Chapter 9

**Existing Land Use**

**and Land Use Trends**

**EXISTING LAND USE AND LAND USE TRENDS**

***General Land Uses*, *Areas, Intensity***

Mangaldan is primarily an agricultural municipality with 3,378.50 hectares or 69.69% of the total land area being devoted to agricultural uses. The remaining 1,469.28 hectares or 30.31% include residential neighborhoods, commercial, institutional uses, fishponds, rivers, roads and other uses as shown in (Table 8 and Map No. 26 – Existing Land Uses).

Despite the dominance of agricultural use, an urbanizing trend is noted which can be accounted by the following factors: 1) Mangaldan is absorbing portions of the commercial and industrial requirements of Dagupan City and part of the Calasiao-Mangaldan-Dagupan (CAMADA) or Metro-Dagupan plan; and 2) adjacent towns of San Jacinto, Mapandan and San Fabian are dependent on Mangaldan for their commercial activities.

The various land uses can be described as follows:

a. **Agricultural**

The agricultural lands in the municipality cover an approximate area of with 3,378.50 hectares or 69.69% of the total land area of the municipality. The agricultural activities include: a) rice and corn farming, b) poultry/ piggery/ livestock raising, and rootcrops/ vegetable farming. Bigger farmlands are found at the southwestern portions of the town especially in barangay Alitaya, Buenlag and Malabago. In the eastern part, due to the presence of traversing roads, the once wide and contiguous farmlands are reduced into smaller segments particularly in barangays Gueguesangen, Landas, Osiem, Navaluan, Nibaliw, Palua, Salaan and Tebag.

The strategic agriculture protection zone covers all irrigated ricelands as implemented thru the Department of Agrarian Reform (DAR). This covers an area of 1,350 hectares which remain the same from the last planning period.

b. **Residential Uses**

Residential areas are intermingled with agricultural areas and built along major thoroughfares. The residential neighbourhoods are characterized by residential uses together with accessory and secondary uses such as sari-sari stores, home industries and the line. This use occupies an aggregate of 836.39 hectares or 17.25% of the total municipal area.

High density neighbourhoods are located along the national road going to Dagupan City in barangays Bari, Malabago and Anolid. Other high density neighborhoods are found in Maasin; that portion of Salay and Bantayan along the road leading to San Fabian; that portion of Guiguilonen and Embarcadero along the road leading to San Jacinto and along the minor roads; and those portions in Buenlag and Gueguesangen along the road leading to Sta. Barbara and that portion of Gueguesangen along the road leading to Mapandan.

The rest of the residential neighborhoods could be considered as medium to low density characterized by intermittence with agricultural uses.

**c.** **Fishery**

Fishponds are found in the northwestern potion of the town in barangays Bateng, Talogtog, Lanas, Maasin and Anolid. Fishponds occupy about 331.54 hectares or 6.84% of the total land area. The more common species of fish caught are bangus, tilapia, malaga, shrimps, lobsters and crabs.

d. **Road Network**

The road network with a total area of 176.35 hectares or 3.64% of the municipal area. This includes all national, provincial, municipal and barangay or farm to market roads.

e. **Commercial Uses**

Significant commercial uses requiring land use classification are those found in Bari, Banaoang, Guiguilonen and Poblacion. The tendency for these areas to be converted to commercial use is due to urbanizing trend along the road leading to Dagupan City and their proximity to the Central Business District. A total of 44.04 hectares or 0.91% of the total municipal area is occupied by this use.

Commercial uses complementary and supportive to residential neighborhoods such as sari-sari stores and home-based crafts are subsumed as portions of the residential uses.

Among the industries in the municipality include: meat and fish processing, panocha/ bocayo making, fan making, blacksmithing, bijon factory, oil factory, candy making, peanut brittle making, hollow blocks making, bagoong factory and home-based catering.

f. **General Institutional Uses**

General Institutional Uses consist of the municipal hall, schools, churches/chapels, barangay health stations, clinics, barangay halls. These uses occupy an aggregate of 35.99 hectares or 0.74% of the total area and are found within residential neighborhoods.

Elementary schools are found in almost all barangays except in: Bateng, Guiguilonen, Guilig, and Landas. New school sites have been identified in barangay Guilig and Bateng.

There are 30 medical health facilities which are distributed in all barangays. The two (2) Rural Health Centers are located in Poblacion and Bantayan.

Chapels are located in the following 14 barangays: Alitaya, Amansabina, Gueguesangen, David, Guesang, Landas, Osiem, Anolid, Malabago, Maasin, Bateng, Bantayan, Salaan and Salay.

All barangays have their own barangay halls.

g**.** **Parks and Recreation**

Parks and Recreation include the playground and town plaza covering an area 2.52 hectare or 0.05%. These do not form part of the Institutional Area.

h.  **Cemetery/ Memorial Park**

The identified special uses having environmental impact and significance are cemeteries, memorial parks,. It occupies 9.92 hectares or 0.20% of the total land area.

i. **Special Uses**

The Special Uses consist of slaughterhouse, livestock and municipal controlled dumpsite. These uses occupy 2.68 hectares or 0.05% of the total area.

Table 8: Existing Land Uses (GENERAL/URBAN)

|  |  |  |
| --- | --- | --- |
| **Land Use** | **Existing Land Use (2016)** | |
| **Area (Has.)** | **Percent to Total** |
| Agricultural | 3,378.50 | 69.69 |
| Residential | 836.39 | 17.25 |
| Industrial | 29.85 | 0.62 |
| Fishery | 331.54 | 6.84 |
| Roads | 176.35 | 3.64 |
| Commercial | 44.04 | 0.91 |
| General Institutional | 35.99 | 0.74 |
| Parks and Recreational | 2.52 | 0.05 |
| Cemetery/ Memorial Park | 9.92 | 0.20 |
| Special Uses |  |  |
| - Slaughterhouse | 1.00 | 0.02 |
| - Livestock | 0.48 | 0.01 |
| - Municipal Controlled Dumpsite | 1.20 | 0.02 |
| **TOTAL** | **4,847.78** | **100.00** |

***Pattern of Growth***

The municipality follows a linear pattern of growth where developments occur along both sides of major highways and parallel to major thoroughfares. This pattern still allows for an effective interaction among uses and for the efficient distribution of services and facilities. This is made possible by the relatively short distances between the Poblacion and the other barangays. Moreover, the adequacy of roads has provided easy access to services and facilities.

***Suitability and Compatibility***

Generally, no major problem confronts the municipality in terms of conflicting land uses, except for some industrial projects located along the industrial strip which are polluted and are adjacent to existing agricultural areas and fishponds. The question posed to Municipal Planners at this point is the assessment and evaluation of the trend towards allowing urban use expansion, especially for the commercial and industrial uses.

***Land Use Analysis***

In the previous preparation of the general land use map, the exact location and the roads courses are not properly delineated in the cadastral map of the municipality. With computer-aided mapping techniques used, a more accurate General Land Use Map is generated for this CLUP 2016-2026.

**Topography of the municipality**– physical development in the Municipality is 0 percent slope, ideal as a commercial business district.

**Development Cost** – there is a lower cost of development in Mangaldan compared to Dagupan City but the influx of commerce concentrated in the city has thwarted the intention of development and improvement of certain areas.

**Road Network**- the present road network has also influenced the character of the existing residential areas and of the municipality.  Concentration of the commercial facilities along Poblacion indicated the importance of accessibility in promoting urban growth.

**Population and Service *–*** development usually follow the concentration of population.  It is observed that residences sprout around the institutional areas, and along major roads in other community.

**Environmental Aspect –** The municipality is safe from any major hazards, as shown in the previous analysis by overlying hazard maps. Along Rivers are identified as high susceptible to flooding which is natural. No structures are built within the buffer zones of the rivers.

After the analysis of the problems caused by the present land use, together with desired changes in the environment as expressed by the needs of various sectors of the community, land use objectives are formulated.

The expansion of the urban area becomes inevitable because of the need to accommodate urban functions required by municipality’s urban increasing population.  In the process of urban expansion, however, agricultural area shall be maintained and regulated to minimize conversion of agricultural to any land uses as Mangaldan still maintains its production of rice, corn and other agricultural crops.

It is also noted that settlement within prime agricultural land are being used as residential areas without any conversion clearance from the concerned agency and/or locality.

The municipality of Mangaldan is a Grid and Concentric Form of Development. It aims to maximize the use in the Poblacion that provides more open spaces outside of its urban form that redirects future urban development.

***Comparative/Competitive Advantages***

The municipality of Mangaldan is known for being the Pindang Capital of the North.

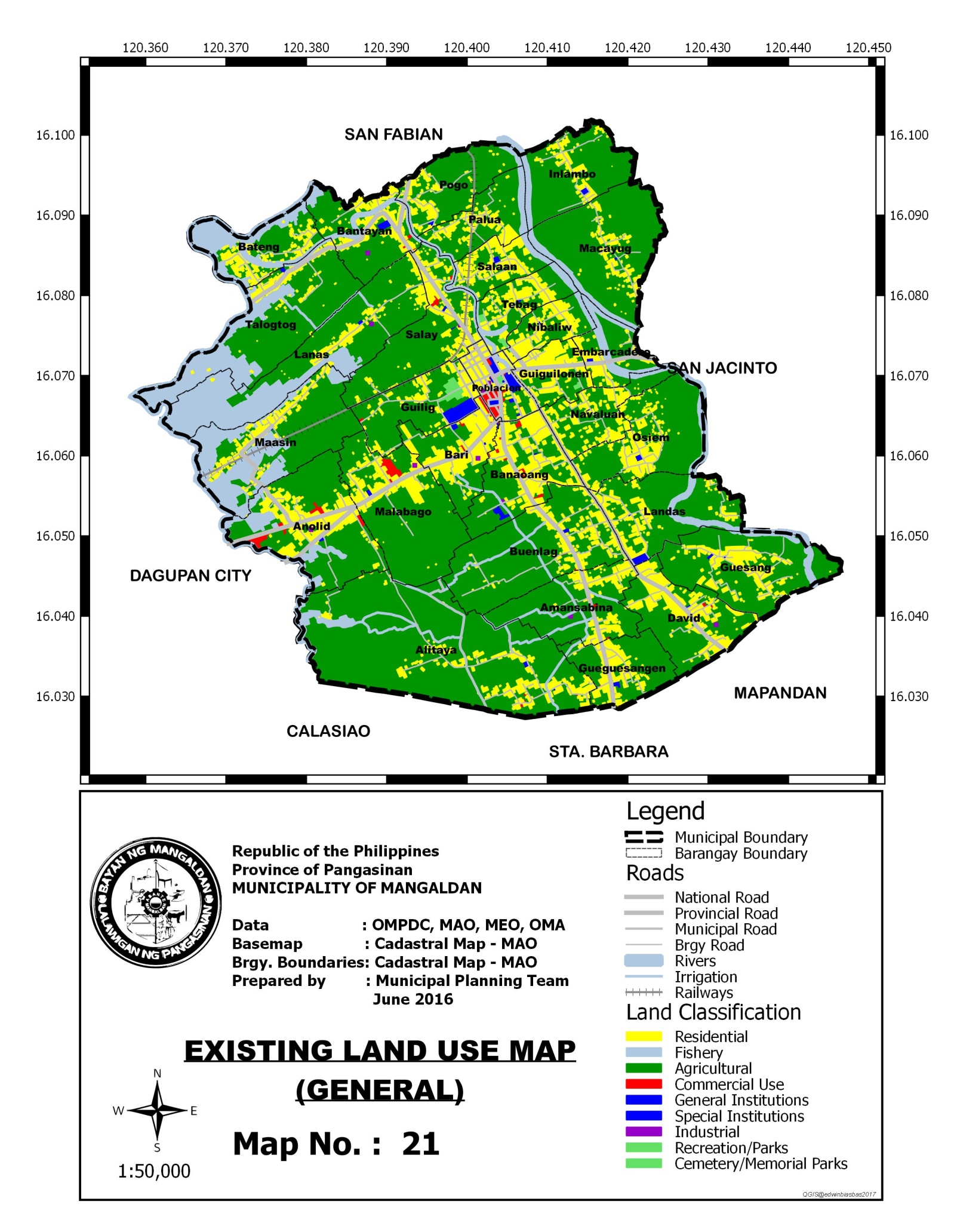
* Stable peace and order situation
* Adequate services for education
* High literacy rate of the population and availability of skilled manpower as well as professionals.
* Sufficient Food Supply

***Weaknesses: Priority Issues and Concerns***

* Bigger urban populace will require larger land area for urban expansion and development such as housing and infrastructure.
* Population density is increasing in the Poblacion area and its immediate barangays. It becomes highly dense which needs more housing and social welfare services.
* The proliferation of informal settlers.
* Erosion has lowered the depth of the River and has affected the flow of water along the riverbanks, causing flooding and other adverse effects on productivity of nearby agricultural crops.
* Because of increasing population density, there has been an increase in residential areas, not only in the Poblacion but in rural areas as well. Due to this, agricultural lands had been converted into residential and other urban purposes.
* The municipality still operates on a controlled dumpsite. Likewise, drainage and flood control facilities are inadequate which are very essential to prevent flooding in the locality.

***Functional Role of the Town vis-à-vis Other Towns***

Mangaldan’s strategic location being at the crossroads of the major transportation routes going to the major urban centers makes it a growing commercial/industrial town. In the Philippine Development Plan 2017-2022 of the National Economic & Development Authority, Region I, Mangaldan is identified as one of the sub-growth centers in the Region, a satellite of Dagupan City. As envisioned, Mangaldan will play a supportive role to Dagupan City which is a major urban center and to the town of Manaoag, which is dubbed as the “Pilgrimage City of the North”.



Special Uses

26