding b. Treatment of Positive Cases c. Sputum follow-up (3 times) d. Request for laboratory supplies/equipment e. Regimen III (CAT III) drugs				ON-GOING THROUGHOUT THE TIME FRAME	RHU Staff	<ul style="list-style-type: none"> - Ordinance on TB DOTS - TB Task Force Ordinance - Allocation of TB Funds Ordinance
2. Multiple Drug Therapy	200,000/pt	P400,000.00	LGU/DOH	ON-GOING THROUGHOUT THE TIME FRAME	MHO/PHW referral to	
3. IEC on Multiple Drug Resistant Therapy		P 10,000.00	DOH			
Sub Total		P 410,000.00				

C. National Leprosy Control Program

Goal : Eradicate Leprosy

Objective : To increase case finding and treatment of all leprosy cases

Target : All positive cases treated and cured

PROGRAMS/PROJECTS/ACTIVITIES	SUCCESS INDICATOR	Budgetary Requirement	Funding Source	TIME FRAME	Ensurer	Legislative /Executive Actions
1.Leprosy Elimination Campaign - Skin Clinic - IEC through leaflets	Treatment and cure of actual cases	P20,000/year	LGU/DOH	ON –GOING THROUGHOUT THE TIME FRAME	RHU Staff	
Sub Total		P 20,000.year				

D. Control of Diarrheal Diseases

Goal : Eliminate the spread of diarrheal diseases

Objective : To prevent and treat diarrheal diseases

Target : 0 incidence of diarrheal diseases among children 0-6 years of age

PROGRAMS/PROJECTS/ACTIVITIES	SUCCESS INDICATOR	Budgetary Requirement	Funding Source	TIME FRAME	Ensurer	Legislative /Executive Actions
1.IEC campaigns		P 10,000.00	LGU/DOH	ON-GOING THROUGHOUT THE TIME FRAME	RHU Staff	
2. Giving of Oresol	14.5% x 2.8 14,566	P 30,000.00			RHU Staff	
Sub Total		P 40,000.00				

E. Environmental Sanitation

Goal : Improved environmental sanitation

Objectives :

1. To reduce the number of households with unsanitary toilets
2. To ensure all types of water sources as potable
3. To reduce the number of households using unfriendly garbage and water waste disposal
4. To prevent the emergence and spread of dengue and other types of communicable diseases

Targets :

1. 100% of households with water-sealed toilets
2. 100% of water sources chlorinated
3. 100% of barangays implement the solid waste management
4. 0 incidence of dengue and other communicable diseases

PROGRAMS/PROJECTS/ACTIVITIES	SUCCESS INDICATOR	Budgetary Requirement	Funding Source	TIME FRAME	Ensurer	Legislative /Executive Actions
1. IEC Campaigns on Environmental Sanitation	80-100% of the community aware of environmental sanitation	P 20,000.00	LGU		RSI/RHU Staff	
2. Construction of water-sealed toilets	Water –sealed toilets in the households		LGU		RSI/RHU STaff	
3. Regular Inspection and Issuance of Sanitary	80-100% of business				RSI	

Permits to Business Establishments	establishments complied to sanitay requirements			ON-GOING THROUGHOUT THE TIME FRAME		
4. Water Chlorination to all water sources	100% of water sources chlorinated		LGU		MPDC	
5. Implementation of Solid Waste management in the homes and workplaces	80% of households and workplaces practicing environmental friendly garbage disposal		LGU		Solid Waste Committee/RSI	
6. Conduct Food Handlers Class	80-100% of food handlers practicing good manufacturing practices		LGU		MAO/RSI	
7. IEC /Training on communicable diseases a. Dengue Brigade b. HIV-AIDS c. Hepatitis d. Bird Flu e. Rabies Control		P 32,000.00	LGU			

Sub Total						
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F. Healthy Lifestyle Programs

Goal : Healthy lifestyle a way of life in the community

Objective : To reduce the incidence of lifestyle-related diseases

Target : 1. Early detection of lifestyle –related diseases in children and adults
2. Sustained treatment of those diagnosed with life-style related diseases
3. Institutionalization of Physical Fitness Program in the community

PROGRAMS/PROJECTS/ ACTIVITIES	SUCCESS INDICATOR	Budgetary Requirement	Funding Source	TIME FRAME	Ensurer	Legislative /Executive Actions
1.IEC on Life-style related diseases	-80% of population aware about lifestyle diseases and its prevention -reduction in no. of cases related to lifestyle					- Anti-Smoking Ordinance - Healthy Lifestyle Ordinance
2.Diabetes Screening -regular sugar determination - maintenance dosages	-80% of patients are conscious and practicing the diabetes regimen		LGU/Philos Health			
3.Cardio-Vascular Disease Monitoring	-80% of patients are conscious and		LGU/Philos Health			

- regular BP -maintenance dosages	practicing the cardio regimen					
4.Regular HATAW or similar program on physical fitness	-		LGU/RHU/HRM			
Sub Total						

G. Capacity Development of Health Providers

Goal : Capable health providers managing the rural and barangay health centers

Objectives : 1. To raise the capacity and capability of health personnel of the health personnel in the rural health centers and also of the barangay health workers

2. To access recent updates of health programs

Target : All staff of the two (2) RHUs and BHWs

PROGRAMS/PROJECTS/ ACTIVITIES	SUCCESS INDICATOR	Budgetary Requirement	Funding Source	TIME FRAME	Ensurer	Legislative /Executive Actions
1.Attendance of trainings and seminars conducted by DOH and other accredited health organizations	80-100% of health personnel knowledgeable of health programs and skilled in applying these in their work		LGU	ON-GOING THROUGHOUT THE TIME FRAME		
2.Training of Barangay	207 BHW acquire knowledge and skills	P30,000.00	LGU	Years 1 and 5	RHUs	

Health Workers of						
Sub Total						

EDUCATION

Objectives:

1. To increase the Mean Percentage Score (MPS) results of the National Achievement Test
2. To continuously capacitate the teachers in all grade levels
3. To reduce the repetition and failure rates among public school pupils

Targets:

1. Achieve the planning standard of 75% in the National Achievement Test results
2. 100% of the teachers are equipped with effective teaching techniques and strategies
3. 70% reduction in the repetition and failure rates of pupils

PROGRAMS/PROJECTS/ ACTIVITIES	SUCCESS INDICATOR	Budgetary Requirement	Funding Source	TIME FRAME						Ensurer	Legislation/Executive Actions
				Yr 1	Yr 2	Y3	Y4	Y5	Y6		
1. Monitoring of review sessions for the National Achievement Test	5% increase in the NAT results yearly	P6,000.00	DepED	X	X	X	X	X	X	Local School Board	Memorandum/Guidelines
2. Monitoring of attendance on Trainings and seminars for teachers	-100% attendance -Highly competent teachers	P 30,000.00	DEpEd/LGU							Local School Board	Memorandum
3. LGU financial assistance to	Prioritized	P	LGU	X	X	X	X	X	X	LGU	Resolution

indigents pupils a. Formulate guidelines for financial assistance to indigent pupils b. Identify the indigent pupils	indigent pupils avail of financial assistance	2,000/indigent student									
4. Annual Recognition of a. academic achievers in the public elementary and high schools b. Recognition of Eco-savers	Awards received by achievers		LGU	X	X	X	X	X	X	MSWD	
5. Municipal Education Summit	- Education Profile in the municipality - Recommendations / Actions for issues and concerns	P200,000.00			X					Local School Board/DepEd /LGU/PTCA	
Sub Total											

SOCIAL WELFARE SERVICES

A. Day Care System

Goal : Enhanced Day Care System

Objective: To improve the capacity of Daycare teachers

Targets: 100% of Daycare teachers/workers are competent

PROGRAMS PROJECTS, ACTIVITIES	SUCCESS INDICATORS	BUDGETARY REQ'T.	FUND SOURCE	TIME FRAME						ENSURER	LEGISLATIVE/EX EXECUTIVE ACTION
				1	2	3	4	5	6		
1. Capacity development for Day Care Workers a. Attendance in DCW enhancement seminars/programs b. Conduct municipal wide training workshop	100% competent DCW	200,000/yr	LGU (mun/brgy)	X	X	X	X	X	X	MSWD	
2. Municipal-wide Daycare System Summit	Municipal Daycare Situationer/profile	150,000	LGU (mun & brgy)			X				MSWD	
3. Recognition of Performing Daycare Centers (DCC) and Day Care Workers (DCW)	DCW and DCC recognized and awarded	100,000/yr	LGU (mun)			X			X	MSWD	
4. Monitoring and Evaluation of DCCs and DCWs	Performance of DCCs & DCWs monitored	100,000/yr	LGU (mun & brgy)	X	X	X	X	X	X	MSWD	

	and evaluated										
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B. OUT-OF-SCHOOL YOUTH

Goal : Increased productivity and honed skills of out-of-school youth

Objectives : 1. To establish functional organizations of the out-of-school youth
2. To create job opportunities for the out-of –school youth

Targets : 1. 75% of OSY in Metro Jagna and coastal barangays organized
2. 50% of OSY technically skilled and avail of job opportunities

PROGRAMS PROJECTS, ACTIVITIES	SUCCESS INDICATORS	BUDGETARY REQ'T.	FUND SOURC E	TIME FRAME						ENSURE R	LEGISLATIVE/EX EXECUTIVE ACTION
				1	2	3	4	5	6		
1. Inventory, Profiling and Organizing of OSY (Metro Jagna and coastal barangays) a. Inventory and profile of OSY b. Barangay- level OSY organizations c. Municipal OSY organization	-functional barangay OSY organizations in 19 barangays -municipal OSY organization	100,000	LGU/AI ay Lakad	X	X	X	X	X	X	MSWD	

2. Skills Training in: <ul style="list-style-type: none"> • Commercial cooking • Driving & engine maintenance • Information technology • Building-wiring installation • Computer hardware servicing • Automotive mechanics 	200 skilled OSY	100,000/yr	LGU/AI ay Lakad	X	X	X	X	X	X	MSWD	
3. Capital Assistance to qualified and trained OSY	30 OSY have start-up businesses	300,000	LGU			X	X	X	X	MSWD	
4. Continue with the scholarship grants to OSY	-deserving OSY identified and able to finish courses	yearly	LGU/AI ay Lakad	X	X	X	X	X	X	MSWD	
5. Municipal Out of School Youth Summit	OSY Situation/Profile	100,000	LGU (mun/b arbaria n)				X			MSWD	
Sub Total		P 600,000									

C. WOMEN SECTOR

Goal : Increased participation of women in productive and community concerns

Objectives:

1. To strengthen women organizations in the barangays and at the municipal level
2. To increase awareness of women and men about gender and related concerns
3. To create sustainable livelihood and micro-enterprises of women
4. To develop women micro-entrepreneurs

- Targets:**
1. Functional women's organizations in all barangays and municipal level
 2. 1/3 of barangay women's organizations have sustainable and viable livelihoods and enterprises
 3. 20 women entrepreneurs
 4. 80% of members of women organizations are aware, knowledgeable and conversant about gender and related concerns

PROGRAMS PROJECTS, ACTIVITIES	SUCCESS INDICATORS	BUDGETARY REQ'T.	FUND SOURCE	TIME FRAME						ENSURER	LEGISLATIV E/EXEUCU TIVE ACTION
				1	2	3	4	5	6		
1. Capacity Development Program a. Training Needs Assessment b. Organizing and Organizational Development c. Gender and Development and Rights Education	-accreditation of all barangay organizations in accrediting bodies and the SB -functioning women's organization -application of knowledge/awareness of gender	200,000/yr	LGU - GAD Budget	X	X	X	X	X	X	MGAD-C/GAD Focal Point	Enforcement of the GAD Code
2. Entrepreneurship Training Program a. Baseline study of existing women's enterprises b. Training Courses	-Women Enterprise Profile -Business Plans/ Feasibility Studies	500,000 (with supplement on a yearly	LGU-GAD Budget/other partners	X	X	X	X	X	X	MGAD-C/GAD Focal Point	

	-potential women entrepreneurs	basis)									
3. Provision of capital and related enterprise needs to priority enterprises	-sustained operation of 10 priority enterprises	1,000,000 (as start-up)	LGU/other partners		X	X	X	X	X	MGAD-C/KKJ-LCW	
4. Bantay Banay Projects (for gender-based violence concerns in the barangays)	-existence of Bantay Banay mechanisms in the barangay (with 5 pilot barangays)	200,000/yr	LGU	X	X	X	X	X	X	MSWD/PNP Women & Children's Desk/Barangay Councils	Enforcement of GAD Code
Sub Total		P1,900,000									

D. OTHER REGULAR SOCIAL WELFARE SERVICES

PROGRAMS PROJECTS, ACTIVITIES	SUCCESS INDICATORS	BUDGETARY REQ'T.	FUND SOURCE	TIME FRAME						ENSURER	LEGISLATIVE/ EXECUTIVE ACTION
				1	2	3	4	5	6		
1. Supplemental Feeding a. ECCD b. Milk Feeding Program	# of 0-6 aged children served		ECCD/ND A/LGU	X	X	X	X	X	X	MSWD	MOA
2. Assistance to Other Sectors a. Strengthening of Senior	-functional organizations of		LGU	X	X	X	X	X	X	MSWD	

Citizens Organization b. Strengthening of Organization of Persons with Disability c. Strengthening of the Stimulation Therapeutic Activity Center (STAC)	Senior Citizens and PWD -livelihood of PWDs -rehabilitation of STAC beneficiaries										
3. Phil Health for indigents	-increased no. of beneficiaries		LGU		X	X	X	X	X	MSWD	
4. Aid to Individuals in Crisis Situation Enhance procedures and systems of AICS provision	-better procedures installed		LGU	X	X	X	X	X	X	MSWD	
5. Establishment of the Muslim cemetery in Jagna	-deceased Muslims can be buried in Jagna		Private Sector	X	X					MPDC/MSWD	

E. Housing

Goal : Decent and affordable housing for the underprivileged and homeless

Objectives : 1.To provide housing units for those squatting in government lands
2. To relocate 69 household victims-survivors of Mayana landslide
3. To identify households living in danger areas of the barangays

Targets : 1. 50-80% of identified households are relocated to identified areas

PROGRAMS PROJECTS, ACTIVITIES	SUCCESS INDICATORS	BUDGETARY REQ'T.	FUND SOURCE	TIME FRAME						ENSURER	LEGISLATIVE /EXEXECUTIVE ACTION
				1	2	3	4	5	6		
1.Identification of sites suitable for housing/social housing	Inventory of identified sites for housing		LGU(mun & brgy)	X						MPDC/Ba rangay councils	
2. Inventory of households living in danger areas of the barangays	List of households in danger zones per barangay		LGU(mun & brgy)	X						MPDC/Ba rangay councils	
3. Negotiation with landowners of the relocation site of the Mayana displaced families	Agreement on the price of lot to be used as relocation site		LGU (mun)	X						LCE/SB/M PDC	
4.Tap funds from national and local sources both government and private sectors	Commitment s for funds and other forms of assistance		LGU (mun)	X	X	X	X	X	X	LCE	
5.Preparation of guidelines and mechanics for relocation of households	Guidelines and mechanics formulated		LGU (mun)		X	X	X				
6.Consultations with concerned families/households				X	X	X	X	X	X		
7.Construction of housing units by	Housing		LGU/other			X	X	X	x		

phases	units and facilities erected		stakeholders								
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INFRASTRUCTURE SECTOR

Development Goals: Improvement/Restoration and construction of various Infrastructure projects

Objectives :

ROADS and BRIDGES:

1. To Transform deteriorated municipal road into a good riding quality.
2. To prevent the flow of water to cross the road
3. To transform all earth roads to all weather roads.
4. To easy transport farm to market goods.
5. To get rid of the dust in market area.
6. To decongest traffic and serve as a rerouting artery

TARGETS:

1. 516 mtrs. of concreted surface of Severo Salas st. and Cagampang St.
2. 50 mtrs. of concreted surface of road beside municipal building leading to Jagna Gym
3. 7 barangays rehabilitated:
 - Cambugason – Canukso Elementary School 1.4 km.
 - Mayana – Balikbayan road
 - Odiong – Cabulihan – Ilaya road
 - Laca – Cantuyoc road
 - Can-ipol – Daguokan road
 - Lubcanan – Tejero road (leading to Kota Cementery)
 - Cabunga-an Gamay Barangay road
4. 500 mtrs. concreting, a portion of Calabacita Road (jct. Calabacita – S-Bullones road)
5. 1,275 sq. mtrs. Concrete surface (fronting new public market)

6. Calmayon bridge converted from temporary to permanent and Quezon bridge rehabilitated to accommodate bigger loads

PROGRAM/PROJECT/ACTIVITIES	SUCCESS INDICATOR	BUDGETARY REQUIREMENTS	FUNDING SOURCE	TIME FRAME						ENSURER	LEGISLATION/ EXECUTIVE FUNCTIONS
				YR 1	YR 2	YR 3	YR 4	YR 5	YR 6		
Concreting of Severo Salas st.	248 m concreted	P651,000.00	20% dev't fund	—	—					Budget off. Engineering, MPDC	Appropriation ordinance
Concreting of Cagampang st.	268 m concreted	P703,500.00	20% dev't fund			----	----	----	----		
Re-shaping & regravelling	7 barangays re-shape & regravell	P600,000.00	20% dev't fund	----	----	----	----	----	----		
Concreting Of Calabacita road	500m concrete	P1,125,000.00		----	----	----	----	----	----		
Concreting Of area fronting new public market	1,275 sq.m. concreted	P2,000,000.00	CDF 2,000,000.* 20% =500,000.	----	----	----	----	----	----	DPWH MO, Budget, MPDC, Engineering	Resolutions Appropriation ordinance
Construction of RCDG Bridge at Calmayon Bridge and rehabilitation of Quezon Bridge	Bigger loads accommodated (serves as re-routing artery)	P30,000,000.00	Tulay ng Pangulo*	—	—	—	—	—	—	DPWH	SB resolutions

INFRASTRUCTURE SECTOR

Development Goals: Improvement/Restoration and construction of various Infrastructure projects

Objectives :

BUILDINGS:

1. Make 2nd Floor of the public market fully operational.
2. Serve the needs of Senior citizens and relay new information regarding their sectors
3. Serve as Registration and Information center for tourist visiting the 5 cluster municipalities (Lila to Jagna)
4. Produce a high-tech and sanitary processed calamay.
5. Produce a high-tech and sanitary processed agri-product powders (ubi, salabat, etc.) and serve as center for women activities for their products

TARGETS:

1. Public market 2nd floor will be operational in 2010.
2. Completion of the unfinished senior citizen's building.
3. Completion of the Tourism building and attendance to all tourist passing Jagna
4. Calamay Processing Building operational
5. Processing Center at MAO office operational
6. Construction of Jagna Pasalubong Center

PROGRAM/PROJECT/ ACTIVITIES	SUCCESS INDICATOR	BUDGETARY REQUIREMENTS	FUNDING SOURCE	TIME FRAME						ENSURER	LEGISLATION/EXEC UTIVE FUNCTIONS
				YR 1	YR 2	YR 3	YR 4	YR 5	YR 6		
Completion of phase 4 Jagna Public Market	operational	P7,000,000.00	Dept. of Agriculture	—	—					MO, Budget, , MEO,MPDC	
Completion of Senior Citizens bldg.	Operational	P500,000.00	20% dev't fund	—	—	—	—	—	—		
Completion of Tourism cluster center building	Tourist serve	P3,000,000.00	DOT*	—	—	—	—	—	—		SB resolution
Construction of Calamay processing Center	Operational	P500,000.00	LGU*	—	—	—					
Construction of MAO processing Center	Operational	P200,000.00	20% dev't fund	—						MAO	
Construction of Jagna Pasalubong Center		500,000.00		—	—						

Development Goals: Improvement/Restoration and construction of various Infrastructure projects

Objectives :

SANITARY LANDFILL:

1. Make Jagna clean and hygienic

WATER SYSTEM:

1. Install bigger pipes and construct a larger capacity reservoir.

IRRIGATION:

Improvement of irrigation systems

TARGETS:

1. Completion of Cell 1/Phase 1 of Sanitary Landfill
2. Eight (8) metro Jagna barangays sufficiently supplied
3. Increase the irrigated land area by 15% from the present area

PROGRAM/PROJECT/ ACTIVITIES	SUCCESS INDICATOR	BUDGETARY REQUIREMENTS	FUNDING SOURCE	TIME FRAME						ENSURER	LEGISLATION/EXEC UTIVE FUNCTIONS
				YR 1	YR 2	YR 3	YR 4	YR 5	YR 6		
Road opening leading to leading to landfill site	Road passable	500,000.00	LGU	—	—	—				M.O. MBO,MEO,MPD O	Appropriation Ordinance
Replacement of old pipes w/bigger and construction of large capacity reservoir	Sufficient water supplied	5,500,000.00	CDF *	—	—	—	—	—	—	DPWH	SB Resolution
Concreting of irrigation canal linings and structure Irrigation canals at Cambugason and Alejawan	Irrigation canal constructed	5,000,000.00	D.A	—	—	—	—	—	—	NIA	SB Resolution

ENVIRONMENT SECTOR

Development Goals: **Environmentally sound community that is responsive to climate change.**

Objectives:

1. To design drainage system and sewerage master plan of Metro Jagna.
2. To formulate a reforestation plan for forest and watershed areas.
3. To identify area and establish Water Treatment Facility in Slaughter House.
4. To identify NGO partners for Environment sector

Targets:

1. Implementation of Drainage & Sewerage Plan.
2. Reduced incidence of illegal logging, grassfire and increased reforestation activities.
3. Water Treatment Facility establish by 2012.
4. MOA with NGO partner

PROGRAM/PROJECTS/ACTIVITIES	SUCCESS INDICATOR	BUDGETARY REQUIREMENTS	FUNDING SOURCE	TIME FRAME						ENSURER	LEGISLATIVE/ EXECUTIVE ACTIONS
				Y1	Y2	Y3	Y4	Y5	Y6		
1. Hire a planner/consultant to work on drainage and sewerage design and master plan.	Drainage and Sewerage Design Plan	P 50,000.00	Outsource		x					MPDC/ME O	Executive Order Planning Team
2. Assigned a front desk officer for reforestation activities.	Hired Personnel	P 40,000.00	General Fund	x						MO, HRMO	Executive Order issued
3. Tree Growing Activities	Number of seedlings grow	P 20,000.00	General Fund	x						DA, ISWM	
4. Linkage to NGOs for the Design and Plan for the Establishment of Water Treatment Facility	Water Treatment Facility Plan Formulated	P 60,000.00	NGO		x					ISWMO, ISWM-TWG	
5. Establish a water treatment facility of Slaughter House											

Objectives: <ol style="list-style-type: none"> 1. To strengthen Municipal Disaster Coordinating Council, Barangay Disaster Coordinating Council and Emergency Rescue Team 2. To relocate Mayana Landslide Victim Targets: <ol style="list-style-type: none"> 1. Ready Disaster Management Teams 2. Proposed Relocation site can be acquired by 2011. 											
PROGRAM/PROJECTS/ACTIVITIES	SUCCESS INDICATOR	BUDGETARY REQUIREMENTS	FUNDING SOURCE	TIME FRAME						ENSURE R	LEGISLATIVE/ EXECUTIVE ACTIONS
				Y1	Y2	Y3	Y4	Y5	Y6		
1. Renewal of Executive Order on composition of MDCC/BDCC.	Number of Executive Order Filed			x						DILG, MO	Memorandum Circular
2. Purchase GPS and GIS software for planning tools on disaster preparedness.	GPS Unit Program/ Software Installed	P 100,000.00	5% Calamity Fund	x						MDCC Action Officer	

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3. Conduct orientation and disaster preparedness. ➤ Formulate Disaster Preparedness Plan. ➤ Conduct trainings on - How to conduct fire drill - How to conduct earthquake drill - Functions of different committees • Evacuation • Rescue • Transportation of Goods • Relief • Communication & Information • Operation First Aid Team	Plan; Increased Disaster Preparedness and Awareness	P 100,000.00	5% Calamity Fund	x	x	x	x	x	x	MDCC/B DCC	Memorandum Circular
4. Conduct regular meeting and disaster drills every quarter	Drills Conducted Quarterly	P 20,000.00	Calamity Fund	x	x	x	x	x	x	MDCC Action Officer	Memorandum
5. Acquired the Proposed Relocation Sites for Mayana Landslide victims	Landslide victims transferred	300,000.00	General Fund	x						Mayor's Office/Administrator	SB Resolution

Objectives: 1. To strictly implement and enforce environmental laws. Targets: 1. Minimal no. of case of environmental laws violators by 15%.											
PROGRAM/PROJECTS/ ACTIVITIES	SUCCESS INDICATOR	BUDGETARY REQUIREMENT S	FUNDING SOURCE	TIME FRAME						ENS URE R	LEGISLATI VE/ EXECUTIV E ACTIONS
				Y1	Y2	Y3	Y4	Y5	Y6		
1. Creation of environmental enforcement committee <ul style="list-style-type: none"> • Seminar/Orientation Training on Deputization as Enforcers. • Strengthen P.O. & NGOs 	Deputized Enforcers	P 100,000.00	General Funds							May or	Issue Executive Order

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2. Enhancing environmental radio program in DYJP: TOPICS: <ul style="list-style-type: none"> • Solid/Liquid Waste Management • Coastal Resource Management • Reforestation Management • Upland Resource Management 	Number of Program/ Topics aired over the radio	P 5,000.00	General Fund		x	x	x			DYJP, May or, ME NRO	
3. Conduct Forum on Environmental problems (Invite DENR-EMB,BEMO,BFAR <ul style="list-style-type: none"> - Upland Resource Problems - Solid/Liquid Waste Problems - Fisheries and Aquatic Problems - Coastal Resource Problems ✓ Conduct Forum with fishermen engage in manta ray fishing. <ul style="list-style-type: none"> • IEC on prohibiting for catching manta ray • Identify alternative livelihood program • Sourcing funds for alternative livelihood. 	Documentations of Problems Raise	P 15,000.00	General Fund		X					ME NRO , ISW M-TW G, DA, MO, MP DC	
					X						
					X						
					x						

GOALS: *Sustained Vibrant and Rich Coastal and Marine Resources*

OBJECTIVES:

1. Conduct continuous IEC to enhance awareness and advocacy of POs and stakeholders on Coastal Resources Management
2. Conduct regular monitoring and assessment of Coastal and Marine Resources
3. Effectively manage and maintain existing fish sanctuaries

TARGETS:

1. a. Reorientation on Coastal Resources Management and Fishery Laws conducted to 14 Coastal Barangays
- b. Conducted reorganization and strengthening of the 8 Fishermen Organizations
2. a. Conducted annual monitoring and assessment of the 7 existing Fish Sanctuaries
3. a. Effectively managed and maintained the 7 existing Fish Sanctuaries

PROGRAMS/PROJECT S/ACTIVITIES	Success Indicator	Budgetary Requirements	Time Frame						Ensurer	Legislation/Executive Functions	Fund Source
			1	2	3	4	5	6			
1. Continuous IEC activities on CRM	a. IEC on CRM conducted and enhance aware ness & advocacy of the 14 coastal fisherfolks	180T	X	X	X	X	X	X	MAO/ BEMO		MLGU/ PLGU
2. Reorganization and strengthening of POs	a. 8 coastal POs reorganized and strengthened.	150T	X	X	X	X	X	X	MAO/ BEMO		LGU
3. Annual monitoring	a. 7 existing FS monitored and	130T	X	X	X	X	X	X	MAO/		MLGU/ PLGU

<i>& assessment of FS</i>	<i>assessed every year.</i>								<i>BEMO/ BFAR</i>		
<i>4. Management and maintenance of existing FS</i>	<i>a. 7 existing FS effectively managed and maintained.</i>	<i>360T</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>MAO/ BEMO/ BFAR</i>		<i>MLGU/ BEMO</i>

Objectives:

1. To create an organization mechanism for environmental management.
2. To implement Environmental Policy to pilot offices in compliance to ISO 14001 accreditation.

Targets:

1. Form an embryo of the Municipal Environment and Natural Resources Office and designate MENRO Officer by 2010.
2. ISO 14001 Accredited by 2011

1. PROGRAM/PROJECTS/ ACTIVITIES	SUCCESS INDICATOR	BUDGETARY REQUIREMENTS	FUNDING SOURCE	TIME FRAME						ENSURER	LEGISLATIVE/ EXECUTIVE ACTIONS
				Y1	Y2	Y3	Y4	Y5	Y6		
1. Hire Personnel-in-charge of the 3 ecosystems come together as MENRO staff.	Person in-charge hired		General Fund							HRMO	
2. Formulate comprehensive Development Plan for Environment Management.	Approved Plan	P 100,000.00	General Fund		x					SWM-TWG, MPDC	
3. Introduce new farming technology and organic inputs.											
4. IEC on organic farming.	Number of flyers, brochures distributed	P 20,000.00	General Fund	x	x	x	x	x	x		

5. Full Implemengtation of Environmental Management System Guidelines to all pilot offices	EMS Audit Reports	200,000.00	General Fund	x	x	x	x	x	x	Market,MO, MPDC , RHU and Engineering Office	
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Objectives:

1. To clean and clear all rivers and creeks from obstruction of its flows.
2. To practice farmers to go on organic farming.
3. To operate Lift 1 of Sanitary Landfill in Tubod Mar.

Targets:

1. To clean and clear all rivers and creeks by 2011.
2. Increase number of farmers using organic farming.
3. SLF Operational by 2011.

2. PROGRAM/ PROJECTS/ ACTIVITIES	SUCCESS INDICATOR	BUDGETARY REQUIREMENTS	FUNDING SOURCE	TIME FRAME						ENSURER	LEGISLATIVE/ EXECUTIVE ACTIONS
				Y1	Y2	Y3	Y4	Y5	Y6		
1. Declogging and dredging.	Operation of estuaries	P 200,000.00	20% Development Fund		x					MEO	

2. Construction of flood control.	Visible Flood Control	P 1,500,000.00	Outsource	x	x					DPWH, OCD, DENR	
3. Opening of Access Road to Sanitary Landfill Site	Passable road	500,000.00	Outsource		x					MEO.MO	
4. Construction and Operation of Lift 1 SLF	Operational SLF Facility	1,500,000.00	Outsource		x					MEO, SWM Board	

DEVELOPMENT ADMINISTRATION























Goal: GAD oriented, morally upright, productive and competent LGU Officials and employees

Objectives:

1. To foster collaboration, teamwork and close coordination among government officials and employees;
2. To institutionalize personnel policies;
3. To have morally upright and values oriented officials and employees;
4. To match capability with the demand and requirements of the job;
5. To heighten awareness of local officials and employees on GAD

Targets:

- 1) By 2012, at least 70% of the personnel policies are implemented and internalized by the officials and employees.
- 2) Every year within six years, at least two activities aside from the regular staff meetings are conducted to foster close interpersonal relationship and close coordination among government officials and employees.
- 3) Acquisition of adequate system and knowledge by the HRMO on personnel administration within three years

PROGRAMS PROJECTS, ACTIVITIES	SUCCESS INDICATORS	BUDGETARY REQ'T.	FUND SOURCE	TIME FRAME						ENSURER	LEGISLATIVE REQ'T.
				1	2	3	4	5	6		
Conduct regular meetings - Heads of offices/departments with LCE (Execom) - Staff meetings	Meetings conducted for coordination Employees properly informed/updated on COA & BAC policies & other PPAs	None	-							HRMO/LCE	
Conduct of sportsfest/moral recovery, values orientation/spiritual formation programs and other team buildings activities (twice a year)	Interpersonal relationship and teambuilding promoted	Php 150T	LGU-GF							HRMO/LCE	SB Resolution
Disseminate updated personnel policies through seminars and provision of copies to employees & officials (Manuals for easy reference containing CSC policies for regular employees and LGU policies for job-order employees)	Implementation and internalization of policies	Php200T	LGU-GF							HRMO	SB Resolution
Request CSC for trainings and seminars on personnel administration	Acquisition of adequate system and knowledge by the HRMO on personnel administration	Php50T	LGU-GF								
Continue to conduct OD workshops	Inculcation of work norms	Php150T	LGU-GF								
Conduct of GAD seminar/training for rank and file employees and barangay officials	GAD consciousness and orientation	Php1M	LGU-GF								
Conduct of workforce assessment	Employee productivity	Php20T	LGU-GF								

Installation of human resource information system	Availability of accurate and updated information on the employee as basis for management's decisions (provision of monthly information to the LCE)	Php250T	LGU-GF									
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Goal: Responsive and effective local legislation

Objective:

1. To apply legislative tracking and analysis

Targets:

- 1) Acquisition of legislative tracking analysis system software by 2011.

PROGRAMS PROJECTS, ACTIVITIES	SUCCESS INDICATORS	BUDGETARY REQ'T.	FUND SOURCE	TIME FRAME						ENSURER	LEGISLATIVE REQ'T.
				1	2	3	4	5	6		
Create legislative tracking and analysis Committee	Committee created	-	-							Vice Mayor	SB Resolution authorizing the creation
Installation of legislative tracking analysis system software (inclusive of training for personnel) Results to findings on: - Ordinances for enactment - Ordinances implemented	legislative tracking analysis system software	Php300T	LGU & outsourcing							Vice Mayor	SB Resolution

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- Unimplemented ordinances - Ineffective ordinances												
Convey results to LCE for implementation, monitoring and tracking	Ordinances implemented, and implementation monitored & tracked	Php20T									Vice Mayor	
Employment of Minimum Compliance Checklist (containing list of minimum ordinances to be enforced and monitored – checklist to be accomplished by barangays & offices)	Implemented/ Unimplemented ordinances identified as well as issues in the implementation	P200t									Vice Mayor, SB, LCE	

Goal: To maximize the collection of all local revenues

Objectives:

1. To tap all sources of revenue and exert all efforts;
2. To tap the barangays in the collection of local revenue through sharing scheme
3. To establish an interconnection among collection offices

Targets

Every year, increase local collection by 10% based on the current year's actual collection.
Tap all barangay governments in the collection of certain local revenues

PROGRAMS PROJECTS, ACTIVITIES	SUCCESS INDICATORS	BUDGETARY REQ'T.	FUND SOURCE	TIME FRAME						ENSURER	LEGISLATIVE REQ'T.
				1	2	3	4	5	6		
Conduct of tax mapping	Tap all sources of revenue	Php200T	LGU-GF							MTO	

Formulate Revenue Generation Plan as an implementing tool of the Revenue Code	Tap all sources of revenue	Php 5T	LGU-GF								LFC	
Networking of offices with revenue generating functions through acquisition of software	Easy access of data	Php 110T	LGU outsourcing								MTO & BPLO	
Consultation of Barangay Officials on the collection of revenue through sharing scheme	Tap all barangay governments in the collection of certain local revenues	Php10T	LGU-GF								MTO	
Formulation of policies on the sharing scheme	-do-	Php20T	LGU-GF								LFC	SB Resolution

Goal:

Promotion of transparency and customer satisfaction

Objectives:

- To develop venues for making information available to the constituents and a mechanism for feed backing
- To provide avenues for meaningful participation in governance
- To further strengthen existing partnerships and new linkages
- To delight constituents with fast, efficient, friendly and quality services

Targets

- Install Complaint/Suggestion Box and make available Feedback Form all throughout the year
- Maintain/sustain all partnerships forged both private entities and government agencies within six years
- Within six years, adopt an LGU publication on a monthly edition
- Maintain participatory and consultative governance within six years

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PROGRAMS PROJECTS, ACTIVITIES	SUCCESS INDICATORS	BUDGETARY REQ'T.	FUND SOURCE	TIME FRAME						ENSURE R	LEGISLATIV E REQ'T.
				1	2	3	4	5	6		
Install and maintain Complaint/Suggestion Box	Installation of mechanism for feed backing	Php1T	LGU							HRMO	
Make available Customer Feedback Form	-do-	Php1T	LGU							HRMO	
Institutionalize and establish new partnership and convergence of programs/projects	Maintain/sustain all partnerships	Php5M	LGU Outsourcing							LCE	SB Resolution
Publish Community Bulletin	information available to the constituents	Php400T	(sourced out from office supplies							SB Com. Chair on Info, MPIO, MO	
Conduct periodic inventory of POs/NGOs	Guide of the call for accreditation	P20T	LGU							CSO Desk	
Designation of CSO Desk Officer/Focal Person	Strengthening of POs									LCE	
Maintenance of Community Radio and Jagna website as venue for information and feedback	Availability of information and feedback mechanism to the constituents	Php1M	LGU Outsourcing							MO/MI O	
Conduct Training of personnel on basic customer service skills especially for frontliners	Satisfied customers	Php100T	LGU							HRMO	
Employ Inter Office Audit Team	Gauge customer satisfaction	Php100T	LGU							HRMO	

