

Appendix 6
Socio-Economy

APPENDIX 6

SOCIO-ECONOMY

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APPENDIX 6

SOCIO-ECONOMY

CHAPTER 1 PRESENT NATIONAL AND REGIONAL SOCIO-ECONOMIC SITUATION

1.1 National Socio-economy

The population of the Philippines in 1980 was 45.5 million increasing to 72.3 million in 2000. Population density was 194.6 persons/km² in 1980 and it reached 245.6 persons/km² in 2000. Average population growth rate per annum for the last two decades was 2.35% during 1980-1990 and 2.12% during 1990-2000.

Population, Population Density & Population Growth

	1980	1990	1995	2000
Population (persons)	45,501,995	57,308,359	64,838,757	72,345,000
Population density(persons/km ²)	154.5	194.6	220.1	245.6
Average annual growth rate (%/year)	1975-1980	1980-1990	1990-1995	1995-2000
	2.71	2.35	2.32	2.02

Source: 2000 Philippine Statistical Yearbook, NSCB

The average annual growth rate of the Gross National Product (GNP) during 1989-1999 was recorded at 4.2%. After economic stagnancy between 1991-1992, GNP growth gradually accelerated and reached to 7.2 % in 1996. However, the path to sustained growth was derailed in 1998 by the worst drought that hits the agricultural sector in 31 years, in addition to the 1997-98 Asian economic crisis which saw the peso depreciating against the US dollar by 48 % by the end of 1998. The following table shows GDP and GNP during the last 10 years.

GDP and GNP

(Unit: million pesos at constant 1985 price)

	1989	1991	1993	1995	1997	1999
GDP	699,448	716,522	734,156	802,224	893,151	917,382
Annual rate(%)	6.7	1.2	1.2	4.6	5.7	1.4
GNP	684,231	720,218	746,921	824,525	930,658	968,556
Annual rate(%)	6.9	2.6	1.9	5.2	6.4	2.0

Source: 2000 Philippines Statistical Yearbook, NSCB

In 1988, the ratio of Filipino households below the poverty threshold was 40.2 % of the total number of households. The ratio went down to 32.1 % in 1997 but much of the improvement took place in the National Capital Region (NCR). While the poverty incidence rate for the areas outside NCR fell at a lower rate from 43.1 to 36.2 %. In the rural areas, the drop in poverty incidence was smaller, from 46.3 % in 1988 to 44.4 % in 1997.

Average Annual Income and Expenditures of the Country

Year	Average Income	Average Expenditure	Saving
1988	40,408	32,521	7,887
1991	95,186	51,991	13,195
1994	83,161	67,661	15,500
1997	123,168	99,537	23,631

Source: 2000 Philippines Statistical Yearbook, NSCB

Annual Per Capita Poverty Thresholds and Incidences of Families in the Country

	Annual Per Capita Poverty Threshold ¹	Magnitude of Poor Families ²	Incidence of Poor Families ³
1988	4,777	4,230,484	40.2
1991	7,302	4,780,865	39.9
1994	8,885	4,531,170	35.5
1997	11,319	4,511,151	31.8

Source: Technical Working Group on Income and Poverty Statistics, NSCB

A large part of the cause of the poverty problem can be traced to the low productivity of the agricultural sector, which remains the primary source of income of most of the poor. As of 1998, the sector accounted for 39.2% of total employment but contributed only 19.4 % to gross domestic product (GDP).

Regarding forest administration, actual forest cover has decreased to 18% (5.4 million ha) of the total land area from more than 50% in 1948. Varied causes have been cited such as fires, logging, swidden (*kaingin*), pests, diseases, mining activities, and encroachment of settlements in critical watersheds.

1.2 Regional Socio-economy and Regional Physical Framework Plan

1.2.1 Population

Compared to the average population density in the Philippines, the population densities in the four provinces concerned to the Study Area are lower. Isabela province has the highest population density among the four provinces. Population trend of the provinces concerned in the Study Area is shown below.

¹ The annual per capita income required or the amount to be spent to satisfy nutritional requirements (2,000 calories) and other basic needs

² The number of families whose annual per capita income falls below the annual per capita poverty threshold

³ The proportion of poor families to total number of families

Population and Population Density of the Provinces Concerned

Province	Population (Population density: (persons/ km ²))			
	1980 (May 1)	1990 (May 1)	1995 (Sep 1)	2000 (May 1)
- Ifugao	111,368 (44.2)	147,281 (58.5)	149,598 (59.4)	160,000 (63.5)
- Isabela	870,604 (81.6)	1,080,341 (101.3)	1,160,721 (108.8)	1,277,000 (119.7)
- Nueva Vizcaya	241,690 (61.9)	301,179 (77.1)	334,965 (85.8)	365,000 (93.5)
- Quirino	83,230 (27.2)	114,13 (37.3)	131,119 (42.9)	147,000 (48.1)

Source: 2000 Philippines Statistical Yearbook, NSCB

The population growth rate of the four provinces is given below for the last two decades. It is quite distinctive that the population growth rate in Quirino province showed far higher than the other three provinces.

Population Growth of the Provinces Concerned

Province	Annual Average Growth Rate		
	1980-1990	1990-1995	1995-2000
- Ifugao	2.83 %	0.29 %	1.49 %
- Isabela	2.18 %	1.35 %	2.06 %
- Nueva Vizcaya	2.22 %	2.01 %	1.85 %
- Quirino	3.21 %	2.63 %	2.50 %

Source: 2000 Philippines Statistical Yearbook, NSCB

1.2.2 Regional Economy

During the decade of 1989-1999, per capita GRDP of CAR increased by 30 % from ₱ 11,769 in 1989 to ₱ 15,206 in 1999 at constant 1985 prices, although per capita GRDP during the same period was stagnant between ₱ 11,000 pesos and ₱ 12,000 pesos. While, per capita GRDP in Region 2 during the same period was significantly lower than the national one, and GRDP of ₱ 6,103 in 1989, after down to ₱ 5,591 in 1993, improved to ₱ 7,211 in 1999. It corresponds to the improvement of 18% from the one in 1989 and 30% from the one in 1993.

Per Capita Gross Regional Domestic Product

(Unit: pesos at constant 1985 prices)

Region	1989	1991	1993	1995	1997	1999
Philippines	11,639	11,397	10,961	11,417	12,147	11,948
CAR	11,769	11,941	11,561	12,087	14,091	15,296
Region 2	6,103	5,818	5,591	5,950	6,506	7,211

Source: National Statistical Coordination Board

1.2.3 Annual Income and Poverty Level

An average annual income of CAR increased from some ₱ 33,800 in 1988 to ₱ 112,400 in 1997, and for Region 2 it was from ₱ 33,000 to ₱ 86,800. While an average annual savings of CAR was from ₱ 5,100 to ₱ 25,400 (as large as 5.0 times), and for Region 2 it was from ₱ 8,400 to ₱ 18,300 (2.2 times only).

Average Annual Income and Expenditures by Region

(Unit: ₱)

Year	Average Income		Average Expenditure		Saving	
	CAR	Region 2	CAR	Region 2	CAR	Region 2
1988	33,838	32,939	28,722	24,582	5,116	8,357
1992	58,985	50,850	43,916	39,991	15,169	10,859
1994	74,669	68,851	60,317	53,251	14,352	15,600
1997	112,361	86,822	86,924	68,556	25,437	18,266

Source: 2000 Philippines Statistical Yearbook, NSCB

Poverty incidence of CAR was almost the same level during 1988-1997 as 41.9% to 42.4%, while that of Region 2 during the same period improved from 40.4 to 32.1%, which was almost the same level with the national one's of 31.8%. More detailed information is given below.

Annual Per Capita Poverty Thresholds and Incidences of Families by Region

Year	Annual Per Capita Poverty Threshold		Magnitude of Poor Families		Incidence of Poor Families	
	CAR	Region 2	CAR	Region 2	CAR	Region 2
1988	5,116	4,934	89,572	177,072	41.9	40.4
1991	8,332	7,035	111,030	211,839	48.8	43.3
1994	10,853	8,316	122,942	185,708	51.0	35.5
1997	12,836	9,880	110,142	188,286	42.5	32.1

Source: Technical Working Group on Income and Poverty Statistics, NSCB

1.2.4 Industries

In the agriculture, fishery and forestry sectors, CAR and Region 2 are not major contributors to the total national agricultural gross value added (GVA). Contribution to national economy in mining and quarrying sectors of CAR was significant, while that of Region 2 was negligible. The following table shows the GVA of each sector during the last 10 years.

Gross Value Added (GVA)

(Unit: million pesos at constant 1985 price)

Region	1989	1991	1993	1995	1997	1999
Agriculture, Fishery and Forestry						
Philippines	159,964	162,937	167,053	172,848	185,004	183,407
CAR	2,821	2,721	2,908	3,388	3,378	3,348
Region 2	7,851	7,377	7,583	8,782	10,026	11,474
Mining and Quarrying						
Philippines	11,389	10,770	11,571	10,035	10,338	9,736
CAR	2,485	2,840	2,621	1,656	2,122	2,085
Region 2	108	48	49	116	134	109
Manufacturing						
Philippines	179,152	183,111	181,289	203,271	223,672	224,667
CAR	2,558	2,793	3,791	5,069	7,191	7,410
Region 2	607	632	916	631	704	718
Construction						
Philippines	39,878	35,285	38,344	44,492	57,322	50,988
CAR	1,047	1,395	476	721	1,003	3,076
Region 2	1,225	1,595	595	795	1,094	2,010
Electricity, Gas and Water						
Philippines	18,756	19,552	20,255	26,060	29,357	31,259
CAR	900	869	1,080	1,199	1,322	1,357
Region 2	218	200	239	312	340	357
Service Sector						
Philippines	290,310	304,866	315,643	345,518	387,458	417,325
CAR	3,440	3,433	3,762	4,042	4,626	5,026
Region 2	4,717	4,863	5,078	5,506	6,151	6,669

Source: 2000 Philippine Statistical Yearbook

In October 1999, the total number of labor force in CAR and Region 2 was 603,000 and 1,349,000 persons, respectively. Of the labor force, 563,000 (93.4%) and 1,299,000 (96.3%) persons were employed in CAR and Region 2 as shown below.

Summary of Labor/Employment in CAR and Region 2

	CAR	Region 2
1. Labor force	603,000	1,349,000
2. Employed	563,000	1,299,000
3. Unemployed	40,000	50,000
(Unemployment ratio: %)	(6.6)	(3.7)
3.1 Rural area	26,000	33,000
3.2 Urban area	13,000	17,000

Agriculture, fishery and forestry sectors absorbed 820,000 persons (63 %) out of the total employed persons of 1,299,000 in Region 2, and 328,000 persons (58%) out of 563,000 in CAR. More than 60 % of the unemployed persons are residing in rural areas⁴

1.3 Regional Physical Framework Plan

The Local Government Code of 1991 (R.A. 7160)⁵ devolved to the province the power to review and approve comprehensive land use plans and zoning ordinances for component cities and municipalities and to adopt a comprehensive land use plan for the province. This implies that the provincial and municipal governments share the joint responsibility for planning and managing the use of their lands and other natural resources.

Purpose of Review of the Plan – The Plan was reviewed to identify the physical developments, if any, in the areas covered by the M/P Study of the Upper Magat and Cagayan River Basin. This will serve as a guide in planning the physical developments in the watersheds to be proposed in the Study so that the plans of the Study would in fact be an implementation of the Regional Physical Framework Plan. The data and information presented herein were obtained from the Regional Physical Framework Plans and Provincial Physical Framework Plans.

(1) Region 2, Cagayan Valley (1993-2022)

General Objectives of RFPF Region 2 – The Regional Physical Framework Plan (RFPF) embodies a set of policies and a graphic translation of the desired spatial arrangement of land-using activities to: a) effect a rational distribution of the regional population; b) facilitate access by regional population to basic services; c) guide public and private investments to ensure optimum and sustained use of natural and man-made resources; and d) protect the integrity of the physical environment.

1) Land Use in 1990

Land use in the region has been categorized as a) Production Lands and Built-up Areas, b) Protection Land Use, and c) Tourist Areas/Recreational Areas.

Production Lands and Built-up Areas - The production lands and built-up areas in 1992 consisted of croplands, fishery areas, production forests and areas occupied by commercial, residential, industrial, infrastructures, utilities and built-up areas (**Table 1.2.1**). The total production lands and built-up areas cover some 1.8 million ha or about 67% of the region's total land area. About 772,859 ha of the production lands are devoted to agriculture while production forests occupied 811,103 ha. Fisheries had the smallest area of 9,352 ha and the built-up areas at 207,449 ha.

Production Forestlands - The total production forestlands include pasture/grasslands (400,380 ha), residual dipterocarp forest (313,353 ha), forest plantations (44,279 ha) and agro-forestry areas (53,091 ha). Mineral lands are also found in the production forestlands covering 128,501 ha. Majority is found in Isabela and Nueva Vizcaya (**Table 1.2.1**).

⁴ 2000 Philippine Statistical Yearbook

⁵ RA 7160 Local Government Code, 1991

Protection Land Use - The region had a total of 883,052 ha (**Table 1.2.1**) of protection land use in 1992 most of which were found in Isabela (272,515 ha), Cagayan (250,112 ha), N. Vizcaya (179,942 ha) and Quirino (160,160 ha). The Southern Sierra Madre Natural Park, a proclaimed NIPAS area is found in Isabela. The protected land area of the region includes proclaimed IPAS areas (260,552 ha), reserved second growth forests (373,663 ha), mangrove (4,445 ha), old growth forest (277,689 ha), mossy forest (93,466 ha), pine forest (1,600 ha), parks (6,811 ha), grasslands/brushlands and plantations in areas above 50% slope and 1,000 m asl elevation (105,041 ha).

Tourist Areas/Recreational Areas - Scenic mountains, historical landmarks, beaches, unique houses in Batanes, caves, centuries old churches, waterfalls, hot springs, museums, dams, salt springs and rapids are some of the tourist or potential tourist areas of the region. Most of the scenic areas are not yet accessible and need to be developed.

2) The Regional Physical Framework Plan

The Regional Physical Framework Plan (RFPF) has been subdivided into four component plans:

- Production Land Use Component;
- Environmental Rehabilitation and Conservation Component;
- Population and Settlements Plan; and
- Infrastructure Plan Component.

Production Land Use Component - The existing (1992) and proposed land uses (2022) of the region by province are shown in **Table 1.2.1**. It is proposed that by 2022 there would be a reduction in the total production forest of the region from 811,103 ha to 751,045 ha or a reduction of 60,058 ha. For Nueva Vizcaya the reduction in production forest is from 121,527 ha to 113,218 ha or 8,309 ha. For Quirino the reduction in production forests is 8,651 ha while in Isabela it is about 20,332 ha.

The residual dipterocarp forest of the region is predicted to be reduced from 313,353 ha in 1992 to 219,348 ha in 2022. For Nueva Vizcaya the reduction in residual dipterocarp forest is likely to be 10,604 ha, 5,224 for Quirino and 40,577 ha for Isabela. The grazing rangelands in the region is likely to decrease from 400,380 in 1992 to 220,208 in 2022 (**Table 1.2.2**). In Nueva Vizcaya it may decrease from 55,393 ha to 30,466 ha or a reduction of 14,927 ha. The grazing rangelands in Quirino may also decrease by 25,953 ha while in Isabela the decrease is 60,058 ha.

From 44,279 ha it is proposed that by 2022 the industrial forest plantation areas will have expanded to 104,336 ha or an increase of 60,057 ha. The IFP of Nueva Vizcaya will increase by 8,309 ha, 8,631 ha in Quirino and 20,332 ha in Isabela. The area for agroforestry is to similarly increase, from 53,091 ha to 113,148 ha or an increase of 60,057 ha. In Nueva Vizcaya the agroforestry area is likely to increase by 7,990 ha, 20,421 ha in Quirino and 20,332 ha in Isabela. In 1992 there was no reflected area of community forestry. In 2022 it is proposed that the area of this land use be 94,005 ha with 10,604 ha in Nueva Vizcaya, 5,224 ha in Quirino and 40,577 ha in Isabela.

Protection Land Use Component - The protection land use for Region 2 is proposed to remain the same over the planned period (**Table 1.2.1**). The total protection land use for the region for NIPAS and Non-NIPAS areas is 883,052 ha. By year 2022 the protection

land use area of Nueva Vizcaya will still be 179,942 ha, 160,160 ha for Quirino and 272,515 ha for Isabela. The reserved 2nd growth forests, mangroves, old growth forests, mossy and pine forests as well as parks is to remain constant in area up to 2022. Grasslands and brushlands as well as plantations within areas with slopes of 50% and greater and those in elevations 1,000 m above sea level are part of the protection land uses. These forests should be protected to maintain water yield of reservoirs and major rivers of the region and to preserve biodiversity and ecological balance.

3) Policy Guidelines

Production Forests – Because of the dwindling forest resources of the region timber production in areas that can sustain selective logging is to be logged for domestic requirements. Exports are limited to non-timber forest products. Specific policies on production forests are:

- Production forests with second growth vegetation shall be utilized for industrial tree plantations and agroforest areas to provide livelihood opportunities for upland dwellers and minimize their indiscriminate tree-cutting activities for firewood and charcoal;
- Timberlands should be well monitored to prevent over-logging. Full support of DENR's monitoring personnel should be extended; and
- Community logging should be promoted to motivate the community where the timberlands are located to value and protect such resources.

Protection Forests - For the protection forests the policy guidelines are:

Economic and other forms of development activities within protection forests should be discouraged. However, research, institutional and related uses may be allowed subject to their being non-detrimental to the environment;

The rehabilitation and protection of this resource shall be continued and strengthened.

Settlements located in protection and rehabilitation areas shall be restrained from further growth. Appropriate measures shall be provided to prevent further environmental degradation of the critical areas due to the presence of settlements;

Lands considered ancestral domain of indigenous communities shall be surveyed and delineated to determine the actual extent. The type of development interventions to be undertaken should consider the rights, livelihood, and spiritual integrity of the IPs and at the same time the protection of the environment.

(2) Cordillera Administrative Region (CAR)

The CAR RPFPP covers the period 1994 to 2023 or a 30-year period. The general objectives are to:

- Effect a rational distribution of the population;
- Facilitate access by the regional population to basic services;

- Guide the public and private investments to ensure optimum and sustained use of natural and man-made resources; and
- Safeguard and protect the integrity of the physical environment.

The fourth objective seeks to ensure quality environment free from pollution, soil erosion, forest denudation and other forms of environmental degradation.

1) Physical Attributes of the Region

Land Area and Composition in 1990 - CAR is made up of six provinces and one city (Baguio City). It has 76 municipalities and 1,177 *barangays*. CAR has a total land area of 1,829,368 ha, 6.11% of the entire land area of the Philippines. Indigenous communities numbering about 98,600 in 1990 predominantly populated the region. They are classified into seven ethnolinguistic groups, namely: Ikankanaey (27,456), Ifugaw (20,911), Ibaloy (14,004), Ikalangga (12,884), Ifontok (12,158), Itnog (7,641), and Isnag (3,493). Ilocanos (indigenous in the Ilocos Region) occupy Baguio City and the lowland plains of Lower Abra, Lower Apayao, Tabuk (Kalinga) and Lamut (Ifugao).

Physical Characteristics and Climate – The region contains more than 100 peaks, 10 of which are the highest in the country emphasizing the predominantly steep terrain and high elevations of the region. Mt. Pulag is the highest peak in Luzon (2,922 m asl) and the second highest in the country. Only 15% of the land area of the region can be classified as flat to rolling and these are found in Abra and Apayao. About 71% have slopes of 30% and greater. **Table 1.2.3** shows the area of slope classes found in the various provinces while **Table 1.2.4** the elevation characteristics of areas in different provinces. Because of the general topography of the region it experiences mild temperatures throughout the year except in low-lying areas of Ifugao, Kalinga, Apayao and Abra where warm climate predominates.

Forest Resources – National parks and forest reserves cover and aggregate area of 604,104 ha. The region supports major river basins namely: Magat River Basin, Agno River Basin, Bued River Basin, Aringay River Basin, Naguilian River Basin, Amburayan River Basin, Chico River Basin, Sifu-Malig River Basin, and the Agbulo-Apayao River Basin. These rivers provide continuous water for irrigation and energy production.

The region contains diverse resources of flora and fauna that are important sources of medicine, food and other products. In addition to timber resources the region also abounds in non-timber resources such as rattan, bamboo, palms, orchids, ferns and vines found in association with forest trees.

2) Land Use in 1990

Almost 85% of its area is classified as forestlands with only 15% as alienable and disposable (A&D). **Table 1.2.5** shows there were 1,557,626 ha declared as forestlands in 1990 based on certified and declared A & D lands and forestlands.

Forestlands – The DENR-CAR ENR Regional Development Plan for the Medium Term placed the production and protection forest of CAR at 1,488,712 ha (**Table 1.2.6**). DENR classified all lands below 50% in slope and less than 1,000 meter in elevation as *production forest*. This area is approximately 996,799 ha. The breakdown of the 996,799

ha production forest by slope and elevation and by province is shown in **Table 1.2.7**. The production forest of the province of Ifugao is placed at 167,789 ha.

The breakdown of *protection forest* is shown in **Table 1.2.8**. It includes old growth, mossy forest, areas greater than 50% in slope and higher than 1,000 m in elevation for non-pine forest and those above 84% in slope and higher than 1,500 m in elevation for pine forest. All areas established as national parks and forest reserves form part of the protection forest. The area of protection forest is 491,913 ha. The *protection forest* of Ifugao is placed at 58,580 ha.

3) Regional Physical Framework Plan

The underlying principle of the RFPF of CAR is the management of urban expansion such that forests and agricultural areas (rural areas) will be conserved and protected. The vision of the plan is to attain an equitable socio-economic development within the context of environmental quality and sustained utilization of physical resources. In addition, the development strategy to be adopted should be culturally and environmentally sensitive.

4) Regional Land Use Plan

Built-up Areas - The proposed built-up areas of CAR by 2020 is shown in **Table 1.2.9**. In general, there is an average annual increase in built-up areas of 10.85 %. In the proposal built-up areas will be found in the following areas: a) A & D and other lands less than 18% in slope exclusive of agricultural lands and protection forests, b) areas of the public domain 19 - 30% slope exclusive of agricultural lands and outside protection forests, c) areas of the public domain 31 - 50% slope exclusive of agricultural lands and outside of protection forests, and d) potential agricultural expansion areas for probable conversion to urban use. It is proposed that the existing built-up area of 10,170 ha for the region will become 164,306 ha in 2020. For Ifugao it is proposed that the built-up area be increased from the existing 490 to 9,332 ha. The greatest increase will take place in the A & D and other lands with slope less than 18% but outside of agricultural lands and protection forests where 5,580 ha is likely to be built-up by 2020.

Agricultural Lands - The proposed extent of agricultural lands in the region by 2020 is shown in **Table 1.2.10**. Irrigated and irrigable areas in alluvial and gently sloping areas will comprise 161,541 ha. These areas are highly restricted from conversion. Ifugao has 17,944 ha of this type of agricultural land. Expansion areas for agriculture will come from lands with slopes from 8 –18% in slope. About 83,764 ha will come from these areas. Similarly, agricultural production areas will come from ecologically fragile lands in the highlands with slopes greater than 30 %. About 25,331 ha in ecologically fragile agricultural lands in the highlands will be maintained for high value crops, 1,308 ha of which are situated in Ifugao. Areas of this nature found in protection forests will be released. About 52,079 ha will be for agroforestry and/ or pasture purposes of which 1,888 ha are in Ifugao.

Production Forest Land Use – This will consist of public lands greater than 18% in slope but do not belong to the protection forests and exclusive of protected agricultural lands and urban development areas. These areas are for harvesting (in the pine and dipterocarp forests), agroforestry and grazing. The RFPF supports underground mining over surface mining in production forests to preserve surface forest vegetation and minimize adverse

environmental impact. There are however, no indicated proposed areas for forest production in the CAR RFPF.

Protection Forest Land Use – The proposed configuration of the protection forests of the region is shown in **Table 1.2.11**. By year 2020 about 712,404 ha or 39% of the total land area of the region will comprise the forest protection area. Protection forest will consist of national parks; forest, military, and civil and all other types of reservations; mossy; old growth dipterocarp, reproduction pine and dipterocarp forest located in areas about 84% slope and above 1,500 m in elevation (for pine forest) and 50% in slopes and above 1,000 m in elevation for dipterocarp forest. The total area of the proposed protection forest is larger than the area of declared or proclaimed national parks and forest reserves which totals 640,496 ha (**Table 1.2.12**). The increase in the area is brought about by including mossy forests, dipterocarp forest greater than 50% in slope and higher than 1,000 m in elevation and pine forest with slopes greater than 84% and higher than 1,500 m in elevation if these are outside the coverage of forest reserves and national parks. These areas total 114,104 ha.

However, the CAR RFPF proposes a reduction in the area of declared national parks and forest reserves particularly where these areas have been used for agricultural purposes or have become built-up areas. The national parks and forest reserves where these reductions in areas are proposed. The total reduction in areas of national parks and forest reserves comes to 41,768 hectares. The Central Cordillera Forest Reserve (partly in Ifugao), the Ambuklao-Binga Watershed (partly in Ifugao), the Mt. Sto. Domingo Forest Reserve (wholly in Ifugao) and the Central Mayoyao Forest Reserve (wholly in Ifugao) are proposed to be reduced in area.

1.4 Provincial Comprehensive Land Use Plan/Provincial Physical Framework Plan

This Chapter presents the socio-economic situation of the provinces covered in the M/P Study. This is to understand the economic milieu under which the Master Plan was prepared. This Section also presents the development plans of the provinces. Knowledge of these development plans especially for the uplands and forestlands will assist the M/P Study in blending the provincial plans into the M/P.

(1) Nueva Vizcaya

The province of Nueva Vizcaya prepared and adopted a 30-year Comprehensive Land Use Plan (CLUP) covering the period of 1995 to 2025. A 5-year Medium Term Plan called Provincial Comprehensive Development Plan (PCDP) for the period 2001 to 2004 has also been prepared. Information and data in this section were obtained from these two documents.

1) Physical Attributes

Land Area - The province has a total land area of 390,390 hectares.

Forestlands - The actual forestlands of the province cover 301,469 ha or 77.23% of the total land area (**Table 1.2.13**). The production forest has a total area of 83,947 ha or 21.50% of the total provincial land area (**Table 1.2.14**). However, 36,910 ha included in the production forest are classified as A & D. The protection forest of the province is

approximately 251,600 ha or 64.45% of the total land area. The types of land uses in the protection forests are: 84,785.59 ha (33.69%) second growth forest, 142,277.97 ha (58.14%) grassland, 11,395.27 ha (4.53%) old growth forest, 2,013.25 ha (0.81%) mossy forest, 1,600 ha (0.64%) pine forest, and 5,507.92 ha (2.19%) cropland areas.

The DENR survey of forest occupants conducted in 1989 revealed that at that time there were 4,749 settlers in the protection forest occupying a total of 12,639.21 ha in Mt. Pulag, the Salinas Forest Reservation, Casecnan Forest Reservation and other non-NIPAS areas. The Bugkalots (Ilongots) of the Casecnan Forest Reservation have claims over the area as their ancestral domain.

Alienable and Disposable Land – The A & D area of the province covers 88,921 ha or 22.77% of total provincial land (**Table 1.2.13**). The municipality of Bambang has the largest A & D land of 12,566 ha and Ambaguio has the smallest with only 1,128 ha.

2) Development Plans

Production Land Use - Activities in production forestry is limited to grazing and pasture, agro-forestry, terraced farming, and timber production. Local requirement for timber will be met by lowland forestry while the raw material needs of the handicraft industry will be provided by the upland including the protection forests.

Protection Land Use - Activities that will be undertaken range from restoration, rehabilitation to complete prohibition of entry in the protected forest areas. However, scientific or educational research, outdoor recreation, observance of religious and cultural events and non-destructive production activities like forest farming will be allowed in protection forests. Actions on NIPAS areas will be in accordance with the NIPAS Law. For non-NIPAS protected areas, the province will either recommend the establishment of these areas as part of the NIPAS or manage the areas itself.

PCDP Plans - The 2001-2004 PCDP reduced the 30-year PCLUP into 5-year development plans. One development strategy of the PCDP is the protection and conservation of watersheds. Among the targets of the 2001-2004 PCDP pertaining to environment and natural resources are:

Restoration and rehabilitation of watersheds and denuded open areas

- 13 hectares – Bangan Hill
- 24,000 ha – Lower Magat Forest Reserve
- 750 ha – Tree for Legacy Program
- 329 ha – Barobbob watershed
- 800 cu m Kasibu and Casecnan slop stabilization project
- 250 issuances and 40 CBFM claims to be administered
- Three MFPC to be strengthened and one provincial MFPC to be established, and
- Implement Social Forestry Productivity Enhancement Program to cover 179,942 ha protection area and 121,527 ha production area.

(2) Quirino

The Provincial Physical Framework Plan (PPFP) for Quirino was formulated to provide over-all framework for socio-economic development planning for a long-term period. The

PPFP serves as guide for the municipalities to prepare their Comprehensive Land Use Plans (CLUP). The PPFP covers the planning period of 1993 – 2002.

1) Physical Attributes

Quirino has a total land area of 305,718 ha, approximately 11.4% of the area of the region. It consists of six municipalities and 132 *barangays*. Mountains and highlands cover about 80% of its land area.

Quirino classified its land uses into seven categories (**Table 1.2.15**). Forestlands occupy 60% (184,019 ha) of the total land area. This is followed by pastureland with 64,420 ha (21.39%) and lowland paddy rice fields (24,801 ha or 7.84%). Perennial fruit trees and other fruits occupy 17,460 ha (5.71%), cultivated annual crops, 10,507 ha (3.45%) and the residential area with only 4,509 ha or 1.48 %.

The classified production forest of the province is placed at 113,679 ha while 133,591 ha are protection forests. The protection forest includes part of the Cagayan River Watershed Reservation.

2) Development Plans

The Province of Quirino prepared a Comprehensive Development Plan for the period 1999 to 2003. This is being updated but the revision is still to be deliberated upon. **Table 1.2.16** shows the targets, activities and estimated costs for the management of Integrated Protected Areas System (IPAS) in the provinces, management of upland communities and development of watersheds. The plan includes the establishment and maintenance of 1,175 ha of buffer zones, management of about 45,220 ha of virgin forest, protection of about 92,740 ha of forests and the restoration of about 470 ha of forest areas.

In addition, the Provincial Government will support the RP-German Community Forestry Project, which consists of conservation and protection of natural forest, development of plantations and rehabilitation of degraded areas, establishment of agroforestry, support for agriculture and development of infrastructures. It also supports the Community-Based Environment and Natural Resources Management Project (CBENRMP) covering 14,975 ha.

(3) Ifugao

The province of Ifugao formulated a 10-year Master Development Plan (MDP) covering the period from 1994 to 2003.

Among the objective of the MDP related to forests and the environment are:

- Resolve ancestral domain issues in favor of the Ifugao people (100% issuance of individual land titles covering 10,000 ha)
- Protect and enhance the natural environment and Ifugao culture (60% forest cover at the end of the planned period, 100% preservation of material culture and full documentation of province's history and oral traditions)
- Develop eco-cultural tourism as the anchor industry of the province (100,000 visitors annually)

1) Physical Attributes

Ifugao has a land area of 251,781 ha. Extensive mountains that rise as high as 2,523 m above sea level characterize the province. Steep slopes account for 55% of the total land area of the province while the flat and undulating areas account for only 8 %.

2) Development Strategy for Ifugao

The development strategy for Ifugao must address matters of urgency exemplified by the alarming state of forest denudation in the province that threatens agricultural production and the useful life of the Magat Dam.

A major program under the PFP is the community-based Comprehensive Natural Resources Management Program (CNRMP). The program aims to stem further ecological degradation and restore ecologically sustainable economic activities in Ifugao.

The components of the program are as follows:

- Erosion Control and Watershed Management - This component aims to restore 71,000 ha that are subjected to moderate to severe erosion. The sub-components are: a) Reforestation of severely eroded areas (46,500 ha); and b) Agroforestry on moderately eroded areas (24,500 ha)
- Terrace Rehabilitation – Rehabilitate and restore productivity of 80% of idle and abandoned rice terraces (3,500 ha)
- Cultural Development and Community Mobilization – research and documentation of environment-anchored cultural systems and practices, information campaign, training, and formal/non-formal education modules
- Research, Development & Extension for Appropriate Resource Management Technology – Research and propagation of appropriate resource management technologies and practices as part of capability building of the communities under the program
- Biodiversity Program – Restoration of Ifugao’s forests and thorough inventory of organic resources, establishment and maintenance of special nurseries, greenhouses and hortoriums

CHAPTER 2 INDUSTRIES IN THE STUDY AREA

2.1 Forestry

On a national scale, the Philippine forest industry has been on a downward trend since its peak in the 1950s to 1970s. The situation in the Study Area has followed the same trend. In the 1980s, there were at least eight Timber License Agreements (TLA) in the area covering more than 150,000 ha. By the end of the 1990s only one TLA remained. At present, the sole surviving TLA is Liberty Logging Corporation in Isabela province covering about 26,000 ha. However, this corporation is not currently operating. The following table summarizes the trend in TLA in Isabela from 1996 to 2000.

Active Timber Licenses in Isabela 1996-2000

Year	No. of TLA	Area (ha)	AAC(m ³)
1996	4	89,015	35,119
1997	4	89,165	29,261
1998	3	67,875	21,492
1999	3	69,075	21,492
2000	3	85,466	25,794

* AAC: Annual Allowable Cutting Limit

Source: Philippines Forestry Statistics FMB, DENR

The 1987 Philippine Constitution no longer allows the TLA system but the remaining TLA holders are allowed to continue operations until their scheduled expiration. For example, even if Liberty Logging has suspended operations, it is still legally allowed to resume logging until its TLA expires in 2011. After expiration, logging concessions can no longer be renewed as TLAs. Consistent with provisions of the Constitution, any renewals must be along the lines of joint venture, co-production or production-sharing agreements operations. The current format for these new modes is the Integrated Forest Management Agreement (IFMA).

Reduction in the number of TLAs is a result of (i) cancellation and suspension of agreements for violations of TLA terms and agreements; (ii) government response to pressure from non-government organizations (NGOs) advocating a total logging ban and (iii) voluntary cessation. Many TLA holders stopped operations after government prohibited logging in all remaining old-growth forests and placed these under the National Integrated Protected Areas System (NIPAS). They closed shop because, in their view, operations would not be financially viable if confined to the residual forests previously logged in the past.

In a similar manner, the number of wood processing plants has drastically declined. There were formerly several large sawmills in the Study Area, each having a daily production capacity of around 1,415 m³. By the end of the 1980s all of these mills had ceased to operate.

Wood processing is now dominated by mini-sawmills and re-saw operations. There are numerous mini-sawmill and re-saw entities but there is no precise record on the number.

Based on official records there is only one existing mini-saw mill, which is located in Isabela. However, since there are an estimated total of more than 70 furniture makers in the Study Area¹, one can safely assume that many unrecorded mini-sawmills or re-sawmills are producing the lumber requirements of the furniture makers.

The raw material they use is predominantly *Gmelina arborea* wood from logs grown in man-made forests or backyard plantations. However, some occasionally manufacture furniture from narra lumber (*Pterocarpus indicus*) and wood from other species that grow in the natural forests.

Production of logs is active only in Isabela but the amount is limited ranging from 4,500 to 16,000 m³ based on the statistical information between 1996 to 2000. Non-timber forest products (NTFPs) are limited for armaciga resin, bamboo poles, spilit rattan and unspilit rattan. The Philippine Forestry Statistics by DENR indicates that the production is only minimal.

Data from CENRO in Nueva Vizcaya reports production of 60,850 linear meters (lm) of rattan by six rattan permittees in 2000.

2.2 Agriculture

(1) Ifugao

The province of Ifugao has a total land area of 251,778 ha. Of the total land area, about 30% or 79,050 ha are potential for agricultural production. Presently, actively cultivated area measures 26,677 ha and, 52,373 ha are regarded as an agricultural expansion area according to Bureau of Agriculture Statistics (BAS).

Agricultural Land Area of Ifugao in 1997

Description	Hectares	%
Active Agricultural Areas	26,677	33.8
- Rice land	13,674	47.1
- Corn	6,497	22.4
- Vegetables	746	2.1
- Legumes	223	0.8
- Coffee	2,560	8.8
- Fruits	1,379	4.4
- Rootcrops	1,519	5.0
Agricultural Expansion Area	52,373	66.2
Total	79,050	100.0

Source: Bureau of Agricultural Statistics

Majority of the province's existing/active agricultural land area is occupied by palay at 13,674 ha or 47.1% of the active agricultural areas. These are largely the rice terraces, all

¹ Record of the Department of Trade and Industry (in Ifugao 16, in Nueva Vizcaya 70 as of 1998)

irrigated, of the province. Other crops planted included coffee, corn, fruits, vegetables and legumes.

Most of the identified agricultural areas have slopes of 30% to 50%. The active agricultural lands such as rice terraces and fruit tree farms are mostly located in Banaue, Kiangan and Hingyon municipalities and some parts of Hungduan municipality.

Agriculture is the main source of livelihood of the Ifugao people. Around 53% of the Ifugao households draw their livelihood from this sub-sector. As of 1997, there were about 18,000 persons employed in agriculture, comprising about 70 % of the total employed.

For the period 1995-1997, the total area devoted to crops increased annually by 3.3% while production increased annually by 5.6%. The area planted to various crops was 21,674 ha in 1994 to 29,028 ha in 1997. Production likewise increased from 60,979 MT in 1994 to 84,875 MT in 1997.

Palay as the staple food remained to be the primary crop of the province with a total area planted of 13,674 ha in 1997, 10.3% higher than the 12,401 ha in 1995. There had been a 7.7% increase in the production of palay from 35,809 MT in 1995 to 41,472 MT in 1997. Except for the rice producing municipalities of Lista and Lamut, all the rest have to import rice from outside the province. The bulk of palay produced in Lamut and Lista is sold in Nueva Vizcaya and Isabela and brought back to the province as rice.

The area planted to corn is 6,497 ha accounting for 22.4% of the total cropland area. The corn production area increased annually by 2.0% from 6,270 ha in 1995 to 6,497 ha in 1997. Production volume, however, decreased slightly from 10,760 MT in 1995 to 10,647 MT in 1997. This was attributed to the drought in the province during the period.

As one of the major industrial crops of the province, coffee plantations accounted for 2,560 ha or 8.8% of the area planted to crops. Farmers shunned from expanding their plantations due to the unpredictable price of coffee at the local and world markets.

The area devoted to rootcrops covered 4.9% of the total area for crops. Being the substitute staple for rice, it is planted province-wide on the farms and on the *kaingins*. Total area planted in 1997 was 1,446 ha as compared to the 1995 figure of 1,321 ha, indicating a 5.1% average annual increase in terms of area. Production, likewise, increased annually by 6.3% from 3,676 MT in 1995 to 4,153 MT in 1997.

The area planted to vegetables during the period 1995 to 1997 decreased by 1.4% annually from 626 ha in 1995 to 608 ha in 1997. The major vegetable crops produced in the province were Baguio beans, cabbage and pechay. Production in 1997 was 2,276 MT.

Legume production likewise decreased by 12.4% from 96 MT in 1995 to 73 MT in 1997. Area planted decreased annually by 4.6% from 252 ha in 1995 to 223 ha in 1997.

Area planted to fruit trees was 1,287 ha in 1997. Some of the reasons for the reluctance of farmers to venture in fruit tree production are the long gestation period and high cost of establishment. Production, however, increased by 6.8% annually during 1995-1997.

Crop Production Data of Ifugao from 1995 to 1997

Crops	Unit	1995	1996	1997	AAGR (%)
Palay	Area (ha)	12,401	12,127	13,674	5.27
	Production (MT)	35,809	39,954	41,472	7.69
Corn	Area (ha)	6,270	5,964	6,497	2.03
	Production (MT)	10,760	8,489	10,647	2.16
Vegetables	Area (ha)	626	626	608	-1.44
	Production (MT)	2,258	2,275	2,276	0.40
Legumes	Area (ha)	252	200	223	-4.57
	Production (MT)	96	92	73	-12.41
Root Crops	Area (ha)	1,321	1,525	1,446	5.13
	Production (MT)	3,676	3,898	4,153	6.29
Fruit Trees	Area (ha)	1,240	1,265	1,287	1.88
	Production (MT)	9,123	10,104	10,391	6.80
Coffee	Area (ha)	2,560	2,560	2,560	0
	Production (MT)	1,373	1,211	1,319	-1.44
Total	Area (ha)	27,231	27,057	29,028	3.32
	Production (MT)	75,894	80,025	84,875	5.75

Source: BAS

(2) Isabela

The average palay area harvested in the province for the crop year 1996 totaled 214,014 ha for all types, 193,560 ha for irrigated and 20,454 ha for rainfed. Palay production totaled 840,586 MT for all types, 790,018 MT for irrigated and 50,568 MT for rainfed while the yield of palay was 3.93 t/ha for all types, 4.08 t/ha for irrigated and 2.47 t/ha for rainfed.

On the other hand, the average corn area harvested in the province for the same crop year totaled 146,259 ha for all types, 10,605 ha for white corn and 135,654 ha for yellow corn. Corn production totaled 330,998 MT for all types, 17,341 MT for white corn and 299,512 MT for yellow corn. The yield was 2.26 t/ha for all types, 1.64 t/ha for white corn and 2.21 t/ha for yellow corn².

(3) Quirino

The major contributor to the province's economic activity is agriculture. In 1995, the agriculture sector dominated the work force of the province, accounting for almost 70% or 32,959 out of the total labor force of 47,583 with the age of 15 years and above³.

Of the total labor force engaged in the agriculture sector, about 50 % is for corn farming, 34 % in palay farming, 12 % in banana farming, 2.4 % in agricultural crops and services, and 1.2 % in animal farming².

² Socio-economic profile Isabela, 1997

³ 1995 NSO CP Report No.2-76B

Corn and rice are the major crops produced in the province. For the year 1997, the DA-RFU⁴ reported a total cropland area of 40,931.4 ha for a variety of agricultural crops. The municipalities of Diffun and Saguday are major palay production areas, claiming respectively 27.7% and 19.3% of the total paddy land areas of 10,149 ha. It consisted of 7,303 ha of irrigated paddy land, 1,344 ha of rainfed paddy and 1,502 ha of upland paddy.

An aggregate area of 13,343 ha was devoted for corn production. The municipalities of Aglipay and Maddela led in corn production with their shares of 33.7 % and 25.5 %, respectively. White corn and yellow one were grown on 516 and 12,827 ha, respectively.

For permanent crop production in the province, banana is grown in commercial scale. Other fruits grown are mango, citrus, jackfruit, santol, papaya, etc. Temporary crops like beans, habitchuelas, peanut, ginger, camote, cassava, gabi, mango, ube and other vegetables were also grown but in small scale.

(4) Nueva Vizcaya⁵

In Nueva Vizcaya agricultural land was 23.6% of the total land area.

A farming household of the province has an average of 1.9 ha of farmland. In the upland areas 95% of the total number of the farming households depended for their livelihood on income from crop production and livestock raising. Of these, 56.7% had annual income of ₱ 40,000 and below, and 20.7% had annual income above ₱ 80,000⁶.

1) Rice

Paddy is the major crop grown in the province, with a total area of 44,847 ha or 46.5% of the total agricultural land, of which 99% was irrigated and 1% was rainfed. It is intensively grown in the municipalities of Bagabag, Solano, Bayombong, and Villaverde in the north and the municipalities of Aritao, Bambang and Dupax del Norte in the south. Among the fifteen municipalities, Solano has the highest production in the lowlands and Kasibu in the upland areas.

Average yield of rice in the province is 3.2 t/ha. The province used to produce rice more than its consumption requirement. However, the annual production available for sale marginally increased by an average of 2.2% during 1995-1998. The minimal increase was due to the erratic production trend.

2) Corn

Corn production in the province was not as intensive as palay production. The agricultural land devoted to corn production was 11.3 % of the total crop land.

In the province, yellow corn used to be produced for feed supplement in poultry and hog raising. Corn cultivation was mostly concentrated in the municipalities of Bagabag, Diadi, Quezon and Villaverde.

⁴ Department of Agriculture - Regional Field Units

⁵ Socio-economic profile Nueva Vizcaya, 2000

⁶ CASCADE baseline survey, 1999

Corn production posted an increasing trend in area cultivated and productivity during 1994-1998. Area planted with corn increased by an average of 0.8% per annum, while production and yield increased annually by 10.5% and 8.5%, respectively.

3) Vegetables

Nueva Vizcaya has established itself as the major producer of both tropical and temperate vegetables in Region 2. Of the total agricultural land, 3-5 % has been devoted to vegetable growing. Baguio beans, cabbage, carrots, potatoes, tomatoes, onions and squash were the most popular vegetables grown in the province.

Major vegetable producers in the province are the municipalities of Kayapa, Kasibu, Dupax del Norte and Dupax del Sur.

Vegetable growing has proved to be very profitable. Vegetables command good price particularly during the lean months. Despite potentials for high profitability, the marketing of vegetables is plagued by a number of market players between the producers and the end consumers. This resulted in a lower farm gate price and a higher retail price.

4) Fruits

The province produces fruits with high commercial value, such as mango, pineapple, banana and citrus. As of 1998, 25,600 ha, representing 26.6% of the total agricultural land, was devoted to orchards. Among the aforementioned fruits, mango growing occupied the largest area while pineapple was the least.

According to the data in 1998, only 2,655 out of total mango trees of 11,741 were fruit bearing trees mostly found in the municipalities of Diadi, Aritao and Bagabag. Around 1,501 households were engaged in mango production, reaping a volume of 4,407 tons per harvest season. The most common varieties planted were the carabao, pico, Indian and apple varieties, of which the carabao variety was most commonly used for processing.

Of the mango harvested, 65 % was sold to mango buying stations, local traders and local processors, 5% was for home-consumption, and the remaining 30% were treated as rejects.

The growing of citrus, which was concentrated more in the municipalities of Kasibu and Bayombong, Vilaverde and Diadi, is fast becoming a major venue of fruit growers. Total area actually planted was around 614 ha with another 141 ha as potential production area.

2.3 Livestock

Livestock production in the four provinces within the Study Area consists of backyard and commercial production. Backyard production is basically to meet individual household needs. It forms the greater bulk of livestock production in the area. Commercial production exists but only on a limited scale. The discussion on livestock production is limited to grazing animals whose production requires large open spaces often in forestlands and therefore has impacts on forestlands.

(1) Ifugao

The population of grazing animals in Ifugao in 1997 is shown in the table below. The livestock considered here are carabaos, cattle and goats. Backyard population far exceeded population in commercial farms. There were an estimated 12,346 heads of carabao in backyard farms compared to only 708 heads in commercial farms or a mere 5.7 %. The main reason for the high number of carabaos is that it is used in farming. Carabao's meat is preferred over beef in Ifugao. Similarly, goat production at the household level exceeded that of commercial production. There were an estimated 3,183 heads of goats in backyard farms compared to only 215 heads in commercial farms. Goat's meat is a delicacy in the province. In the case of cattle, population in commercial farms was estimated at 11,172 heads while in backyard farms it was only about half or 5,639 heads.

Number of Livestock in Ifugao

Livestock	Type of Farm (Heads)		Total
	Backyard	Commercial	
Carabao	12,346	708	13,054
Cattle	5,639	11,172	16,811
Goat	3,183	215	3,398
Total	21,168	12,095	33,263

Source: Bureau of Agricultural Statistics, Lagawe, Ifugao

(2) Isabela

In 1997 Isabela produced an estimated total number of heads of grazing animals, carabao, cattle and goats, of 73,972. The disaggregation of this figure is shown in the table below. Backyard population of carabao amounted to 33,195 heads. There was no reported population of carabao in commercial farms in Isabela in 1997. Cattle population at the backyard level was 25,912 heads, not far from the backyard population of carabao. Cattle population in commercial farms was less than 1/5 of backyard population, amounting to 4,410 heads. There was also no reported population of goats in commercial farms in Isabela in 1997. However, backyard population reached 10,455 heads in 1997.

Number of Livestock in Isabela

Livestock	Type of Farm (Heads)		Total
	Backyard	Commercial	
Carabao	33,195		33,195
Cattle	25,912	4,410	30,322
Goat	10,455		10,455
Total	69,562	4,410	73,972

Source: Bureau of Agricultural Statistics, Bayombong, Nueva Vizcaya

(3) Nueva Vizcaya

Grazing animal population in 1997 in Nueva Vizcaya is summarized in the table shown below. Carabao and cattle population in backyard and commercial farms was almost the same with a slightly higher cattle population of 25,620 heads compared to the carabao population of 24,386 heads. Cattle population in commercial farms was also high,

reaching a level of 14,077 heads compared to only 708 heads of carabao in commercial farms. Goat population in households was estimated at 15,336 heads while there was only 716 heads in commercial farms. Nueva Vizcaya farmers use the carabao for farming chores and this could be an explanation for the high household carabao population in the province. Furthermore, Carabao's milk is being promoted in some provinces in Northern Luzon.

Number of Livestock in Nueva Vizcaya

Livestock	Type of Farm (Heads)		Total
	Backyard	Commercial	
Carabao	24,386	708	25,094
Cattle	25,620	14,077	39,697
Goat	15,336	1,716	17,052
Total	65,342	16,501	81,843

Source: Bureau of Agricultural Statistics, Bayombong, Nueva Vizcaya

(4) Quirino

Carabao population in Quirino Province in backyard farms was estimated to be 17,519 heads far more dominant over cattle population of only 6,361 heads. There was, however, no reported carabao population in commercial farms in 1997. Cattle population in commercial farms that year was reported to be 1,409 heads. Carabao is also used for farming purposes in Quirino province. Goat raising produced an estimated 6,031 heads at household level while only 200 heads were reported in commercial farms. Goat is also a delicacy in the province of Quirino.

Number of Livestock in Quirino

Livestock	Type of Farm (Heads)		Total
	Backyard	Commercial	
Carabao	17,519		17,519
Cattle	6,361	1,409	7,770
Goat	6,031	200	6,231
Total	29,911	1,609	31,520

Source: Bureau of Agricultural Statistics, Cabarroguis, Quirino

CHAPTER 3 SOCIO-ECONOMIC CONDITIONS AT BARANGAY LEVEL

3.1 Barangay Profile Survey

To understand the socio-economic condition at the lowest LGU level, data on socio-economic conditions of *barangays* in the Study Area were collected through a *Barangay Profile Survey* subletted to a local consultant of PKII Engineers.

At the beginning of the survey, about 700 *barangays* in and around the Study Area were listed up based on the 1/50,000 NAMRIA Maps and an official master list of *barangays*¹. The Profile Survey for the 700 *barangays* was commenced in April 2001 and substantially completed in July 2001. After the preparation of the Administrative Boundary Map at the *barangay* level², however, it was revealed that there were *barangays* that had been surveyed but located outside the Study Area. On the other hand, several *barangays* are actually inside the Study Area but were not surveyed.

The *barangays* whose jurisdictional area of more than 20% is situated within the limits of the Study Area were taken up as the *barangays* being included in the Study Area (**Table 3.2.2**). Following table summarizes the number of municipalities and *barangays* included in the Study Area.

Number of Municipalities and *Barangays* in the Study Area

Province	Number of Municipalities		Number of <i>Barangays</i>	
	Entire province	Study area	Entire province	Study area
Ifugao	11	11	175	149
Isabela	36	7	1,056	140
Quirino	6	5	132	87
Nueva Vizcaya	15	15	275	255
Total	68	38	1,638	631

Based on the *barangay* list thus finalized, the additional survey was conducted in late August and the beginning of September 2001. Then, finally the *barangay* profile data for 631 *barangays* were stored into database.

For the preparation of *barangay* profiles, all the secondary data (census data, statistical data, municipal profile, records of tax declaration, etc) related to the above items were collected in the NSO, LGU offices (Municipality and Province) and the local offices (CENRO/PENRO) of DENR. At the same time, the qualitative information was gathered through interviews with the said offices.

In case that the required data were not available from secondary sources, *barangay* interview survey was conducted. A key-informant interview was employed for the survey.

¹ As of July 3, 2001, National Barangay Operation Office, Department of the Interior and Local Government

² The Study Team Submitted preparation of Administrative Boundary map at barangay level to a local survey firm. The administrative boundary of each barangay in the Study Area were depicted on the NAMRIA MAP and digitized.

3.2 Statistical Analysis of the Barangay Profile

3.2.1 Selection of Targeted Barangays to be Analyzed for M/P Study

Based on the land classification, 408 *barangays* whose jurisdictional area of more than 20% are covered by the Protected Area and Forestland (PA&FL lands) were selected from the 631 *barangays* in the Study Area as targeted *barangays* to be analyzed for further M/P study from socio-economic viewpoints. List of the 408 targeted *barangays* is shown in **Table 3.1.1**. Locations of the selected 408 *barangays* are shown in **Figure 3.2.1**.

3.2.2 Statistical Analysis of the Barangay Profile

(1) Area of Barangay

Total area of all 408 *barangays* is 855,706 ha. Average area of the *barangay* among 408 *barangays* is 2,097 ha. *Barangay* that has the smallest area is Aromin, Echague municipality in Isabela province with 104 ha. The largest one is Matmad, Nagtipuna municipality in Quirino province with 26,998 ha.

Area of *Barangay*

(Unit: ha)

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Smallest	134	104	232	251	104
Largest	19,585	4,684	11,563	26,998	26,998
Average	1,509	1,417	2,334	3,017	2,097
Total	206,758	36,844	434,130	177,974	855,706

*: Percentage of total population of the provinces

An aggregated administrative area of 676,782 ha out of the 855,706 ha is situated within the PA&FL lands with a spatial area of 660,572 ha. This is because there are cases that administrative boundaries overlap each other between/among contiguous *barangays*.

(2) Population

The household population is applied for the Study based on the latest national population census data (2000 Census of Population and Housing, final counts as of May 1, 2001, NSO). Total population of the targeted *barangays* is 406,073 persons.

Population ranges from 110 persons in Banga, Lagawe Municipality in Ifugao to 3,945 persons in Bone South, Aritao Municipality in N. Vizcaya. Average *barangay* population is 995 persons. Compared to total provincial population, Ifugao covers the largest rate (73.2%) and the smallest is Isabela (1.7%). In total, targeted *barangays* cover 20.7% of the total population of four provinces.

Average household number by *barangay* is 196.2 with average of household size at 5.1 persons. Spatial distribution of the number of household member of the targeted *barangays* is shown in **Figure 3.2.2**.

Population, Household Number and Household Size

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
a) Number of <i>barangay</i>	130	34	185	59	408
b) Household population	(Unit: person)				
<i>Barangay</i> Average	821	501	1,010	831	881
Total within the Study Area	<u>106,687</u>	<u>17,024</u>	<u>186,862</u>	<u>49,028</u>	<u>359,601</u>
b) Household number	(Unit: HH)				
<i>Barangay</i> Average	157	101	201	167	174
Total Number	20,427	3,434	37,109	9,850	70,820
c) Household size	(Unit: person)				
Average Size	5.2	4.9	5.0	5.0	5.1

Source: *Barangay* profile survey conducted by the Study Team

Lowest population density among the targeted *barangays* is Matmad of Nagtipuna Municipality in Quirino at 1.7 persons/km², and highest density is Poblacion of Kiangnan Municipality in Ifugao at 1,195.2 persons/km². Average population density of all targeted *barangays* is 103.1 person/km². Spatial distribution of the population density of the targeted *barangays* is shown in **Figure 3.2.3**.

Population Density

(Unit: person/km²)

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Lowest	4.6	9.0	2.5	1.7	1.7
Highest	1,195.2	712.0	580.2	344.5	1,195.2
Average	123.2	105.3	95.7	79.0	103.1

On average, male population and female population in total are balanced in implication of almost equal sex numbers at 0.52 called as sex ratio. Lowest sex ratio at 0.29 in Caba of Lagawe Municipality in Ifugao, and the highest is Poblacion, Kiangnan Municipality in Ifugao. Spatial distribution of the sex ratio of the targeted *barangays* is shown in **Figure 3.2.4**.

Sex Ratio (male / female population)

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Lowest	0.29	0.46	0.46	0.35	0.29
Highest	0.77	0.56	0.59	0.56	0.77
Average	0.51	0.51	0.52	0.52	0.52

Since the population over 65 years old is counted as higher age group, population between 15 to 65 years old is counted as productive age instead of the labor force by over 15 years old group. The productive age group population (15 - 65 years old) varies from 42.2% to 65.5% with the average of 52.8%, and higher age group (over 65 years old) is from 0% to 16.2% with the average of 5.2%. Spatial distribution of the percentage of population by the said age groups of the targeted *barangays* is shown in **Figures 3.2.5 and 3.2.6**.

Percentage of Population by Age Group

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
15 – 64 years old					
Lowest	42.2%	49.0%	43.3%	46.1%	42.2%
Highest	60.5%	65.5%	62.0%	58.6%	65.5%
Average	51.3%	55.3%	53.4%	53.2%	52.8%
Over 65 years old					
Lowest	0.0%	1.6%	0.0%	0.8%	0.0%
Highest	16.2%	9.1%	9.2%	7.2%	16.2%
Average	6.5%	4.5%	4.6%	4.0%	5.2%

(3) Social Characteristics of the Population

According to the *barangay* profile survey, 28 ethnic groups live in the targeted *barangays*. Major ethnic groups are Ilocano and Ifugao. There are some *barangays* in Ifugao and in Nueva Vizcaya where sole ethnic groups reside. Highest number of ethnic groups at 28 ethnic groups lives in Villa Coloma, Bagabag Municipality in Nueva Vizcaya.

Spatial distribution of the variety of ethnic groups of the targeted *barangays* is shown in **Figure 3.2.7**.

Variety of Ethnicity

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Lowest	1.0	2.0	1.0	2.0	1.0
Highest	12.0	15.0	28.0	20.0	28.0
Average	4.5	4.4	8.4	6.4	6.6

Relevant to religious types in the targeted *barangays*, the Roman Catholic is the first major religious group, second is the Church Christ. Average number of religious groups in *barangay* level is 6.7 as following table. Spatial distribution of the variety of religious groups of the targeted *barangays* is shown in **Figure 3.2.8**.

Variety of Religions

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Lowest	2	1	1	2	1
Highest	15	10	15	12	15
Average	6.4	5.6	6.9	7.1	6.7

Presence of ancestral land under the Indigenous Peoples Right Act (IPRA) were confirmed. Locations of the ancestral land were confirmed. Spatial distribution of the presence of ancestral domain of the targeted *barangays* is shown in **Figure 3.2.9**.

Presence of Ancestral Domain Claim in the *Barangay*

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
No. of <i>Barangay</i>	35	0	24	11	70
Ratio of total no. of Brgy	25.5%	0.0%	12.9%	18.6%	17.2%

The percentage of the population under provincial poverty line widely ranges from 0% to 100 % with average at 46.7 %. Spatial distribution of the percentage of population under poverty line of the targeted *barangays* is shown in **Figure 3.2.10**.

Percentage of Population under Poverty Line

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Lowest	48.0%	0.0%	3.0%	2.0%	0.0%
Highest	80.0%	92.0%	99.0%	100.0%	100.0%
Average	70.4%	22.5%	36.6%	33.9%	46.7%

(4) Education

Data on education level were collected in literacy level, no education population, and collage-graduated population. Spatial distributions of the educational-related statistical indices are shown in **Figures 3.2.11 to 3.2.13**.

Statistics on Educational Level

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Literacy Rate (simple level)					
Lowest	14.0%	22.9%	0.0%	10.0%	0.0%
Highest	78.0%	90.0%	99.0%	99.0%	99.0%
Average	57.0%	40.9%	71.4%	73.4%	64.9%
Percentage of People who Have No Education					
Lowest	2.9%	0.0%	1.2%	0.7%	0.0%
Highest	53.7%	21.4%	55.2%	48.6%	55.2%
Average	20.2%	7.8%	13.6%	13.6%	15.4%
Percentage of Collage-graduated Population					
Lowest	0.0%	0.3%	0.0%	0.0%	0.0%
Highest	46.8%	19.0%	28.1%	15.5%	46.8%
Average	9.9%	5.0%	6.4%	3.8%	7.1%

(5) Economic activity

In the targeted *barangays*, 73% of the labor force is engaging in agricultural-related activity. Spatial distribution of the percentage of population who engage in agricultural activity of the targeted *barangays* is shown in **Figure 3.2.14**.

Percentage of Population who Engage in Agricultural Activity

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Lowest	21.5%	64.1%	0.0%	0.0%	0.0%
Highest	99.3%	100.0%	99.1%	96.9%	100.0%
Average	79.8%	85.3%	65.9%	74.2%	73.0%

The following table shows farming area on major crops by types.

Agricultural Area

	Ifugao	Isabela	N. Vizcaya	Quirino	Total
Crop Area					

(Unit: ha)

Irrigated Rice	7,324.6	204.8	15,613.9	1,270.1	24,413.3
Rainfed Rice	2,459.0	739.1	1,852.6	725.0	5,775.7
Upland Rice	294.0	509.2	1,863.4	1,047.5	3,714.1
Corn	1,493.0	3,954.9	6,155.5	5,681.5	17,284.9
Vegetables	870.9	105.6	4,366.0	1,197.7	6,540.3
Pineapple	32.3	5.4	1,972.0	16.5	2,026.1
Banana	711.3	1,253.2	1,754.5	8,071.4	11,790.3
Coffee	567.8	32.4	2,369.0	378.2	3,347.4
Coconut	181.1	69.6	1,303.9	258.7	1,813.3
Total	13,934.0	6,874.2	37,250.8	18,646.5	76,705.5

(6) Infrastructure

Infrastructure service level is investigated in the *barangay* profile survey such as water supply, electricity, telecommunication facility, and medical facility as follows.

Spatial distribution of the percentage of water-supplied population of the targeted *barangays* by water supply level is shown in **Figures 3.2.15 to 3.2.17**.

Percentage of Water-supplied Population

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Level I ³					
Lowest	0.0%	0.4%	0.0%	0.0%	0.0%
Highest	90.0%	100.0%	100.0%	100.0%	100.0%
Average	25.8%	61.1%	35.8%	48.6%	35.9%
Level II					
Lowest	0.0%	0.0%	0.0%	0.0%	0.0%
Highest	100.0%	85.0%	100.0%	100.0%	100.0%
Average	40.4%	20.1%	35.4%	30.0%	35.3%
Level III					
Lowest	0.0%	0.0%	0.0%	0.0%	0.0%
Highest	93.0%	10.0%	100.0%	100.0%	100.0%
Average	10.6%	0.4%	12.7%	6.2%	10.3%

Spatial distribution of the percentage of electricity-served population of the targeted *barangays* is shown in **Figure 3.2.18**.

-
- ³ - Water supply level I: In general, a protected well (deep or shallow) with a handpump, or protected spring and outlet, without a distribution system. Such a system is generally suitable for rural areas where houses are thinly scattered, with the well sited at a distance of not more than 250 m from the farthest user. A single source services from 5 to 50 households (HH) with at least 30 liters per capita per day (lpcd).
- Water supply level II: A communal standpipe system composed of a source and a piped distribution system with a standpipe for every 4-6 households, generally suitable for more dense clusters of at least 100 HH. Each faucet delivers about 60 lpcd and is not more than 25 meters from the farthest house. An electricity driven pump and a storage tank may be included in the system.
 - Water supply level III: a piped system with individual metered connections generally suitable for dense urban areas with at least 600 HH. The design of the system varies depending on the requirements of the area. In the rural areas where there are large town center, Level III systems are designed to deliver about 100 lpcd; depending on the users' income level. Water supplied by the system for domestic consumption is based on 200 lpcd for the general population, 40 lpcd for low-income groups and 400 lpcd for high-income groups.

Percentage of Electricity-served Population

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Lowest	0.0%	0.0%	0.0%	0.0%	0.0%
Highest	100.0%	100.0%	100.0%	100.0%	100.0%
Average	26.5%	60.5%	37.2%	36.3%	35.0%

Spatial distribution of the Availability of Telecommunication Facilities is shown in Figures 3.2.19 and 3.2.20.

Availability of Public Facilities in the *Barangay*

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Telecommunication Facilities					
No. of Brgy	7	12	69	9	97
Ratio of total no. of Brgy	5.1%	46.2%	37.1%	15.3%	17.2%
Medical Facilities					
No. of Brgy	76	21	140	40	277
Ratio of total no. of Brgy	55.5%	80.8%	75.3%	67.8%	17.2%

Travel time from *barangay* to nearest Poblacion varies from some minutes to 8 hours. These figures show not only physical distance, but also availability of transportation. Spatial distribution of the travel time from *barangay* is shown in Figure 3.2.21.

Travel Time from *Barangay* to Poblacion

(Unit: minute)

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Shortest	0	7	0	0	0
Longest	480	320	600	360	600
Average	105.1	71.7	87.5	59.1	88.3

(7) Resources for forest management

Data of and spatial distribution of the Existence of Forest Management Area is shown in the following table and Figures 3.2.22 to 3.2.25, respectively.

Forestry Management-related Statistics

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Existence of Forest Management Area					
No. of Brgy	52	9	73	41	175
Ratio of total no. of Brgy	38.0%	34.6%	39.2%	69.5%	17.2%
On-going and Completed Reforestation Project					
No. of Brgy	92	4	80	25	201
Ratio of total no. of Brgy	67.2%	15.4%	43.0%	42.4%	17.2%
Presence of CBFMA					
No. of Brgy	45	1	31	26	103
Ratio of total no. of Brgy	32.8%	3.8%	16.7%	44.1%	17.2%
Existence of PO in the <i>Barangay</i>					
No. of <i>Barangay</i>	76	5	65	34	180
Ratio of total no. of <i>Brgy</i>	55.5%	19.2%	34.9%	57.6%	17.2%

(8) Issues related to implementation of reforestation project

Issues that may affect the implementation of forest management are also interviewed to key informant in the *barangay* profile survey and are summarized as follows.

Spatial distribution maps of the presence of boundary and kaingin issues are shown in **Figures 3.2.26** and **3.2.27**.

Presence of Major Issues

	Ifugao	Isabela	N. Vizcaya	Quirino	Whole
Boundary issue					
No. of <i>Barangay</i>	9	0	11	5	25
Ratio of total no. of <i>Brgy</i>	6.6%	0.0%	5.9%	8.5%	17.2%
<i>Kaingin</i> system					
No. of <i>Barangay</i>	127	10	1	2	140
Ratio of total no. of <i>Brgy</i>	92.7%	38.5%	0.5%	3.4%	17.2%

1) Ifugao Province

i) Land tenure issues

- Municipal and *barangay* boundary disputes
- Issuance of Certificate of Stewardship.
- Integrated Social Forestry
- *Kaingin* system, *Muyong* system & Pasture Land
- Expanding vegetable production
- Late Payment
- Boundaries and land disputes
- CADC
- Gardening
- Ancestral Land Claims (two municipalities)

2) Nueva Vizcaya Province

i) Land tenure issues

- High population density
- No open land for possible reforestation project
- Non-security of tenure among majority of populace
- Boundary disputes
- Pasture lease agreement
- Fire and illegal logging
- No fund raising
- Mine extraction
- No appropriate area of forest zone; non-security of land tenure/titles/certificates
- Alienable & disposable land covered w/ resettlement area
- Not all has acquired land titles on the resettlement area

ii) Local traditions/ customs

- Lands have been pre-occupied and people are not willing to accept or support reforestation projects
- Poor road condition, no transportation; no electricity
- Financial problems
- Lack of tenurial instrument
- Issuance of land stewardship to settlers
- Boundary disputes
- Customs and traditions are already eliminated or diminished
- Forest fire
- Land converted into *kaingin*

3) Quirino Province

- i) Land tenure issues
 - Boundary dispute
 - Don't have forest land
 - Loggers and Kaingineros
 - Illegal loggers
 - Mining applications
 - Lack of information dissemination
- ii) Local traditions/ customs (Not specified)
 - ISF Issuance
 - Land owners hesitant to cultivate their land because of fear of losing their land and their *kaingin*
 - Squatters

4) Isabela Province

- i) Land tenure issues
 - Land occupancy/ownership of public lands not clear to people.
 - Not enough area for reforestation projects.
 - People do not know clearly policies regarding land ownership over forest area
 - No interest for reforestation project.
 - Squatting and unawareness of lands laws.
 - Conversion of forest land to agricultural land.
 - Implementation of reforestation project in the area is not applicable due to the absence of potential forestlands.
- ii) Local traditions/ customs
 - Most people are only caretaker of absentee landlords.
 - There is no land tenure that affects reforestation project that will be introduced in the *barangay*.
 - Forestlands are left without maintenance and no reforestation project is being implemented to replace the depleted trees.
 - There are areas classified as forestlands but due to *kaingin* activities the forest were already denuded and it needs reforestation project.
- Illegal logging
- People not used to planting trees
- Yearly burning of mountainside to enable new grasses to grow livestock
- Yearly *kaingin* system
- Agricultural crops is priority over reforestation
- People are not aware about reforestation projects
- No interest in reforestation project

Major data collected by the *barangay* profile survey by each targeted *barangay* are shown in **Table 3.2.1**.

3.3 Population Projection of the Targeted Barangays for M/P

As explained in the previous section, final result of national population census data (as of May 1, 2001) is applied as latest population data for the Study in the year 2000. To formulate M/P, future population of the targeted *barangays* till the target year 2015 is projected by statistical estimation of the approximate function by using adjusted exponential function based on the population projection from 1995 to 2010 by NSO⁴.

Compared to the population in 2000 at 406,073 persons, projected population in the target year 2015 will be 524, 453 persons with 29% increase.

⁴ 1995 Census-Based City/Municipality Population Projections, NSO, 1999

Population Projection from Year 2001 to 2015

	Ifugao	Isabela	N. Vizcaya	Quirino	Total
2000	118,194	23,110	208,962	55,807	406,073
2001	120,676	23,572	213,350	57,314	414,912
2002	123,158	24,058	217,947	58,765	423,928
2003	125,640	24,520	222,336	60,272	432,767
2004	128,122	24,982	226,724	61,778	441,606
2005	130,723	25,444	231,112	63,229	450,508
2006	133,086	25,883	235,291	64,680	458,941
2007	135,450	26,299	239,679	66,187	467,616
2008	137,932	26,715	243,859	67,638	476,144
2009	140,296	27,131	248,038	69,089	484,554
2010	142,660	27,547	252,217	70,540	492,964
2011	143,960	27,778	254,516	71,210	497,464
2012	145,970	28,125	258,068	72,382	504,544
2013	147,979	28,448	261,411	73,498	511,337
2014	149,870	28,749	264,755	74,614	517,988
2015	151,761	29,072	267,889	75,730	524,453

CHAPTER 4 SOCIO-ECONOMIC CONDITIONS AT SUB-WATERSHED LEVEL

4.1 Socio-economic Characteristics of Sub-watersheds

Through the M/P study, priority area by sub-watershed basis will be selected to efficiently implement the forestry management scheme under the limited resources. Out of 133 sub-watersheds in the Study area, 128 sub-watersheds are considered for the prioritization since those sub-watersheds include the targeted 408 *barangays* for the reforestation and forest management scheme.

Socio-economic data of each *barangay* were converted to these by Sub-watershed in proportion to *barangay* area occupied in the sub-watershed. As a result, total population residing in the 128 sub-watersheds from targeted 408 *barangays* is about 359,000 persons with average 2,800 person/sub-watershed. Average population density in the sub-watershed area where the targeted 408 *barangays* are located is 50 persons/km². Summary of representative socio-economic data on the sub-watersheds is shown below.

Summary of Representative Socio-economic Data on the Sub-watersheds

	Unit	Lowest	Highest	Average	Total
1)Population	persons	115	20,970	2,830	359,600
2)Household number	households	20	4,430	553	70,820
3)Population density	persons/km ²	2	300	56	—
4)Poverty population rate	%	2	80	39	—
5)Agri-sector population rate	%	32	230	75	—
6)Literacy rate	%	25	95	63	

Major socio-economic data by each sub-watershed are summarized in **Table 4.1.2**.

4.2 Socio-economic Ranking of Sub-watersheds

To prioritize the sub-watersheds from socio-economic viewpoints, each sub-watershed was scored and ranked by the following criteria, which were considered as objective and accurate data among those available in the *barangay* profile.

Criteria of Sub-watershed Ranking

Ranking Items	Criteria
1. Necessity of watershed management	1) Agricultural sector population rate in terms of dependence of the land in the sub-watershed 2) Poverty level
2. Potencial of implementation of the forest management	1) Literacy 2) Experience of reforestation management project

To evaluate necessity of watershed management for each sub-watershed, poverty population rate and agricultural sector population rate were scored by relative comparison in five ranks. Then, consolidated scores of two criteria were ranked for all sub-watersheds.

Relevant to priority ranking of the potential of implementation of the forest management, simple literacy rate as criteria of basic education level and experience in forest management project were applied from the *barangay* profile survey results. Those data by *barangay* also were scored by five ranks.

As results of calculation of the scoring, top fifteen ranked sub-watersheds are shown in the following tables. All results of the ranking are shown in **Tables 4.2.1 and 4.2.2**. Spatial distribution maps of the sub-watershed rankings in the Study area based on each criterion and combined criteria are shown in **Figures 4.2.1 to 4.2.6**.

Top Fifteen Ranked Sub-watersheds on Necessity of Watershed Management

No.	Sub-watershed Code	Score on Agri-sector Pop Rate	Score on Poverty Rate	Total Score
1	A3-c	5	5	10
2	A3-d	5	5	10
3	M1-a	5	5	10
4	M1-b	5	5	10
5	M1-c	5	5	10
6	M1-f	5	5	10
7	M1-h	5	5	10
8	M1-i	5	5	10
9	M2-h	5	5	10
10	M2-i	5	5	10
11	M4-c	5	5	10
12	M4-d1	5	5	10
13	A1-c	5	4	9
14	A2-a	5	4	9
15	M1-d	4	5	9

Top Fifteen Ranked Sub-watersheds on Potential of Watershed Management

No.	Sub-watershed Code	Score on Literacy Rate	Score on Experience of Reforestation Project	Total Score
1	A2-e	5	5	10
2	A3-a	5	5	10
3	M5-b	5	5	10
4	M5-f	5	5	10
5	A1-c	5	4	9
6	C6-b	4	5	9
7	C6-e	4	5	9
8	C8-f	4	5	9
9	C10-c	5	4	9
10	M5-a	5	4	9
11	M5-g	4	5	9
12	M6-b	5	4	9
13	M6-e	5	4	9
14	M8-b	4	5	9
15	M8-c	5	4	9

CHAPTER 5 COST BENEFIT ANALYSIS FOR THE WATERSHED MANAGEMENT PROJECT

5.1 Background

The proposed watershed management project for Upper Magat and Cagayan River basin (the Project) has the following objectives.

- (a) Mitigating soil erosion in the watershed to retain/improve soil productivity and sustainability and to eventually mitigate sedimentation in both the upper and lower parts of the watershed
- (b) Providing improved protection from floods by mitigating flood peaks and providing increased and prolonged base flow from/through both the upper and lower parts of the watershed.
- (c) Providing quality water for both on and off-site beneficiaries
- (d) Improving the living standard of upland dwellers by the utilization of natural resources in the watershed in a sustainable manner
- (e) Increasing economic value of natural resources in the watershed (such as forestry, agriculture, water, power generation, tourism, etc.), and
- (f) Protecting, maintaining, and enhancing the present biodiversity.

To achieve the objectives, various activities will be implemented under the Project. Project costs will be required in addition to the costs for present watershed management activities. In order to justify the implementation of the proposed watershed management project whether the project is worth undertaking in terms of economic viability, sum of the economic benefits by the Project has to exceed the total economic costs by the Project with comparing between with-project and without-project (no action) cases.

In the following sections, both the direct and indirect economic benefits that would be accrued by the watershed management project are firstly identified. Secondly, methods of monetary valuation on each benefit are explained correlating to the relevant costs and project period. Since most of the costs are easily estimated as direct market values, explanation is concentrated to those in need of complicated estimation. Subsequently, necessary surveys for data acquisition are listed and classified in terms of necessity of local information. Then, finally implication of the economic analysis and comprehensive cost benefit analysis is explained.

5.2 Economic Benefits of the Watershed Management Plan

Various economic benefits would be brought about by the conservation and rehabilitation of the watershed through implementation of the watershed management project. The following table shows conceivable benefits of the project.

Items of Expected Economic Benefits from the Watershed Management Project

Items of Economic Benefit	
<u>Economic Activities</u>	11-1) Income generation
1) Forestry	11-2) Poverty alleviation
2) Water supply	11-3) Prevention of rural-urban migration
3) Power generation	12) Health
4) Agriculture	<u>Environmental Service</u>
5) Livestock	13) Biodiversity
6) Mining	14) Prevention of soil erosion
7) Fishery	15) Prevention of slope failure and landslide
8) Transportation	16) Water quality conservation
<u>Social Service</u>	17) Flood mitigation
9) Tourism and recreation	18) Carbon sequestration
10) Historical and cultural assets	19) Micro-climate amelioration
11) Social welfare	

Note: The benefit items were referred and modified from the “Guidelines for Watershed Management and Development in the Philippines, DENR et al., 1999”.

Concept of the valuation of each benefit item and its verification method are explained below. The valuation methods applied here are mainly direct market sales benefit, travel cost, and replacement methods, which are generally used as environmental economic valuation methods.

5.3 Methodology of Benefit Valuation

Methodologies for valuing each economic benefit of the Project are explained below.

(1) Forestry

1) Stumpage Value of Trees for Timber under CBFMP

Under the CBFM program, harvest of trees in the forest plantation area is partly allowed to PO members in some extent under an appropriate plan as an incentive for sustainable participation to the PO members. As a major tree species for timber production, Yamane would be one of tree species to be estimated.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Stumpage Value of Controlled Tree Cutting

Items	Calculations (unit)
a) Stumpage volume per ha in appropriate period for cutting by type of tree species <i>i</i>	A_i (m ³ /ha)
b) Unit stumpage price by type of tree species <i>i</i>	B_i (pesos/ m ³)
c) Stumpage price per ha by type of tree species <i>i</i>	$C_i = A_i \times B_i$ (pesos/ha)
d) Total area of allowable cutting in a year by type of tree species <i>i</i>	D_i (ha/year)
e) Total value per annum	$E = \sum_i C_i \times D_i$ (pesos/year)

In the case of calculation of total economic benefit during the project period, number and rotation period of harvesting after planting and replanting should be considered.

2) Harvest of Firewood

In the agroforestry area, firewood such as Kakawate would be planted together with

fruit trees to some extent. Harvest of firewood in an appropriate manner is valued as the stumpage value of the firewood species such as Kakawate for firewood use.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Harvest of Firewood

Items	Calculations (unit)
a) Unit harvest volume per ha by type of firewood species <i>i</i>	A_i (m ³ /ha)
b) Stumpage value by type of firewood species <i>i</i>	B_i (pesos/m ³)
c) Area for firewood in agroforestry area by type of firewood species <i>i</i>	C_i (ha)
d) Total value per annum	$D = \sum_i (A_i \times B_i \times C_i)$ (pesos/year)

In the case of calculation of total economic benefit in the project period, number and interval period of cutting after planting and replanting period are to be considered.

(2) Water Supply

Part of rain water infiltrates and is retained in the sub-surface soil of the forestland for some time. The retained excessive storm water gradually flows out, so as to increase and prolong base flow while lowering peak flow level and extending runoff period. Consequently, volume of useable water in the dry season could be increased. Thus, implementation of the watershed management project would result in providing more stable water supply to water users in the downstream for various purposes such as agricultural, domestic, industrial and other uses in the dry season. The function of the water detention can be valued in the cost of water supply dams with same capacity of the replanted forest area.

The function of the water detention can be valued in the cost of water supply dams with same capacity of the forest area.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Water Supply

Items	Calculations (unit)
a) Current forest-covered area in the project area	A (ha)
b) Forest area conserved and rehabilitated by implementation of the watershed management project	B (ha)
c) Average rainfall	C (mm/year)
d) Volume of evapotranspiration	D (mm/year)
e) Direct runoff which flows on surface of slope area	E (m ³ /year)
f) Water detention capacity in the watershed before forest rehabilitation	$F = A \times (C - D - E)$ (m ³ /year)
g) Water detention capacity in the watershed after implementation of the watershed management project	$G = B \times (C - D - E)$ (m ³ /year)
h) Increase of water detention capacity by implementation of the watershed management project	$H = G - F$ (m ³ /year)
i) Total construction cost of the water supply dam with same water detention capacity of the watershed per development water volume (Unit of the water detention capacity: pesos/(m ³ /s))	I (pesos/m ³ /year)
j) Annual depreciation costs per development water volume of water supply dam	$J = I \times [b \times (1+b)^a / \{(1+b)^a - 1\}]$ (pesos/m ³ /year) (a: depreciation period, b: interest rate)
k) Annual maintenance costs per development water volume of water supply dam	$K = J \times 1\%$ (pesos/m ³ /year)
l) Total value per annum (= value estimated by the cost of water supply dam)	$L = H \times (J + K)$ (pesos/year)

Source: The estimation method described above was referred from the estimation method adopted by the Forestry Agency of Japan.

In the case data is not available on the valuation by water supply dam mentioned-above, increased agricultural produce in the dry season may be valued by converting it into the increase of water for irrigation and agricultural potential in the project area as alternative estimation method.

In case estimation of incremental river discharge by effect of forest rehabilitation is technically difficult, past river discharge data is used as future river discharge to be attained assuming that the discharge in the past when same forest coverage with the target rehabilitation area in the watershed management project existed is the same as the one that could be attained by the implementation of the project..

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Incremental Agricultural Produce in the Dry Season by Increase of Water Retention Capacity

Items	Calculations (unit)
a)Average river discharge in the past period, where same forest coverage existed with target rehabilitation area in the watershed management project in the dry season	A (m ³ /sec./ha)
b)Average river discharge in the dry season in the recent years	B (m ³ /sec./ha)
c)Unit incremental river discharge from rehabilitated forest area in the dry season	C = A – B (m ³ /sec./ha)
d)Rehabilitation area	D (ha)
e)Forest land area factor (rate of forest coverage to be rehabilitated)	E
f)Water detention capacity in the watershed before forest rehabilitation	F = C × D × E (m ³ /sec.)
g)Unit water requirement for irrigation paddy	G (m ³ /sec./ha)
h)Incremental irrigation area	H = F / G (ha)
i)Unit harvest for irrigation paddy	I (ton/ha)
j)Unit farm gate price of rice	J (pesos/ton)
k)Unit cost for irrigation paddy	K (pesos/ha)
l)Unit profit for irrigation paddy	L = I × J – K (pesos/ha)
m)Unit harvest for rainfed paddy	M (ton/ha)
n)Unit cost for rainfed paddy	N (pesos/ha)
o)Unit profit for rainfed paddy	O = M × J – N (pesos/ha)
p)Unit incremental benefit	P = L – O (pesos/ha)
q)Total value per annum	Q = H × P (pesos/year)

Note: It is assumed that existing rainfed paddy is totally changed into irrigation paddy by increase of water retention capacity in the rehabilitated forest.

(3) Power Generation

Reduction of soil erosion from the watershed by implementation of the watershed management project is valued as the annual cost of dredging of the Magat reservoir and repair of relevant facilities.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Power Generation

Items	Calculations (unit)
a)Present annual sedimentation volume flowing into the Magat dam reservoir	A (m ³ /year)
b)Estimated annual sedimentation volume flowing into the Magat dam reservoir after implementation of the watershed management project	B (m ³ /year)
c)Decreased annual sedimentation volume flow into the Magat dam reservoir by implementation of the watershed management project	C = A – B (m ³ /year)
d)Annual costs for dredging activity in the reservoir per weight of the sediment	D (pesos/m ³)
e)Decreased repair and maintenance cost for facilities relevant to sedimentation	E (pesos/m ³)
f)Total value per annum (= value estimated by decreased costs for dredging and maintenance & repair of facility in the Magat dam)	F = C × (D + E) (pesos/year)

(4) Agriculture

1) Sales of Agroforestry Produce¹

Agroforestry is a component of the site development that allows upland dwellers to provide additional and stable income opportunities in the forestland as well as to give incentive and motivation for sustainable participation in the watershed management project. Sales of agroforestry produces such as mangos and coffee would improve the income level of the participants.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Sales of Agroforestry Produce

Items	Calculations (unit)
a) Estimated unit farm gate price in a year by type of agroforestry produce <i>i</i>	A_i (pesos/kg)
b) Unit produce per ha by type of agroforestry produce <i>i</i>	B_i (kg/ha)
c) Total area of harvest for the agroforestry product in a year by type of agroforestry produce <i>i</i>	C_i (ha/year)
d) Total value per annum	$D = \sum_i A_i \times B_i \times C_i$ (pesos/year)

2) Conservation of Cultivated Land

The watershed management project proposes ecologically compatible land use for existing and proposed agricultural land. Such land use force upland dwellers to restrict farming practices, while it would increased and sustained fertility of the soil in the cultivated area brings about higher productivity of the agricultural produce.

In the estimation, total value is estimated by considering both conservation of nutrient loss from soil loss and additional nutrient by conservation method such as mulching.

Necessary data and calculation method for benefit valuation is summarized below.

¹ This function is also related to the function of (1) forestry.

Necessary Data and Calculation Method for Conservation of Agricultural Land

Items	Calculations (unit)
a) Conservation of nutrient loss from soil loss	
a-1) Annual prevented soil loss by cultivated land conservation measures	A (ton/ha/year)
a-2) Annual prevented nutrient loss by type of nutrient <i>i</i>	$B_i = a_i \times A$ (kg/ha/year) (<i>a_i</i> : conversion factor based on the soil composition by type of nutrient <i>i</i>)
b) Additional nutrient by conservation method such as mulching by type of nutrient <i>i</i>	C_i (kg/ha/year)
c) Total annual incremental nutrient by type of nutrient <i>i</i>	$D_i = B_i + C_i$ (kg/ha/year)
d) Annual requirement of fertilizer per ha instead of the incremental nutrient by type of nutrient <i>i</i>	$E_i = b_i \times D_i$ (kg/ha/year) (<i>b_i</i> : conversion factor by type of fertilizer by type of nutrient <i>i</i>)
e) Unit price of the fertilizer by type of nutrient <i>i</i>	F_i (pesos/kg)
f) Total area applied for conservation of agricultural land	G (ha)
g) Total value per annum	$H = \sum_i (E_i \times F_i) \times G$ (pesos/year)

(5) Livestock (Fodder Produce by Silvopasture)

In the selected sub-watersheds in the Upper Magat and Cagayan River Basin, silvopasture is planned to be introduced to some extent with a combination of silviculture/agroforestry and pasture development in the site development. Intensive produce of fodder is expected to increase productivity of animal raising over that of the present open grazing condition, which is extensive and low productivity incorporating uncontrolled burning causing severe degradation of natural conditions in the forestland. Estimated increase in production of livestock is valued.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Fodder Produce by Silvopasture

Items	Calculations (unit)
a) Annual unit outputs per ha in live weight of the cattle from the silvopasture by type of livestock practice <i>i</i> (e.g. cut & carry, open grazing)	A_i (kg/ha/year)
b) Area of silvopasture land by type of livestock practice <i>i</i>	B_i (ha)
c) Farm gate price of cattle in live weight	C (pesos/kg)
d) Total value per annum	$D = \sum_i (A_i \times B_i) \times C$ (pesos/year)

(6) Mining

There is no benefit for the mining improvement by the watershed management project.

(7) Fishery

Fishery activities are mainly conducted in the Magat dam reservoir. Effect of fishery in the Magat dam reservoir by the watershed management project with water quality improvement is valued in the change of increased sales of the fishery products.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Fishery

Items	Calculations (unit)
a) Present catch of fish species in the Magat dam reservoir by type of fish species <i>i</i>	A_i (kg of fish/unit of water quality)
b) Estimated catch of fish species in the Magat dam reservoir after the project by type of fish species <i>i</i>	B_i (kg of fish/unit of water quality)
c) Increase catch of fish species by improvement of water quality in water quality indexes of pH, Dissolved Oxygen (DO) and suspended solid by type of fish species <i>i</i>	$C_i = B_i - A_i$ (fish/unit of water quality)
d) Sales price to the market	D_i (pesos/kg of fish by kind)
e) Number of fishermen	E_i (persons)
f) Total value per annum (= value estimated by increased total sales price to the market)	$F = \sum_i (C_i \times D_i \times E_i)$ (pesos/year)

(8) Transportation

Reduction of access to the site and transportation time to the market by improvement of the feeder road in the watershed management project is valued in incremental opportunity cost of users.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Transportation

Items	Calculations (unit)
a) Access time to the site and market before implementation of the watershed management project by improved road <i>i</i>	A_i (minute)
b) Access time to the site and market after implementation of the watershed management project by improved road.	B_i (minute)
c) Opportunity cost for time spending for transportation by improved road	C_i (pesos/min)
d) Annual access numbers to the site and market by improved road	D_i (times/year)
e) Total value per annum (= value estimated by opportunity cost for saving time)	$E = \sum_i ((A_i - B_i) \times 2 \times C_i \times D_i)$ (peso/year)

(9) Tourism and Recreation

Economic opportunity for nature tourism and recreation in the watershed will be enhanced by implementation of the watershed management project. Conserved tourism and recreation sites by implementation of the watershed management project are valued in travel costs by increase in number of tourists.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Tourism and Recreation

Items	Calculations (unit)
a) Present annual tourist number for one-day trip tourist and lodging tourist by site of potential and existing tourism and recreation <i>i</i>	A_i (person/year)
b) Expected annual tourist number for one-day trip tourist and lodging tourist by site of potential and existing tourism and recreation <i>i</i> , after implementation of the watershed management project	B_i (person/year)
c) Average travel cost for one-day trip tourist and lodging tourist by site of potential and existing tourism and recreation <i>i</i>	C_i (pesos)
d) Total value per annum (= value estimated by increased total travel costs for increased number of tourists)	$D = \sum_i ((B_i - A_i) \times C_i)$ (pesos/year)

(10) Historical & Cultural Places

Economic opportunity for historical/cultural sites and structures in the watershed will be enhanced by implementation of the watershed management project. Conserved historical/cultural sites and structures by implementation of the watershed management project are valued in travel costs by increase of tourists.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Historical & Cultural Places

Items	Calculations (unit)
a) Present annual tourist number for one-day trip tourist and lodging tourist by potential and existing historical/cultural site or structure <i>i</i>	A_i (person/year)
b) Expected annual tourist number for one-day trip tourist and lodging tourist by potential and existing historical/cultural site or structure <i>i</i> , after implementation of the watershed management project	B_i (person/year)
c) Average travel cost for one-day trip tourist and lodging tourist by potential and existing historical/cultural site or structure <i>i</i>	C_i (pesos)
d) Total value per annum (= value estimated by increased total travel costs for increased number of tourists)	$D = \sum_i ((B_i - A_i) \times C_i)$ (pesos/year)

(11) Social Welfare

Through CBFM activities, PO members receive wage for their work. This will be additional income opportunity for PO members. In addition, the income generation activity would contribute to alleviate poverty incidence among the PO members. Stabilization of livelihood would affect prevention of rural-urban migration.

(12) Health

Income generation through the watershed management project contribute to raise nutrition level to the people, especially children. The increased nutrition level by income increase is valued as benefit on health. However, monetary valuation of the increase in nutrition level is not known and it is an issue to be studied.

(13) Biodiversity

The forest plays a role in provision of habitat of fauna and flora, and in conservation of genetic resources for the biodiversity. Conservation and rehabilitation of natural habitat for wildlife such as birds by implementation of the watershed management project is valued in the artificial handling and feeding costs.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Biodiversity

Items	Calculations (unit)
a) Incremental number of the species by growth of the planted trees by type of protected species <i>i</i>	A_i (number)
b) Annual cost for artificial handling and feeding by type of protected species <i>i</i> (cost for construction of facilities and feed)	B_i (pesos)
c) Total value per annum (= value estimated by the cost for artificial handling and feeding)	$C = \sum_i (A_i \times B_i)$ (pesos/year)

(14) Prevention of Soil Erosion

The forest covering the surface of the earth with trees and other plants mitigates the rainfall impact on the surface soil, so that surface erosion is alleviated. The forest soil, which has a high water infiltration capacity due to relative large voids in the soil, also mitigates surface flow of the rainwater. Reduced volume of soil erosion by implementation of the watershed management project is valued as the construction cost of Sabo Dams for prevention of sedimentation of the same capacity.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Prevention of Soil Erosion

Items	Calculations (unit)
a) Reduction of soil erosion by reforestation	
a-1) Soil erosion rate	A (mm/year)
a-2) Total reforestation area	B (km ²)
a-3) Total volume of soil erosion to be mitigated	$C = A \times B \times 1,000$ (m ³ /year)
b) Reduction of soil erosion by soil conservation activities	
b-1) Effect of soil erosion by soil conservation activities	D (mm/year)
b-2) Total area applied for soil conservation activities	E (km ²)
b-3) Total volume of soil erosion to be mitigated	$F = D \times E \times 1,000$ (m ³ /year)
c) Total volume of soil erosion to be mitigated	$G = C + F$ (m ³ /year)
d) Total value	$H = a \times G$ (pesos) (<i>a</i> : conversion factor for unit construction cost of Sabo dam)
e) Annual depreciation costs of Sabo dam	$I = H \times [c \times (1+c)^b / \{(1+c)^b - 1\}]$ (pesos/year) (<i>b</i> : depreciation period, <i>c</i> : interest rate)
f) Annual maintenance costs of Sabo dam	$J = I \times 1\%$ (pesos/year)
g) Total value per annum	$K = I + J$ (pesos/year)

Note: It is assumed that soil erosion is totally prevented in the reforested site.

Source: The estimation method described above was referred from the estimation method adopted by the Forestry Agency of Japan.

(15) Prevention of Slope Failure and Landslide

The forest stabilizing the soil by the root system of plants prevents slope failure and landslide resulting from advanced soil erosion. Reduced area of slope failure and landslide is valued in the construction cost of same capacity of civil engineering measure for slope protection.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Slope Failure and Landslide Prevention

Items	Calculations (unit)
a) Annual average area of slope failure and landslide per 1 km ² for bare land	A (ha/km ² /year)
b) Annual average area of slope failure and landslide per 1km ² for forest land	B (ha/km ² /year)
c) Forest area conserved and rehabilitated by implementation of the watershed management project	C (km ²)
d) Reduced area of slope failure and landslide by implementation of the watershed management project	$D = (A - B) \times C$ (ha/year)
e) Construction cost of civil engineering measure for slope protection per ha	E (pesos/ha)
f) Total value per annum (= value estimated by the cost of civil engineering measure for slope protection)	$F = D \times E$ (pesos/year)

Source: The estimation method described above was referred from the estimation method adopted by the Forestry Agency of Japan.

(16) Water Quality Conservation

The rainwater is purified in a process of the soaking rainwater into the forest soil. In this function, it can be assumed that the rainwater quality ranging from pH3.7 to pH4.9 as hydrogen ion concentration be purified into water supply source quality ranging from pH5.8 to pH8.6. The water purification function by the forest soil is valued in the cost of same capacity of rainwater utilization facility.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Water Quality Conservation

Items	Calculations (unit)
a) Forest area conserved and rehabilitated by implementation of the watershed management project	$A \times 1,000$ (m ²)
b) Annual average rainfall	B (m/year)
c) Procurement cost for rainwater utilization facility	C (pesos)
d) Construction cost for civil engineering work	D (pesos)
e) Total depreciation costs for the facility and civil engineering work	$E = C \times [c \times (1+c)^a / \{(1+c)^a - 1\}] + D \times [c \times (1+c)^b / \{(1+c)^b - 1\}]$ (pesos/year) (<i>a</i> : depreciation year for machinery, <i>b</i> : depreciation year for civil engineering work, <i>c</i> : interest rate)
f) Maintenance and operation cost	F (pesos/year)
g) Unit cost of water purification by rainwater utilization facility per 1m ³	$G = (E + F) / (B \times A)$ (peso/m ³)
h) Increased capacity of water detention by implementation of watershed management project (see the water supply function)	H (m ³)
i) Total value per annum (= value estimated by the cost of rainwater utilization facility)	$I = G \times H$ (pesos/year)

Source: The estimation method described above was referred from the estimation method adopted by the Forestry Agency of Japan.

(17) Flood Mitigation Effects with Peak Flow Cut by Increase of Water Retention Capacity

Increase of the water retention capacity by the increase of tree vegetation cover in the forest reduces peak flow of floodwater. This function is capable of lowering peak flood flow in heavy rain. Compared to the water detention capacity in the present condition of the watershed, reduced peak flow in the storm by detention of water in the rehabilitated forest soils is valued as the cost of a flood control dam of the same capacity.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Flood Mitigation Effects

Items	Calculations (unit)
a) Peak flood discharge	A (m ³ /sec)
b) Flood duration	B (hours)
c) Simulated flood volume to be mitigated	$C = A \times 10\% \times B \times 3,600 \text{ (sec/hour)} / 2$ (m ³ /sec.)
d) Total reforestation area	D (km ²)
e) Total volume of mitigation	E = C × D (MCM)
f) Total value by flood control dam	F = a × E (pesos) (a: conversion factor for unit construction cost of flood control dam)
g) Annual depreciation costs of flood control dam	$G = F \times [c \times (1+c)^b / \{(1+c)^b - 1\}]$ (pesos/year) (b: depreciation period, c: interest rate)
h) Annual maintenance costs of flood control dam	H = G × 1% (pesos/year)
i) Total value per annum	I = G + H (pesos/year)

Note: * - Difference of runoff coefficient between forest land and grass land is about 0.1 based on a reference of Texas Highway Dept., which is equivalent to 10% difference of flood discharge.

Source: The estimation method described above was referred from the estimation method adopted by the Forestry Agency of Japan.

(18) CO₂ Sequestration by Tree and Underground Biomass

While the forest breathes by taking in oxygen and exhaling carbon dioxide, the forest photosynthesizes by taking in the carbon dioxide and exhaling the oxygen. Taking the total balance of input and output, the forest takes in the carbon dioxide and exhales the oxygen with an increase of biomass in both aboveground and belowground vegetation as well as belowground litter and soil, which is a carbon sequestration function of the forest.

Regarding the carbon sequestration, increased volume of carbon sequestration by increase of the vegetation cover is valued in the international trading contracted price such as that in the BioCarbon Fund².

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for CO₂ Sequestration

Items	Calculations (unit)
a) Unit CO ₂ sequestration volume by forest land use type <i>i</i> (e.g. tree plantation, agroforestry*)	A _{<i>i</i>} (tCO ₂ /ha/year)
b) Land area by forest land use type <i>i</i>	B _{<i>i</i>} (ha)
c) Unit trading price of CO ₂	C (pesos/tCO ₂)
d) Total value per annum	$D = \sum_i (A_i \times B_i) \times C$ (pesos/year)

Note: * - Unit CO₂ sequestration volumes by forest land use type are shown in the following table for reference. If available, data on unit CO₂ sequestration volume by tree species should be applied in addition to the forest land use type.

Source: The estimation method described above was referred from the estimation method adopted by the Forestry Agency of Japan.

² The BioCarbon Fund was launched by the World Bank in November 2002 to provide carbon finance to demonstrate projects that sequester or conserve carbon in forest and agro-ecosystems as a new trust fund related to the Kyoto Protocol project mechanisms. The Fund is expected to begin operations in mid-2003.

CO₂ Sequestration of Forest Land Use in the Philippines (as Reference data)

Forest Type	C Sequestration per ha (tC/ha/year)	CO ₂ Sequestration per ha (tCO ₂ /ha/year)	With underground vegetation, litter and soil (tCO ₂ /ha/year)
A. Protection Forest	1.52	5.57	6.96
B. Second growth Forest	0.12	0.43	0.54
C. Brushlands	2.78	10.20	12.75
D. Grasslands	0.00	0.00	0.00
<u>E. Tree Plantations</u>	4.33	15.89	<u>19.86</u>
<u>F. Agroforestry</u>	2.40	8.81	<u>11.02</u>

Note:

- 1) C Content = Biomass x 0.5= volume x wood density x 0.5
- 2) Wood density for Asian tropical forest = 0.57 t/m³ (Brown and Lugo, 1984)
- 3) Total biomass of mossy, pine, mangrove, sub-marginal and production forest 50 % of old growth forest
- 4) Total biomass of agroforestry farms 50 % of tree plantation
- 5) Biomass of old-growth forest = 350 tons/ha (Brown et al. 1984)
- 6) C Sequestration of second - growth forest = net of harvest and deforestation
- 7) C sequestration by underground vegetation, soil and litter are assumed at 25 % of above-ground vegetation.
- 8) C content of grasslands = 45.8 t/ha (above-ground); 72.6 t/ha (below ground) (IPCC, 1996)
- 9) Biomass of brushlands = 20 % of OGF (70 t/ha)
- 10) C sequestration of brushlands = second- growth forests (2.8 t/ha)
- 11) Agroforestry farms include coconut farms and fruit orchards

Source: Modified from “Philippine Forestry and Carbon Dioxide (CO₂) Sequestration: Opportunities for Mitigating Climate Change. Philippines: College of Forestry and Natural Resources, University of the Philippines Los Banos, Lasco, R. D. and F. B. Pulhin, 1998”

(19) Micro-climate Amelioration

Enhancement of micro-climate amelioration by forest conservation and rehabilitation such as reduction of temperature extremes and heavy wind speed is valued by alternative civil engineering facilities.

Necessary data and calculation method for benefit valuation is summarized below.

Necessary Data and Calculation Method for Micro-climate Amelioration

Items	Calculations (unit)
a)Reduction rate of excessive temperature by forest type <i>i</i>	A_i (°C: degrees centigrade)
b)Unit cost of alternative facility for reduction of excessive temperature	B (pesos/°C)
c)Reduction rate of heavy wind by forest type <i>i</i>	C_i (m/s)
d)Unit cost of alternative facility for reduction of heavy wind	D (pesos/(m/s))
e)Total value per annum (= value estimated by construction of alternative facilities)	$E = \sum ((A_i \times B) + (C_i \times D))$ (pesos/year)

Source: The estimation method described above was referred from the estimation method adopted by the Forestry Agency of Japan.

(20) Summary of Valuation Methods

Valuation methods for the above benefit items are summarized below.

Summary of Valuation Methods for Major Economic Benefits

Items of Economic Benefits	Indicator for Evaluation	Valuation Technique
(1)Forestry		
1) Allowable tree cutting	Stumpage value of tree species allowed to be cut in site development area such as Yamane	Direct valuation
2) Harvest of firewood	Stumpage value of firewood species such as Kakawate in the agroforestry area of the site development	Direct valuation
(2)Water supply	Cost of water supply dam with same capacity of incremental water detention capacity in the watershed	Replacement cost
1) Increase in agricultural produce	Increase in agricultural produce in the dry season in the downstream with increased capacity of water retention through the year. (This is included in part of the above(2))	Replacement cost
(3)Power generation	Decreased costs for dredging and maintenance & repair of facility in the Magat dam	Replacement cost
(4)Agriculture		
1)Sales of agroforestry produces	Agroforestry produce in the site development area	Direct valuation
2)Conservation of agricultural land	Increase in agricultural produce in the forestland	Direct valuation
(5)Livestock (fodder Produce by silvopasture)	Increase in livelihood produce in the silvopasture area of the site development	Direct valuation
(6)Mining	No benefit is expected.	-
(7)Fishery	Incremental catch of fish in the Magat reservoir	Direct valuation
(8)Transportation	Reduction access time to the reforestation site and market due to improvement of feeder road	Saving of travel time
(9)Tourism and recreation	Total travel cost for incremental number tourists	Travel cost
(10)Historical and cultural places	Total travel cost for incremental number of tourists	Travel cost
(11)Social welfare	To be examined	-
(12)Health	To be examined	-
(13)Biodiversity	Cost for artificial handling and feeding for fauna and flora species	Replacement cost
(14)Prevention of soil erosion	Cost of Sabo Dam of same capacity for prevention of sedimentation	Replacement cost
(15)Prevention of slope failure and landslide	Cost of civil engineering measure for slope protection	Replacement cost
(16)Water quality conservation	Cost of rain water utilization facility	Replacement cost
(17)Flood Mitigation	Cost of flood mitigation dam with same capacity of mitigating peak flow in flood	Replacement cost
(18) CO ₂ Sequestration	Contracted trading price of CO ₂ under international trading system such as BioCarbon Fund	Contracted trading price
(19)Micro-climate amelioration	Construction cost of alternative facilities	Replacement cost

5.4 Necessary Supplemental Survey for Estimation and Verifications

To estimate the economic benefits, necessary information should be collected and supplementary field surveys should be conducted before and after implementation of the watershed management project as summarized in **Table 5.4.1**. However, all the field surveys may not be able to conduct under limited resources. Accordingly, priority of the surveys in terms of necessity of the site-specific data and difficulty of implementation of the survey should be examined as shown in the following table. In case where some of the surveys can not be conducted, existing researches under similar conditions of the project site would be utilized as much as possible for reference.

Based on the information collected through the supplemental survey, possibility of the economic benefit estimation are preliminary evaluated for each benefit item as shown in **Table 5.4.2**.

5.5 Economic Evaluation and Its Implications

Economic evaluation for the watershed management project can be conducted by using monetary-valued benefits mentioned above and estimated project cost. The net present value (NPV), benefit-cost ratio (B/C) and economic internal rate of return (EIRR) are applied to examine the economic viability of the proposed components of the watershed management project in terms of the economic costs by comparing to expected economic benefits.

Since the most of economic benefits are derived from forestry growth, it takes years from the beginning of the project until realizing the benefits at certain high level. Therefore, economic benefit estimated at present value tends to be low level. In the conventional economic analysis, even if the project life is set longer than that in conventional infrastructure development project, it is probably difficult to get viable level of the economic feasibility.

The economic analysis is conducted under assumption that various conditions for realizing the benefits are fully fulfilled. Therefore, the result of the economic analysis does not guarantee the proper implementation and sustainability of the watershed management project since there are many risk factors for watershed management project on the basis of the forestry conservation than that of conventional infrastructure-based development project. To materialize the watershed management project, periodical monitoring activity and evaluation, and countermeasures to be appropriately taken based on the evaluation of monitoring results.

Though the economic analysis is usually conducted in pre-evaluation of the project, the results of the economic analysis should be verified in the post-evaluation of the project.

5.6 Economic Benefits and Cost Sharing

Large amount of the cost is required to implement various components of the watershed management project. Under the limitation of governmental budget, the cost burden should be shared among the beneficiaries of the watershed management project in terms of fairness of resource allocation. There are various types of the beneficiaries in different locations as shown below. By using the result of the economic benefit estimation for each benefit item, total amount of cost would be allocated to each type of beneficiary to be born in the ratio of each benefit amount.

Beneficiaries of the Watershed Management Project

Items of Economic Benefits	Beneficiaries	Location of the Beneficiaries *
(1)Forestry	CBFM PO members	Upstream
(2)Water supply	Water users	Upstream and downstream
1) Increase in agricultural produce	Farmers	(Mainly) Downstream
(3)Power generation	Electricity users under national grid	Nationwide
(4)Agriculture	CBFM PO members	Upstream
(5)Livestock (fodder Produce by silvopasture)	CBFM PO members	Upstream
(6)Mining	-	-
(7)Fishery	Fishermen in the Magat dam reservoir	Upstream
(8)Transportation	CBFM PO members	Upstream
(9)Tourism and recreation	a)Local people engaging tourism-related business such as hotels, souvenir shops and drivers b)Tourism companies	a)Upstream and downstream b)Nationwide
(10)Historical and cultural places	a)Local people engaging tourism-related business such as hotels, souvenir shops and drivers b)Tourism companies c)Researchers	a)Upstream b)Nationwide c)Nationwide
(11)Social welfare	a)CBFM PO members b)Local communities	a)Upstream b)Upstream
(12)Health	Mainly the poor	(Mainly) Upstream
(13)Biodiversity	Every people on earth	Worldwide
(14)Prevention of soil erosion	Residents living near the soil erosion-prone area	Upstream
(15)Prevention of slope failure and landslide	Residents living near the slope failure & landslide-prone area	Upstream
(16)Water quality conservation	Water users	Upstream and downstream
(17)Flood mitigation	Residents living in the flood-prone area	(Mainly) Downstream
(18)CO ₂ sequestration	Every people on earth	Worldwide
(19)Oxygen generation	Every people on earth	Worldwide
(20)Micro-climate amelioration	Residents in the watershed	Upstream

Note: * - Upstream: upper Magat and Cagayan river basin,

Downstream: downstream area of the Magat and Cagayan rivers

Tables

Table 1.2.1 Existing and Proposed Land Use by Province, Region 2 (1992 & 2022)

(Unit: ha)

Land use type	Region Total		Batanes		Cagayan		Isabela		Nueva Vizcaya		Quirino	
	1992	2022	1992	2022	1992	2022	1992	2022	1992	2022	1992	2022
1. Production land use	1,593,314	1,533,256	457	457	554,643	531,877	698,028	677,696	201,291	192,982	138,895	130,244
1.1 Croplands	772,859	772,859	457	457	248,397	248,397	400,054	400,054	79,764	79,764	44,187	44,187
1.2 Fisheries	9,352	17,238			9,352	9,352		2,184		1,627		4,175
1.3 Production forest	811,103	751,045			296,894	274,128	297,974	277,642	121,527	113,218	94,708	86,057
Residual dipterocarp	313,353	219,348			125,336	87,736	135,257	94,680	35,347	24,743	17,413	12,189
Grazing rangeland	400,380	220,208			151,768	83,472	135,546	74,550	55,393	30,466	57,673	31,720
Indus. forest plant'n	44,279	104,336			11,600	34,365	13,200	33,532	15,553	23,862	3,926	12,577
Agro-forestry (ISF)	53,091	113,148			8,190	30,955	13,971	34,303	15,553	23,543	3,926	24,347
Community forestry		94,005				37,600		40,577		10,604		5,224
1.4 Mining areas	128,501	155,020	20		20,872	25,000	51,396	62,000	29,746	36,000	26,487	32,000
2. Protection land use	883,052	883,052	20,323	20,323	250,112		272,515	272,515	179,942	179,942	160,160	160,160
2.1 NIPAS areas	260,552	260,552	20,323	20,323			240,229	240,229				
2.2 Non-NIPAS areas	862,729	862,729			250,112	250,112	272,515	272,515	179,942	179,942	160,160	160,160
Reserved 2 nd growth Forest	373,663	373,663			105,039	105,039	73,288	73,288	92,829	92,829	102,507	102,507
Mangroves	4,459	4,459			3,398	3,398	1,061	1,061				
Old growth	277,689	277,689			86,065	86,065	152,616	152,616	3,408	3,408	35,600	35,600
Mossy forest	93,466	93,466			30,500	30,500	42,006	42,006	15,560	15,560	5,400	5,400
Pine forest	1,600	1,600							1,600	1,600		
Parks	6,811	6,811			3,530	3,530	819	819	2,462	2,462		
Grassland/brush land & plantations within areas about 50% slope & 1000m elev.	105,041	105,041			21,580	21,580	2,725	2,725	64,083	64,083	16,653	16,653
3. Built-up areas & Infra/utilities	207,449	267,685	202	380	95,512	118,278	95,913	116,245	9,157	17,466	6,665	15,316
4. Unclassified	178		178									
Total Area	2,683,993	2,683,993	21,160	21,160	900,267	900,267	1,066,456	1,066,456	390,390	390,390	305,720	305,720

Source: Regional Physical Framework Plan, Region II, 1993-2022

Table 1.2.2 Existing and Proposed Pastureland in Region 2 (1992-2022)

(Unit: ha)

Province	Managed Pasture	Grassland/Shrubland	
	1992	1992	2022
Batanes	228		8,683
Cagayan	18,874	151,768	83,472
Isabela	31,420	135,257	74,550
Nueva Vizcaya	15,518	55,393	30,466
Quirino	4,489	57,673	31,720
Total Region II	70,629	400,380	220,208

Source: Regional Physical Framework Plan, Region II, 1993-2022

Table 1.2.3 Slope Characteristics of Various CAR Provinces

Slope Class	Area (km ²)							
	Abra	Apayao	Benguet	Ifugao	Kalinga	Mt. Province	CAR	
							Area	%
0 – 3%	458.25	396.23	55.18	102.00	201.32	8.40	1,221.38	6.68
3 – 8%	106.50	88.11	40.24	88.00	84.74	39.84	447.43	2.45
8 – 18%	272.50	117.42	36.36	269.00	271.21	152.40	1,118.89	6.12
18 – 30%	296.25	513.00	277.91	462.00	550.30	415.36	2,514.82	13.75
30 – 50%	221.00	582.00	302.25	323.00	604.75	321.96	2,354.96	12.87
> 50%	2,621.05	2,496.82	1,943.44	1,273.78	1,141.74	1,159.41	10,636.24	58.14
Total	3,975.55	4,193.58	2,655.38	2,517.78	2,854.06	2,097.37	18,293.72	100.00

Source: Cordillera Regional Physical Framework Plan, 1994-2023

Table 1.2.4 Elevation Characteristics of Various CAR Provinces

Elevation (masl)	Area (km ²)							
	Abra	Apayao	Benguet	Ifugao	Kalinga	Mt. Province	CAR	
							Area	%
Less than 100	246.48	654.57	-	47.33	340.00	31.39	1,319.77	7.21
100 – 300	486.46	246.11	16.88	780.29	487.76	163.42	2,180.94	11.92
300 – 500	376.52	441.03	77.19	737.92	243.23	223.71	2,099.60	11.48
500 – 1,000	1,997.09	2,542.90	723.50	374.50	710.00	314.00	6,711.99	36.69
1,000 – 2,000	835.00	226.97	1,699.60	420.60	1,010.00	1,262.81	5,454.98	29.82
> 2,000	34.00	32.00	138.21	157.14	63.05	102.00	526.40	2.88
Total	3,975.55	4,193.58	2,655.38	2,517.78	2,854.06	2,097.33	18,293.68	100.00

Source: Cordillera Regional Physical Framework Plan, 1994-2023

Table 1.2.5 Land Classification in the Cordillera Administrative Region, 1990

Province	Certified/Declared (ha)				
	A & D	Percent	Forest	Percent	Total
Abra	102,586	25.8	294,969	74.2	397,555
Benguet	61,152	23.0	204,386	77.0	265,538
Ifugao	35,498	14.1	216,280	85.9	251,778
Kalinga & Apayao	56,853	8.1	647,911	91.9	704,764
Mt. Province	15,653	7.5	194,080	92.5	209,733
Total	271,742	14.9	1,557,626	85.1	1,829,368

Source: DENR-CAR, ENR Regional Development Plan for the Medium Term 1993-1998, 1993

Table 1.2.6 Protection and Production Forests of CAR, 1990

Province	Protection Forest	Percent	Production Forest	Percent	Total
Abra	76,742	25.7	222,393	74.3	299,135
Benguet	44,996	25.3	132,645	74.7	177,641
Ifugao	58,580	25.9	167,789	74.1	226,369
Kalinga & Apayao	227,027	36.4	397,058	63.6	624,085
Mt. Province	84,568	52.4	76,914	47.6	161,482
Total	491,913	33.0	996,799	67.0	1,488,712

Source: DENR-CAR, ENR Regional Development Plan for the Medium Term 1993-1998, 1993

Table 1.2.7 Production Areas of Various CAR Provinces, 1990

Land Cover (hectares)	Abra	Benguet	Ifugao	Kalinga-Apayao	Mt. Province	CAR
Areas <84% slope/<1,5000 m elevation	6,441	113,414	475	409	14,040	134,779
Areas <50% slope/<1,000 m elevation	208,622	575	161,089	362,026	52,766	785,078
Agriculture areas w/in Public land	6,500	10,932	6,225	34,180	10,108	67,945
Mineral lands	830	7,724	0	443	0	8,997
Leased	(830)	(6,441)		(443)		(7,714)
Patented	(0)	(1,283)				(1,283)
Total Protection Forest	222,393	132,645	167,789	397,058	76,914	996,799

Source: DENR-CAR, ENR Regional Development Plan for the Medium Term 1993-1998, 1993

Table 1.2.8 Protection Forest Areas of Various CAR Provinces, 1990

Land Cover (hectares)	Abra	Benguet	Ifugao	Kalinga-Apayao	Mt. Province	CAR
Old growth forest	41,409	6,672	11,625	133,960	23,146	216,812
Mossy forest	12,200	2,325	18,000	70,032	39,036	141,593
Areas >84% slope/1,500 M elevation	5,825	17,242	1,330	1,308	3,747	29,452
Areas >50% slope/1,000 M elevation	17,251	-	24,249	20,389	16,514	78,403
Areas established by law	57	18,757	3,376	1,338	2,125	25,653
Critical watersheds	(0)	(9,895)	(0)	(0)	(0)	(9,895)
National Parks	(57)	(8,862)	(3,376)	(1,338)	(2,125)	(15,758)
Total Protection Forest	76,742	44,996	58,580	227,027	84,568	491,913

Source: DENR-CAR, ENR Regional Development Plan for the Medium Term 1993-1998, 1993

Table 1.2.9 Proposed Built-up Areas for CAR by Year 2020

(Unit: ha)

	Abra	Benguet	Ifugao	Kalinga	Apayao	Mt. Province	CAR
A & D lands & other lands <18% slope exclusive of agricultural lands and protection forest	45,300	13,770	5,580	9,635	11,950	9,190	95,425
Areas of the public domain 19-30% slope exclusive of agricultural lands and outside of protection forest	8,050		3,020	1,970	4,770	2,595	20,405
Areas of the public domain 31-50% slope exclusive of agricultural lands and outside of protection forest	17,450	1,600		4,550	7,650	800	32,050
Potential agricultural expansion areas for probable conversion to urban use	3,103	900	732	4,042	7,649		16,426
Total	73,903	16,270	9,332	20,197	32,019	12,585	164,306
Existing built-up areas	2,664	4,595	490	371	600	1,450	10,170
% average annual increase	13.10	4.79	11.53	15.96	15.87	8.33	10.85

Source: CAR RPPF, 1994-2023

Table 1.2.10 Proposed Agricultural Lands for CAR, Year 2020

	Irrigated and irrigable lands in alluvial and gently sloping areas		Agricultural expansion areas within 8-18% slope		Ecologically fragile lands highlands >30% slope				Total	
	Hectares	%	Hectares	%	Cultivated to high value crops		Agro-forestry/pasture		Hectares	%
Highly Restricted from Conversion	161,541 <i>50.05%</i>	100	83,764 <i>25.96%</i>	61.05	25,331 <i>7.85%</i>	100	52,079 <i>16.14%</i>	43.61	322,715 <i>100.00%</i>	72.77
Abra	26,402	16.34	28,605	20.85	283	1.12	17,959	15.04	73,249	16.52
Benguet	10,988	6.80	2,581	1.88	18,469	72.91	6,360	5.33	38,398	8.66
Ifugao	17,944	11.11	29,110	21.22	1,308	5.16	1,888	1.58	50,250	11.33
Kalinga	41,135	25.46	12,724	9.27	2,875	11.35	14,153	11.85	70,887	15.98
Apayao	48,158	29.81	9,727	7.09	436	1.72	9,129	7.64	67,450	15.21
Mt. Prov.	16,914	10.47	1,017	0.74	1,960	7.74	2,590	2.17	22,481	5.07
For Forestry Purposes			47,173 <i>45.13%</i>	34.38			57,349 <i>54.87%</i>	48.03	104,522 <i>100.00%</i>	23.57
Abra			2,716	1.98			410	0.34	3,126	0.70
Benguet			2,124	1.55			469	0.39	2,593	0.58
Ifugao			9,970	1.27			25,115	21.03	35,085	7.91
Kalinga			11,436	8.34			9,190	7.70	20,626	4.65
Apayao			6,855	5.00			10,693	8.95	17,548	3.96
Mt. Prov.			14,072	10.26			11,472	9.61	25,544	5.76
Potential for Conversion to Urban Use			6,265 <i>38.55%</i>	4.57			9,985 <i>61.45%</i>	8.36	16,250 <i>100.00%</i>	3.66
Abra			3,802	2.77			1,305	1.09	5,107	1.15
Benguet			232	0.17			827	0.69	1,059	0.24
Ifugao			148	0.11			1,156	0.97	1,304	0.29
Kalinga			343	0.25			3,083	2.58	3,426	0.77
Apayao			1,740	1.27			3,614	3.03	5,354	1.21
Mt. Prov.			-	0.00			-	0.00	-	0.00

Source: RFPF CAR 1994-2023

Table 1.2.11 Protection forest, CAR, 2020

Particulars	Area (ha)	Percent
National Parks	15,157.20	2.13
Forest/Military/Civil Reservations	583,143.23	81.86
Other protection forests (outside declared national parks and forest/military/civil reservations)	114,104.00	16.02
Mossy forest ¹	39,471.00	5.54
Dipterocarp forest >50% slope &/or 1,000 m elevation ²	50,015.00	7.02
Pine (old growth & reproduction) >84% slope &/or above 1,500 m elevation ³	24,618.00	3.46
Total	712,404.43	100.00

1 Mossy forest outside of coverage of forest reserves and national parks

2 Dipterocarp forest with slope >50% and/or above 1,000 m elevation outside of coverage of forest reserves and national parks

3 Pine forest with slope >84% and/or 1,500 m elevation outside coverage of forest reserves and national parks

Table 1.2.12 Proposed Land Use of Existing Forest Reserves and National Parks, 2020

Name	Location	Land area as declared (ha)	For protection AO Yr. 2020	Areas to be released	
				For agricultural production	For built-up areas
National Parks		18,413	15,157	3,256	
Cassamala Hill National Park	Abra	57	57		
Mt. Data National Park	Benguet;	5,470	2,214	3,256	
Mt. Pulog National Park	Mt. Prov. Benguet;	11,550	11,550		
Balbalasang-Balbaian Nat. Park	Ifugao, N. Vizcaya Kalinga	1,336	1,336		
Forest Reserves		622,083	583,143	38,512	428
Central Cordillera For. Reserve	Mt. Prov.; Benguet; Ifugao; Kalinga; Apayao	111,059a	106,460	4,599	
Sto. Tomas Forest Reserve	Benguet	3,114	3,114		
Ambuklao Forest Reserve	Benguet	10,000	10,000		
Marcos Highway For. Reserve	Benguet	15,920b	15,920		
Ambuklao-Binga Watershed	Benguet; Ifugao	73,350	69,061	4,289	
Busol Watershed Reservation	Baguio City	336	336		
Forbes Park Parcels I, II, III	Baguio City	47	47		
Mt. Sto. Domingo For. Reserve	Ifugao	9,693	8,350	1,343	
Ifugao-Isabela Forest Reserve	Ifugao	26,922	26,922		
Natonin Forest Reserve	Mt. Prov.; Ifugao	2,843	2,843		
Central Mayoyao For. Reserve	Ifugao	13,420	12,510	910	
Abulog Forest Reserve	Apayao	195,659	192,153	3,506	
Central Conner Forest Reserve	Apayao	116,682	115,897	785	
Natonin-Tabuk-Tanudan F. Res.	Kalinga	6,958	4,178	2,780	
Chico River Forest Reserve	Mt. Prov.; Kalinga; Apayao	33,176	13,011	20,300	
Asin Forest Reserve	Benguet	2,168	2,168		
Crystal Cave Forest Reserve	Baguio City	4	4		
Camp & Watershed Reservation	Baguio City	26	26		
Camp John Hay Reservation	Baguio City	690	397		293
Lco Agricultural Farm Reserv.	Benguet	15	15		
Total		640,496	598,300	41,768	428

Source: Cordillera Regional Physical Framework Plan, 1994-2023

a/ computed through grid method

b/ estimated given a 5km strip of land from either side of the 15.92 km Highway

Table 1.2.13 Land Classification of Nueva Vizcaya, 1995

Municipalities	Total Area (ha)	Total A & D (ha)	Total Forestland
Nueva Vizcaya	390,390	88,921	301,469
A. Castaneda	37,540	4,180	33,360
Ambaguio	18,560	1,128	17,432
Aritao	26,560	9,095	17,465
Bagabag	18,390	8,211	10,179
Bambang	34,500	12,566	21,934
Bayombong	13,600	9,878	3,722
Diadi	18,120	3,378	14,742
Dupax del Norte	34,730	5,837	28,893
Dupax del Sur	37,470	4,024	33,446
Kasibu	31,880	5,180	26,700
Kayapa	48,290	3,537	44,753
Quezon	17,620	7,607	10,013
Santa Fe	31,000	2,378	28,662
Solano	13,980	5,566	8,414
Villaverde	8,150	6,356	1,794

Source: Derived from land classification map of DENR, cited by N. Vizcaya's PFPF.

Table 1.2.14 Production and Protection Forest Land Use of Nueva Vizcaya, 1995

Municipalities	Total Area (ha)	Production A & D (ha)	Production Forest (ha)	Protection Forest (ha)
Nueva Vizcaya	390,390	54,843	83,947	251,600
A. Castaneda	37,540	1,135	2,990	33,415
Ambaguio	18,560	542	125	17,893
Aritao	26,560	5,589	10,215	10,756
Bagabag	18,390	8,486	9,634	270
Bambang	34,500	4,363	11,697	18,440
Bayombong	13,600	4,315	5,556	3,720
Diadi	18,120	1,975	10,169	5,976
Dupax del Norte	34,730	4,238	3,968	26,524
Dupax del Sur	37,470	3,274	5,500	28,696
Kasibu	31,880	2,396	10,343	19,141
Kayapa	48,290	343	0	47,947
Quezon	17,620	2,164	7,290	8,166
Santa Fe	31,000	615	1,708	28,677
Solano	13,980	11,020	2,060	0
Villaverde	8,150	3,488	2,692	1,970

Source: Derived from theoretical land use classification map, cited in the N. Vizcaya PFPF.

Table 1.2.15 Land use categories in Quirino, 1993

Land use categories	Area (ha)	%
Lowland paddy rice (irrigated/non-irrigated) including inland fishponds and fish nurseries	24,801.50	7.84
Cultivated annual crops	10,507.00	3.45
Perennial fruit trees and other fruits	17,460.50	5.71
Pastureland (open and improved pasture)	64,420.00	21.39
Forestlands	184,019.98	60.19
Proposed reservoir (Trans-Casecnan Dam, part of Forestlands)	(41,750.00)	
Residential area	4,509.00	1.48
Total	305,718.00	100.00

Source: Constructed from text: Physical Framework Plan, Province of Quirino, 1993-2002

Table 1.2.16 Comprehensive Development Targets of Quirino for 1999-2003

Objectives	Targets	Activities	Estimated Costs (of areas targeted)					Total (P'000)
			1999	2000	2001	2002	2003	
A. Protected Area and Wildlife Services 1. Manage effectively natural resources for sustainable utilization and ecological balance 2. Develop and promote eco-tourism	1. Management and protection of IPAS areas	1. Establishment of buffer zone (ha)	392	392	391			26,318
		2. Management of buffer zone (ha)	392	784	1175	1175	1175	8,814
		3. Prepare Mgt. Plan			1		1	200
		4. Mgt of virgin forests (ha)	46,170	45,220	44,270	43,320	42,370	
		5. Resource protection (ha)	92,730	92,740	92,720	92,720	92,710	2,160
		6. Resource restoration (ha)	90	190	280	370	470	31,360
B. RP-German Project	1. Upland communities as forest managers which will provide technical assistance for development alternative source of income	1. Conservation and protection of natural forest 2. Forest plantation dev't & rehabilitation of degraded forest 3. Agro-forestry 4. Agriculture 5. Infrastructure	36,137	29,362	14,316	9,384	26,833	116,032
C. CBENRM ¹ Project	Cover 14,975 hectares of watershed areas	1. Establishment & maintenance of on-farm agro-forestry model farms	159,780	210,320	39,520	27,360		436,980
		2. Dev't of soil and water conservation structures	328	328	328	323.5	264	1,571.50
		3. Provision of perennial tree seed & nursery materials	30	30	30	15	15	120
		4. Support of field research	50	40				90
		5. Provision of farm tools & equipment	132					132
		6. Establishment & maintenance of nurseries	192.16	99.16	71.62	46.68		409.68
		7. Reforestation thru ANR	480	480	480	360		1,800
		8. Infrastructure & facilities	105					105
		9. Training	682.8	634.2	628			1,945

Source: Comprehensive Development Plan of the Province of Quirino

Table 3.1.1 List of Barangays in the Study Area (1/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
IFUGAO				
BANAUE				
1	14-27-01-001	Amganad	100%	○
2	14-27-01-002	Anaba	100%	○
3	14-27-01-003	Bangaan	100%	○
4	14-27-01-004	Batad	100%	○
5	14-27-01-005	Bocos	100%	○
6	14-27-01-007	Banao	100%	○
7	14-27-01-009	Cambulo	99-20%	○
8	14-27-01-010	Ducligan	100%	○
9	14-27-01-011	Gohang	100%	○
10	14-27-01-013	Kinakin	100%	○
11	14-27-01-016	Poblacion	100%	○
12	14-27-01-017	Poitan	100%	○
13	14-27-01-018	San Fernando	100%	○
14	14-27-01-021	Balawis	100%	○
15	14-27-01-022	Ohaj	100%	○
16	14-27-01-023	Tam-an	100%	○
17	14-27-01-024	View Point	99-20%	○
18	14-27-01-025	Pula	99-20%	○
HUNGDUAN				
19	14-27-02-001	Abatan	99-20%	○
20	14-27-02-004	Bangbang	100%	○
21	14-27-02-010	Maggok	100%	○
22	14-27-02-011	Poblacion	100%	○
23	14-27-02-018	Bokiawan	99-20%	○
24	14-27-02-019	Hapao	100%	○
25	14-27-02-020	Lubo-ong	99-20%	○
26	14-27-02-021	Nungulunan	99-20%	○
27	14-27-02-022	Ba-ang	99-20%	○
KIANGAN				
28	14-27-03-001	Ambabag	100%	○
29	14-27-03-004	Baguinge	100%	○
30	14-27-03-005	Bokiawan	100%	○
31	14-27-03-008	Dalligan	100%	○
32	14-27-03-009	Duit	100%	○
33	14-27-03-011	Hucab	100%	○
34	14-27-03-012	Julongan	100%	○
35	14-27-03-013	Lingay	100%	○
36	14-27-03-014	Mungayang	100%	○
37	14-27-03-015	Nagacadan	100%	○
38	14-27-03-017	Pindongan	100%	○
39	14-27-03-018	Poblacion	100%	○
40	14-27-03-020	Tuplac	100%	○
41	14-27-03-021	Bolog	100%	○
LAGAWE (Capital)				
42	14-27-04-001	Abinuan	100%	○
43	14-27-04-003	Banga	100%	○
44	14-27-04-005	Boliwong	100%	○
45	14-27-04-006	Burnay	100%	○
46	14-27-04-008	Buyabuyan	100%	○
47	14-27-04-009	Caba	100%	○
48	14-27-04-010	Cudog	100%	○
49	14-27-04-011	Dulao	100%	○
50	14-27-04-013	Jucbong	100%	○
51	14-27-04-014	Luta	100%	○
52	14-27-04-016	Montabiong	100%	○
53	14-27-04-018	Olilicon	100%	○
54	14-27-04-020	Poblacion South	100%	○
55	14-27-04-021	Ponghal	100%	○
56	14-27-04-022	Pullaan	100%	○
57	14-27-04-023	Tungngod	100%	○
58	14-27-04-024	Tupaya	100%	○
59	14-27-04-026	Poblacion East	100%	○
60	14-27-04-027	Poblacion North	100%	○
61	14-27-04-028	Poblacion West	100%	○
LAMUT				
62	14-27-05-002	Ambasa	100%	○
63	14-27-05-004	Hapid	100%	○

Table 3.1.1 List of Barangays in the Study Area (2/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
64	14-27-05-005	Lawig	100%	
65	14-27-05-006	Lucban	100%	○
66	14-27-05-007	Mabatobato (Lamut)	100%	○
67	14-27-05-008	Magulon	100%	○
68	14-27-05-009	Nayon	100%	○
69	14-27-05-010	Panopdopan	100%	○
70	14-27-05-011	Payawan	100%	○
71	14-27-05-012	Pieza	100%	
72	14-27-05-013	Poblacion East	100%	
73	14-27-05-014	Pugol (Ifugao Reservation)	100%	
74	14-27-05-015	Salamague	100%	
75	14-27-05-016	Bimpal	100%	○
76	14-27-05-017	Holowon	100%	○
77	14-27-05-018	Poblacion West	100%	
78	14-27-05-019	Sanafe	100%	○
79	14-27-05-020	Umilag	100%	○
		MAYOYAO		
80	14-27-06-001	Aduyongan	100%	○
81	14-27-06-002	Alimit	100%	○
82	14-27-06-003	Ayangan	100%	○
83	14-27-06-004	Balangbang	100%	○
84	14-27-06-005	Banao	100%	○
85	14-27-06-006	Banhal	100%	
86	14-27-06-007	Bongan	100%	
87	14-27-06-009	Buninan	100%	○
88	14-27-06-010	Chaya	99-20%	○
89	14-27-06-011	Chumang	99-20%	○
90	14-27-06-014	Guinihon	100%	○
91	14-27-06-015	Inwaloy	99-20%	○
92	14-27-06-018	Langayan	100%	○
93	14-27-06-019	Liwo	99-20%	○
94	14-27-06-020	Maga	99-20%	○
95	14-27-06-021	Magulon	99-20%	○
96	14-27-06-022	Mapawoy	100%	○
97	14-27-06-023	Mayoyao Proper	100%	○
98	14-27-06-024	Mongol	100%	○
99	14-27-06-025	Nalbu	100%	○
100	14-27-06-026	Nattum	100%	○
101	14-27-06-027	Palaad	100%	○
102	14-27-06-028	Poblacion	100%	○
103	14-27-06-030	Talhoc	100%	○
104	14-27-06-033	Tulaed	100%	○
105	14-27-06-035	Bato-Alatbang	100%	○
106	14-27-06-036	Epeng	100%	○
		ALFONSO LISTA (POTIA)		
107	14-27-07-018	Santo Domingo (Cabicalan)	99-20%	○
		AGUINALDO		
108	14-27-08-002	Bunhian	99-20%	○
109	14-27-08-005	Damag	99-20%	
110	14-27-08-006	Galonogon	99-20%	○
111	14-27-08-007	Halag	99-20%	○
112	14-27-08-008	Itab	99-20%	○
113	14-27-08-009	Jacmal	99-20%	○
114	14-27-08-010	Majlong	99-20%	○
115	14-27-08-013	Ta-ang	99-20%	○
116	14-27-08-014	Talite	99-20%	○
		HINGYON		
117	14-27-09-001	Anao	100%	○
118	14-27-09-002	Bangtinon	100%	○
119	14-27-09-003	Bitu	100%	○
120	14-27-09-004	Cababuyan	100%	○
121	14-27-09-005	Mompolia	100%	○
122	14-27-09-006	Namulditan	100%	○
123	14-27-09-007	O-ong	100%	○
124	14-27-09-008	Piwong	100%	○
125	14-27-09-009	Poblacion (Hingyon)	100%	○
126	14-27-09-010	Ubuag	100%	○
127	14-27-09-011	Umalbong	100%	○
128	14-27-09-012	Northern Cababuyan	100%	○

Table 3.1.1 List of Barangays in the Study Area (3/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
		TINOC		
129	14-27-10-001	Ahin	99-20%	○
130	14-27-10-002	Ap-apid	100%	○
131	14-27-10-003	Binablayan	100%	○
132	14-27-10-004	Danggo	99-20%	○
133	14-27-10-005	Eheb	99-20%	○
134	14-27-10-006	Gumhang	100%	○
135	14-27-10-007	Impugong	100%	○
136	14-27-10-008	Luhong	99-20%	○
137	14-27-10-009	Tinoc	100%	○
138	14-27-10-010	Tukucan	99-20%	○
139	14-27-10-011	Tulludan	100%	○
140	14-27-10-012	Wangwang	100%	○
		ASIPULO		
141	14-27-11-001	Amduntog	100%	○
142	14-27-11-002	Antipolo	100%	○
143	14-27-11-003	Camandag	100%	○
144	14-27-11-004	Cawayan	100%	○
145	14-27-11-005	Hallap	100%	○
146	14-27-11-006	Namal	100%	○
147	14-27-11-007	Nungawa	100%	○
148	14-27-11-008	Panubtuban	100%	○
149	14-27-11-009	Pula	100%	○
		ISABELA		
		ANGADANAN		
150	02-31-02-001	Allangigan	100%	
151	02-31-02-002	Aniog	100%	
152	02-31-02-005	Bantug	100%	
153	02-31-02-009	Buenavista	100%	
154	02-31-02-010	Bunnay	100%	○
155	02-31-02-012	Calaccab	100%	
156	02-31-02-015	Campanario	100%	
157	02-31-02-020	Consular	99-20%	
158	02-31-02-023	Dalenat	100%	
159	02-31-02-024	Dipaluda	100%	
160	02-31-02-025	Duroc	100%	
161	02-31-02-026	Lourdes (El Esca. o)	100%	
162	02-31-02-032	La Suerte	100%	
163	02-31-02-034	Loria	100%	
164	02-31-02-035	Mabuhay	100%	
165	02-31-02-036	Macalauat	100%	
166	02-31-02-038	Malannao	100%	
167	02-31-02-039	Malasin	100%	
168	02-31-02-040	Mangandingay	99-20%	
169	02-31-02-042	Pappat	100%	
170	02-31-02-046	Rang-ayan	99-20%	
171	02-31-02-047	Salay	100%	
172	02-31-02-050	San Isidro	100%	
173	02-31-02-051	San Marcelo	100%	
174	02-31-02-052	San Roque	100%	
175	02-31-02-053	San Vicente	100%	
176	02-31-02-054	Santo Ni. o	100%	
177	02-31-02-058	Victory	100%	
		CORDON		
178	02-31-09-005	Dallao	99-20%	○
179	02-31-09-018	Taliktik	99-20%	○
		ECHAGUE		
180	02-31-12-004	Aromin	100%	○
181	02-31-12-005	Babaran	100%	○
182	02-31-12-006	Bacradal	100%	
183	02-31-12-007	Benguet	100%	○
184	02-31-12-009	Busilelao	100%	
185	02-31-12-010	Caniguing	100%	
186	02-31-12-013	Dammang East	100%	
187	02-31-12-014	Dammang West	100%	
188	02-31-12-015	Dicaraoyan	100%	
189	02-31-12-025	Mabbayad	100%	○
190	02-31-12-027	Madadamian	100%	○

Table 3.1.1 List of Barangays in the Study Area (4/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
191	02-31-12-028	Magleticia	100%	
192	02-31-12-031	Malitao	100%	
193	02-31-12-032	Narra	100%	
194	02-31-12-033	Nilumiso	100%	
195	02-31-12-034	Pag-asa	100%	
196	02-31-12-039	Rumang-ay	100%	
197	02-31-12-041	Salvacion	100%	
198	02-31-12-044	San Carlos	100%	
199	02-31-12-046	San Felipe	100%	○
200	02-31-12-050	San Salvador	100%	
201	02-31-12-052	Santa Cruz	100%	
202	02-31-12-062	Villa Campo	100%	
203	02-31-12-064	Villa Rey	100%	
204	02-31-12-067	Diasan	100%	
		JONES		
205	02-31-15-001	Abulan	100%	
206	02-31-15-002	Addalam	100%	
207	02-31-15-003	Arubub	100%	
208	02-31-15-004	Bannawag	100%	
209	02-31-15-005	Bantay	100%	
210	02-31-15-006	Barangay I (Pob.)	100%	
211	02-31-15-007	Barangay II (Pob.)	100%	
212	02-31-15-008	Barangcuag	100%	
213	02-31-15-009	Dalibubon	100%	
214	02-31-15-010	Daligan	100%	
215	02-31-15-011	Diarao	100%	
216	02-31-15-012	Dibuluan	100%	
217	02-31-15-013	Dicamay I	99-20%	
218	02-31-15-014	Dicamay II	100%	○
219	02-31-15-016	Disimpit	100%	
220	02-31-15-017	Divinan	100%	○
221	02-31-15-018	Dumawing	100%	○
222	02-31-15-019	Fugu	100%	
223	02-31-15-020	Lacab	100%	
224	02-31-15-021	Linamanan	99-20%	○
225	02-31-15-022	Linomot	100%	
226	02-31-15-024	Minuri	100%	
227	02-31-15-025	Namnama	100%	
228	02-31-15-026	Napaliong	100%	
229	02-31-15-028	Palagao	100%	
230	02-31-15-030	Papan Este	100%	
231	02-31-15-031	Papan Weste	100%	○
232	02-31-15-032	Payac	100%	
233	02-31-15-033	Pongpongan	99-20%	○
234	02-31-15-034	San Antonio	100%	
235	02-31-15-035	San Isidro	100%	
236	02-31-15-036	San Jose	100%	
237	02-31-15-037	San Roque	100%	
238	02-31-15-038	San Sebastian	100%	○
239	02-31-15-039	San Vicente	100%	
240	02-31-15-040	Santa Isabel	100%	○
241	02-31-15-041	Santo Domingo	100%	
242	02-31-15-042	Tupax	100%	
243	02-31-15-043	Usol	100%	
244	02-31-15-044	Villa Bello	100%	
		SAN AGUSTIN		
245	02-31-27-001	Bautista	99-20%	○
246	02-31-27-002	Calaocan	100%	
247	02-31-27-003	Dabubu Grande	100%	○
248	02-31-27-004	Dabubu Peque, o	100%	
249	02-31-27-005	Dappig	100%	
250	02-31-27-006	Laoag	100%	
251	02-31-27-007	Mapalad	100%	○
252	02-31-27-008	Masaya Centro (Pob.)	100%	
253	02-31-27-009	Masaya Norte	100%	
254	02-31-27-010	Masaya Sur	100%	
255	02-31-27-011	Nemmatan	100%	
256	02-31-27-012	Palacian	100%	○
257	02-31-27-013	Panang	100%	○

Table 3.1.1 List of Barangays in the Study Area (5/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
258	02-31-27-014	Quimalabasa Norte	100%	
259	02-31-27-015	Quimalabasa Sur	100%	
260	02-31-27-016	Rang-ay	100%	
261	02-31-27-017	Salay	100%	○
262	02-31-27-018	San Antonio	100%	
263	02-31-27-019	Santo Ni, o	100%	○
264	02-31-27-020	Santos	100%	
265	02-31-27-021	Sinaoangan Norte	100%	
266	02-31-27-022	Sinaoangan Sur	100%	
267	02-31-27-023	Virgoneza	100%	
		SAN GUILLERMO		
268	02-31-28-001	Anonang	100%	
269	02-31-28-002	Aringay	100%	
270	02-31-28-004	Centro 1 (Pob.)	100%	
271	02-31-28-005	Centro 2 (Pob.)	100%	
272	02-31-28-006	Colorado	100%	
273	02-31-28-008	Dingading	99-20%	
274	02-31-28-009	Dipacamo	100%	
275	02-31-28-010	Estrella	100%	
276	02-31-28-011	Guam	99-20%	
277	02-31-28-013	Nakar	100%	
278	02-31-28-014	Palawan	100%	
279	02-31-28-017	San Francisco Sur	99-20%	○
280	02-31-28-018	San Mariano Norte	100%	
281	02-31-28-019	San Mariano Sur	100%	
282	02-31-28-020	Sinalugan	100%	
283	02-31-28-021	Villa Remedios	100%	
284	02-31-28-022	Villa Rose	99-20%	
285	02-31-28-023	Villa Sanchez	100%	
286	02-31-28-024	Villa Teresita	100%	
287	02-31-28-026	San Francisco Norte	100%	
288	02-31-28-028	San Rafael	99-20%	
		Ramon		
289	02-31-24-021	Gen. Aguinaldo	99-20%	○
		QUIRINO		
		AGLIPAY		
290	02-57-01-001	Dagupan	99-20%	○
291	02-57-01-002	Dumabel	99-20%	○
292	02-57-01-003	Dungo (Osme, a)	100%	○
293	02-57-01-004	Guinalbin	100%	
294	02-57-01-006	Palacian	100%	○
295	02-57-01-007	Pinaripad Sur	100%	
296	02-57-01-008	Progreso (Pob.)	100%	
297	02-57-01-009	Ramos	100%	
298	02-57-01-010	Rang-ayan	100%	
299	02-57-01-011	San Antonio	100%	
300	02-57-01-012	San Francisco	100%	
301	02-57-01-013	San Leonardo (Cabarroquis)	99-20%	○
302	02-57-01-014	San Ramon	100%	○
303	02-57-01-015	Victoria	100%	○
304	02-57-01-016	Villa Pagaduan	100%	
305	02-57-01-017	Villa Santiago	100%	
306	02-57-01-018	Alicia	100%	○
307	02-57-01-019	Cabugao	99-20%	○
308	02-57-01-020	Diodol	100%	○
309	02-57-01-021	Nagabgaban	100%	○
310	02-57-01-022	Pinaripad Norte	99-20%	
311	02-57-01-023	San Benigno	100%	○
312	02-57-01-024	San Manuel	100%	○
313	02-57-01-025	Villa Ventura	99-20%	○
		CABARROGUIS (Capital)		
314	02-57-02-003	Calaocan	99-20%	○
315	02-57-02-005	Dibibi	99-20%	○
316	02-57-02-006	Eden	99-20%	○
317	02-57-02-014	Dingasan	100%	○
318	02-57-02-015	Tucod	100%	○
		DIFFUN		
319	02-57-03-004	Baguio Village	100%	○

Table 3.1.1 List of Barangays in the Study Area (6/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
320	02-57-03-008	Campamento	100%	○
321	02-57-03-010	Don Mariano Perez, Sr.	100%	○
322	02-57-03-012	Dumanisi	99-20%	○
323	02-57-03-016	Ifugao Village	100%	○
324	02-57-03-021	Magsaysay	100%	○
325	02-57-03-022	Makate	99-20%	○
326	02-57-03-024	Rafael Palma (Don Sergio Osme, a)	99-20%	○
327	02-57-03-029	San Pascual	99-20%	
328	02-57-03-031	Aklan Village	99-20%	
329	02-57-03-032	Gregorio Pimentel	100%	○
		MADDELA		
330	02-57-04-001	Abbag	100%	
331	02-57-04-003	Balligui	100%	
332	02-57-04-004	Divisoria Sur (Bisangal)	100%	○
333	02-57-04-005	Buenavista	100%	
334	02-57-04-006	Cabaruan	100%	
335	02-57-04-007	Cabua-an	100%	○
336	02-57-04-008	Cofcaville	100%	○
337	02-57-04-009	Diduyon	100%	
338	02-57-04-010	Dipintin	100%	○
339	02-57-04-011	Divisoria Norte	100%	○
340	02-57-04-012	Dumabato Norte	100%	○
341	02-57-04-013	Dumabato Sur	100%	
342	02-57-04-014	Lusod	100%	
343	02-57-04-015	Manglad	100%	○
344	02-57-04-016	Pedlisan	100%	
345	02-57-04-017	Poblacion Norte	100%	
346	02-57-04-019	San Bernabe	100%	
347	02-57-04-021	San Dionisio I	100%	○
348	02-57-04-023	San Martin	100%	○
349	02-57-04-024	San Pedro	100%	○
350	02-57-04-025	San Salvador	100%	
351	02-57-04-026	Santo Ni, o	100%	○
352	02-57-04-027	Santo Tomas	100%	○
353	02-57-04-028	Villa Gracia	100%	○
354	02-57-04-029	Villa Hermosa Sur	100%	
355	02-57-04-030	Villa Hermosa Norte	100%	
356	02-57-04-032	Ysmael	100%	○
357	02-57-04-034	Villa Agullana	100%	○
358	02-57-04-036	Poblacion Sur	100%	
359	02-57-04-037	Villa Jose V Ylanan	100%	○
360	02-57-04-038	Jose Ancheta	100%	
361	02-57-04-039	Santa Maria	100%	
		NAGTIPUNAN		
362	02-57-06-001	Anak	100%	○
363	02-57-06-002	Dipantan	100%	○
364	02-57-06-003	Dissimungal	100%	○
365	02-57-06-004	Guino (Giayan)	100%	○
366	02-57-06-005	La Conwap (Guingin)	100%	○
367	02-57-06-006	Landingan	100%	○
368	02-57-06-007	Mataddi	100%	○
369	02-57-06-008	Matmad	100%	○
370	02-57-06-010	Ponggo	100%	○
371	02-57-06-011	San Dionisio II	100%	○
372	02-57-06-012	San Pugo	100%	○
373	02-57-06-013	San Ramos	100%	○
374	02-57-06-014	Sangbay	100%	○
375	02-57-06-015	Wasid	100%	○
376	02-57-06-016	Asaklat	100%	○
		NUEVA VIZCAYA		
		AMBAGUIO		
377	02-50-01-001	Ammueg	100%	○
378	02-50-01-004	Camandag	100%	○
379	02-50-01-005	Labang	100%	○
380	02-50-01-006	Napo	100%	○
381	02-50-01-007	Poblacion	100%	○
382	02-50-01-008	Salingsingan	100%	○
383	02-50-01-009	Tiblac	100%	○

Table 3.1.1 List of Barangays in the Study Area (7/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
384	02-50-01-010	Dullit	100%	○
		ARITAO		
385	02-50-02-001	Banganan	100%	
386	02-50-02-002	Beti	100%	○
387	02-50-02-003	Bone North	100%	○
388	02-50-02-004	Bone South	100%	○
389	02-50-02-005	Calititan	100%	○
390	02-50-02-006	Comon	100%	○
391	02-50-02-007	Cutar	100%	
392	02-50-02-008	Darapidap	100%	○
393	02-50-02-009	Kirang	100%	○
394	02-50-02-010	Nagcuartelan	100%	
395	02-50-02-011	Poblacion	100%	
396	02-50-02-012	Santa Clara	100%	○
397	02-50-02-013	Tabueng	100%	
398	02-50-02-014	Tucanon	100%	○
399	02-50-02-016	Anayo	100%	○
400	02-50-02-017	Baan	99-20%	○
401	02-50-02-018	Balite	100%	○
402	02-50-02-019	Canabuan	99-20%	○
403	02-50-02-020	Canarem	100%	○
404	02-50-02-021	Latar-Nocnoc-San Francisco	100%	○
405	02-50-02-022	Ocao-Capiniaan	100%	○
406	02-50-02-023	Yaway	100%	○
		BAGABAG		
407	02-50-03-001	Bakir	100%	
408	02-50-03-002	Baretbet	100%	○
409	02-50-03-003	Careb	100%	○
410	02-50-03-004	Lantap	100%	
411	02-50-03-005	Murong	100%	
412	02-50-03-006	Nangalisan	100%	
413	02-50-03-007	Paniki	100%	
414	02-50-03-008	Pogonsino	100%	
415	02-50-03-009	San Geronimo (Pob.)	100%	
416	02-50-03-010	San Pedro (Pob.)	100%	
417	02-50-03-011	Santa Cruz	100%	
418	02-50-03-012	Santa Lucia	100%	○
419	02-50-03-014	Tuao North	100%	
420	02-50-03-015	Villa Coloma (Pob.)	100%	○
421	02-50-03-016	Quirino (Pob.)	100%	
422	02-50-03-017	Villaros	100%	○
423	02-50-03-018	Tuao South	100%	○
		BAMBANG		
424	02-50-04-001	Abian	100%	○
425	02-50-04-002	Abinganan	100%	○
426	02-50-04-003	Aliaga	100%	
427	02-50-04-005	Almaguer North	100%	
428	02-50-04-006	Almaguer South	100%	
429	02-50-04-007	Banggot (Pob.)	100%	
430	02-50-04-008	Barat	100%	○
431	02-50-04-009	Buag (Pob.)	100%	
432	02-50-04-010	Calaocan (Pob.)	100%	
433	02-50-04-011	Dullao	100%	○
434	02-50-04-012	Homestead	100%	
435	02-50-04-013	Indiana	100%	○
436	02-50-04-014	Mabuslo	100%	○
437	02-50-04-015	Macate	100%	
438	02-50-04-016	Manamtam	100%	○
439	02-50-04-017	Mauan	100%	○
440	02-50-04-018	Salinas	100%	○
441	02-50-04-020	San Antonio North	100%	
442	02-50-04-021	San Antonio South	100%	○
443	02-50-04-022	San Fernando	100%	○
444	02-50-04-023	San Leonardo	100%	
445	02-50-04-024	Santo Domingo (Tabangan)	100%	○
446	02-50-04-025	Pallas	100%	○
447	02-50-04-026	Magsaysay Hills	100%	○
448	02-50-04-027	Santo Domingo West	100%	○

Table 3.1.1 List of Barangays in the Study Area (8/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
		BAYOMBONG (Capital)		
449	02-50-05-001	Bonfal East	100%	
450	02-50-05-002	Bonfal Proper	100%	
451	02-50-05-003	Bonfal West	100%	
452	02-50-05-004	Buenavista (Vista Hills)	100%	○
453	02-50-05-005	Busilac	100%	○
454	02-50-05-006	Casat	100%	
455	02-50-05-008	La Torre North	100%	
456	02-50-05-009	Magapuy	100%	○
457	02-50-05-010	Magsaysay	100%	○
458	02-50-05-011	Masoc	100%	○
459	02-50-05-012	Paitan	100%	○
460	02-50-05-014	Don Domingo Maddela Pob.(District I)	100%	
461	02-50-05-015	Don Tomas Maddela Pob. (District II)	100%	
462	02-50-05-016	District III Pob. (Don M. Perez)	100%	
463	02-50-05-017	District IV (Pob.)	100%	
464	02-50-05-019	Bansing	100%	○
465	02-50-05-020	Cabuaan	100%	○
466	02-50-05-021	Don Mariano Marcos	100%	
467	02-50-05-022	Ipil-Cuneg	100%	○
468	02-50-05-023	La Torre South	100%	
469	02-50-05-024	Luyang	100%	
470	02-50-05-025	Salvacion	100%	
471	02-50-05-026	San Nicolas North (Luyang)	100%	
472	02-50-05-027	Santa Rosa	100%	
473	02-50-05-028	Vista Alegre (B. Baringin)	100%	
		DIADI		
474	02-50-06-001	Arwas	99-20%	○
475	02-50-06-004	Decabacan	100%	○
476	02-50-06-006	Escoting	99-20%	○
477	02-50-06-007	Nagsabaran	99-20%	○
478	02-50-06-009	Pinya	99-20%	○
479	02-50-06-011	Ampakling	100%	○
480	02-50-06-012	Butao	100%	○
481	02-50-06-013	Langca	100%	○
482	02-50-06-014	Lurad	99-20%	○
483	02-50-06-015	Rosario	99-20%	○
		DUPAX DEL NORTE		
484	02-50-07-002	Belance	100%	○
485	02-50-07-003	Bulala	100%	○
486	02-50-07-009	Inaban	100%	○
487	02-50-07-010	Ineangan	100%	
488	02-50-07-011	Lamo	100%	
489	02-50-07-012	Mabasa	100%	○
490	02-50-07-013	Malasin (Pob.)	100%	○
491	02-50-07-015	Munguia	100%	○
492	02-50-07-016	Oyao	100%	○
493	02-50-07-018	New Gumiad	100%	○
494	02-50-07-019	Yabbi	100%	○
495	02-50-07-020	Binnuangan	100%	○
496	02-50-07-021	Bitnong	100%	○
497	02-50-07-022	Macabenga	100%	○
498	02-50-07-023	Parai	100%	○
		DUPAX DEL SUR		
499	02-50-08-001	Abaca	99-20%	○
500	02-50-08-003	Banila	100%	○
501	02-50-08-004	Carolotan	100%	○
502	02-50-08-007	Gabut	100%	
503	02-50-08-008	Ganao (Lingad)	100%	○
504	02-50-08-011	Mangayang	100%	○
505	02-50-08-012	Palabotan	100%	○
506	02-50-08-013	Biruk	99-20%	○
507	02-50-08-014	Bagumbayan	100%	○
508	02-50-08-015	Balsain	100%	○
509	02-50-08-016	Canabay	100%	○
510	02-50-08-017	Domang	100%	○
511	02-50-08-018	Dopaj	100%	○
512	02-50-08-019	Kimbutan	100%	○
513	02-50-08-020	Kinabuan	100%	○

Table 3.1.1 List of Barangays in the Study Area (9/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
514	02-50-08-021	Sanguit	99-20%	○
515	02-50-08-022	Santa Maria	100%	○
516	02-50-08-023	Talbek	100%	○
		KASIBU		
517	02-50-09-001	Antutot	100%	○
518	02-50-09-002	Alimit	100%	○
519	02-50-09-003	Poblacion (Alloy)	100%	○
520	02-50-09-004	Bilet	100%	○
521	02-50-09-005	Binogawan	100%	○
522	02-50-09-006	Bua	100%	○
523	02-50-09-007	Biyoy	100%	○
524	02-50-09-008	Capisaan	100%	○
525	02-50-09-009	Cordon	100%	○
526	02-50-09-010	Didipio	100%	○
527	02-50-09-011	Dine	100%	○
528	02-50-09-012	Kakiduguen	100%	○
529	02-50-09-014	Lupa	100%	○
530	02-50-09-015	Macalong	100%	○
531	02-50-09-016	Malabing	100%	○
532	02-50-09-017	Muta	100%	○
533	02-50-09-018	Pao	100%	○
534	02-50-09-019	Papaya	100%	○
535	02-50-09-020	Pudi	100%	○
536	02-50-09-021	Tokod	100%	○
537	02-50-09-022	Seguem	100%	○
538	02-50-09-023	Tadji	100%	○
539	02-50-09-024	Wangal	100%	○
540	02-50-09-025	Watwat	100%	○
541	02-50-09-026	Camamasi	100%	○
542	02-50-09-027	Catarawan	100%	○
543	02-50-09-028	Nantawacan	100%	○
544	02-50-09-029	Alloy	100%	○
545	02-50-09-030	Kongkong	100%	○
546	02-50-09-031	Pacquet (Illogot Res.)	100%	○
		KAYAPA		
547	02-50-10-001	Acacia	100%	○
548	02-50-10-002	Amilong Labeng	99-20%	○
549	02-50-10-004	Baan	100%	○
550	02-50-10-005	Babadi	100%	○
551	02-50-10-006	Balangabang	99-20%	○
552	02-50-10-007	Banao	99-20%	○
553	02-50-10-008	Binalian	100%	○
554	02-50-10-010	Cabalatan-Alang	99-20%	○
555	02-50-10-011	Cabanglasan	100%	○
556	02-50-10-012	Kayapa Proper East	99-20%	○
557	02-50-10-014	Mapayao	100%	○
558	02-50-10-015	Nansiakan	100%	○
559	02-50-10-017	Pangawan	99-20%	○
560	02-50-10-018	Pinayag	100%	○
561	02-50-10-019	Pingkian	100%	○
562	02-50-10-020	San Fabian	100%	○
563	02-50-10-024	Balete	99-20%	○
564	02-50-10-025	Buyasyas	100%	○
565	02-50-10-026	Cabayo	99-20%	○
566	02-50-10-027	Castillo Village	99-20%	○
567	02-50-10-028	Latbang	100%	○
568	02-50-10-030	Tidang Village	100%	○
		QUEZON		
569	02-50-11-001	Aurora	100%	○
570	02-50-11-002	Baresbes	100%	○
571	02-50-11-003	Buliwao	100%	○
572	02-50-11-004	Bonifacio	100%	○
573	02-50-11-005	Calaocan	100%	○
574	02-50-11-006	Caliat (Pob.)	100%	○
575	02-50-11-007	Darubba	100%	○
576	02-50-11-008	Maddiangat	100%	○
577	02-50-11-009	Naiubbunan	100%	○
578	02-50-11-010	Runruno	100%	○
579	02-50-11-011	Maasin	100%	○

Table 3.1.1 List of Barangays in the Study Area (10/10)

No.	LOCAL GOVERNMENT CODES	PROVINCE / CITY / MUNICIPALITY / BARANGAY	Occupancy Rate in the Study Area (631 Barangays)	Over 20% Area Covered by National Park & Forestland (408 Barangays)
580	02-50-11-012	Dagupan	100%	○
		SANTA FE		
581	02-50-12-002	Bacneng	100%	○
582	02-50-12-003	Balling	100%	○
583	02-50-12-004	Bantinan	100%	○
584	02-50-12-005	Baracbac	100%	○
585	02-50-12-006	Buyasyas	100%	○
586	02-50-12-008	Imugan	99-20%	○
587	02-50-12-009	Poblacion	100%	
588	02-50-12-010	Sinapaoan	100%	○
589	02-50-12-011	Tactac	99-20%	○
590	02-50-12-012	Villa Flores	100%	○
591	02-50-12-013	Atbu	99-20%	○
592	02-50-12-014	Balete	100%	○
593	02-50-12-015	Canabuan	99-20%	○
594	02-50-12-016	Malico	99-20%	○
595	02-50-12-018	Unib	99-20%	○
		SOLANO		
596	02-50-13-001	Aggub	100%	○
597	02-50-13-002	Bangaan	100%	○
598	02-50-13-003	Bangar	100%	
599	02-50-13-004	Bascaran	100%	○
600	02-50-13-005	Curifang	100%	
601	02-50-13-006	Dadap	100%	
602	02-50-13-007	Lactawan	100%	
603	02-50-13-008	Osme, a	100%	
604	02-50-13-009	Poblacion North	100%	
605	02-50-13-010	Poblacion South	100%	
606	02-50-13-011	Quezon	100%	
607	02-50-13-012	Quirino	100%	
608	02-50-13-013	Roxas	100%	
609	02-50-13-014	San Juan	100%	
610	02-50-13-015	San Luis	100%	
611	02-50-13-017	Tucal	100%	
612	02-50-13-018	Uddiawan	100%	
613	02-50-13-019	Wacal	100%	
614	02-50-13-020	Bagahabag	100%	
615	02-50-13-021	Communal	100%	○
616	02-50-13-022	Concepcion (Calalabangan)	100%	
617	02-50-13-023	Pilar D. Galima	100%	
		VILLAVERDE		
618	02-50-14-001	Bintawan Sur	100%	
619	02-50-14-002	Ibung	100%	
620	02-50-14-003	Cabuluan	100%	○
621	02-50-14-004	Nagbitin	100%	○
622	02-50-14-005	Ocapon	100%	○
623	02-50-14-006	Pieza	100%	
624	02-50-14-007	Sawmill	100%	○
625	02-50-14-008	Poblacion (Turod)	100%	
626	02-50-14-009	Bintawan Norte	100%	○
		ALFONSO CASTANEDA		
627	02-50-15-002	Galintuja	99-20%	○
628	02-50-15-003	Cauayan	100%	○
629	02-50-15-004	Lipuga	99-20%	○
630	02-50-15-005	Lublub (Pob.)	99-20%	○
631	02-50-15-006	Pelaway	100%	○

Table 3.2.1(1) Major Data of the 408 Targeted Barangays by Municipality

No.	Province /Municipality	Area (ha)	Population (person)	Pop. Density (person/km2)	No.of Household (household)	No.of Household Member (person /household)	Rate of Poverty Pop. (%)	Rate of Age15-64 Pop. (%)	Rate of Age Over 65 (%)	Variety of Religious Group	Variety of Ethnic Group
	ISABELA	36,844	23,110	83.1	4,721	4.8	26.1%	55.1%	3.9%	5.9	4.6
1	Angadanan	691	598	86.6	126	4.7	3.0%	57.3%	2.1%	8	3
2	Cordon	7,387	2,773	41.2	564	4.9	7.5%	50.6%	3.7%	5	10
3	Echague	5,491	3,640	166.7	709	5.2	10.5%	52.5%	2.8%	4	7
4	Jones	5,641	4,954	103.4	1,020	4.8	30.5%	57.0%	5.1%	5	4
5	Ramon	4,249	3,496	82.3	778	4.5	70.0%	61.0%	1.6%	9	5
6	San Agustin	11,082	7,441	92.7	1,480	5.0	21.4%	56.7%	6.2%	7	2
7	San Guillermo	2,303	208	9.0	44	4.7	40.0%	50.5%	5.7%	3	2
	NUEVA VIZCAYA	434,130	208,962	114.5	41,428	5.1	32.8%	53.9%	4.6%	7.1	8.9
8	Ambaguio	14,821	9,746	81.6	1,837	5.3	53.1%	49.8%	3.4%	5	6
9	Aritao	34,876	22,252	118.5	4,369	5.1	49.1%	54.2%	5.3%	7	8
10	Bagabag	11,869	13,298	214.0	2,707	5.0	30.8%	56.6%	6.2%	10	19
11	Bambang	26,417	20,574	126.5	4,364	4.7	22.4%	55.3%	5.3%	8	11
12	Bayombong	11,729	14,579	161.5	3,096	4.7	29.9%	55.8%	4.6%	8	9
13	Diadi	12,207	6,103	55.6	1,231	4.9	26.9%	53.8%	3.9%	5	8
14	Dupax Del Norte	39,349	18,340	82.4	3,671	5.1	22.3%	52.9%	5.2%	9	12
15	Dupax Del Sur	36,595	14,415	123.2	2,768	5.2	24.5%	53.8%	5.5%	5	10
16	Kasibu	83,140	28,235	52.3	5,200	5.5	51.8%	51.0%	4.0%	7	8
17	Kayapa	58,395	14,651	34.8	2,655	5.4	43.4%	52.8%	4.4%	6	4
18	Quezon	23,309	15,986	97.9	3,358	4.8	35.1%	55.0%	3.8%	8	8
19	Sta. Fe	28,439	11,586	94.5	2,260	5.1	42.1%	53.4%	4.7%	6	7
20	Solano	3,038	8,022	310.5	1,752	4.6	10.0%	55.5%	6.3%	10	9
21	Villaverd	5,796	7,001	155.4	1,406	5.1	16.8%	53.6%	4.4%	8	5
22	Alfonso Castaneda	44,152	4,174	8.8	754	5.8	33.0%	54.7%	1.5%	4	10
	QUIRINO	177,974	55,807	76.4	11,228	5.1	35.2%	52.8%	4.0%	7.3	6.6
23	Aglipay	22,891	11,939	64.7	2,401	5.0	38.7%	52.5%	4.0%	9	5
24	Cabarrogu	14,071	6,474	70.4	1,219	5.3	40.4%	51.6%	3.7%	9	8
25	Diffun	11,054	7,432	71.5	1,524	4.9	37.8%	51.3%	4.1%	6	6
26	Madella	11,928	13,248	127.6	2,657	5.0	34.3%	54.3%	4.9%	6	5
27	Nagtipuna	118,029	16,714	48.0	3,427	5.0	24.7%	54.2%	3.2%	7	9
	IFUGAO	206,758	118,194	112.3	22,679	5.2	68.4%	51.9%	6.8%	6.7	5.2
28	Banaue	20,702	20,551	178.6	3,952	5.2	72.1%	51.7%	7.5%	7	6
29	Hungduan	22,774	9,371	47.3	1,699	5.5	66.0%	50.1%	8.5%	6	4
30	Kiangnan	12,315	14,022	219.3	2,692	5.1	72.1%	52.6%	5.5%	7	6
31	Lagawe	23,151	9,724	98.3	1,891	5.1	72.1%	51.0%	7.4%	6	4
32	Lamut	12,001	11,379	117.3	2,160	5.3	72.1%	53.0%	4.6%	8	5
33	Mayoyao	20,316	13,092	107.8	2,683	4.9	72.1%	52.5%	5.2%	6	2
34	Alfonso Lista (Potia)	1,784	1,177	66.0	247	4.8	53.0%	57.6%	4.4%	10	12
35	Aguinaldo	34,591	7,075	61.6	1,483	4.9	72.1%	51.0%	4.5%	6	2
36	Hingyon	6,430	9,769	209.6	2,063	4.7	72.1%	50.2%	12.4%	7	5
37	Tinoc	33,185	9,740	48.7	1,680	5.8	64.2%	49.2%	4.6%	6	5
38	Asipulo	19,508	12,294	81.2	2,129	5.8	65.0%	52.2%	10.5%	6	4
	Min	691	208	8.8	44	4.5	3.0%	49.2%	1.5%	3	2
	Max	118,029	28,235	310.5	5,200	5.8	72.1%	61.0%	12.4%	10	19
	Average	22,519	10,686	103.1	2,107	5.1	42.2%	53.4%	5.0%	6.8	6.7
	Total	855,706	406,073		80,056						

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (2/24)

Code	Province/ Municipality/ Barangay	Area (ha)	Population (person)	Pop. Density (person/km ²)	Sex Ratio	No. of Household (household)	No. of Household Member (person /household)	Rate of Poverty Pop. (%)	Rate of Age15-64 Pop. (%)	Rate of Age Over 65 (%)	Variety of Religious Group	Variety of Ethnic Group	Rate of Agri. Worker Pop. (%)	Rate of Labor Pop. (%)	Rate of Self- employment Pop. (%)	Literacy Rate (%)	Rate of College Graduate Pop. (%)	Rate of No- education Pop. (%)
02-50-02-019	Canabuan	5,223	406	7.8	0.49	74	5.5	45.0%	55.5%	3.0%	5	6	35.9%	51.0%	41.4%	75.0%	4.6%	12.1%
02-50-02-020	Canarem	1,294	747	57.7	0.54	142	5.3	50.0%	57.4%	4.3%	8	7	54.8%	49.4%	49.4%	89.0%	3.2%	17.7%
02-50-02-021	Latar-Nocnoc-San Fra	1,136	382	33.6	0.55	72	5.3	42.0%	45.1%	8.2%	4	4	28.9%	59.6%	22.8%	80.0%	4.1%	7.7%
02-50-02-022	Ocao-Capinaan	1,855	678	36.6	0.51	119	5.7	50.0%	49.7%	3.1%	9	5	50.0%	50.0%	42.4%	85.0%	1.4%	14.6%
02-50-02-023	Yaway	997	575	57.7	0.50	104	5.5	55.0%	56.3%	2.1%	4	8	49.1%	49.1%	49.1%	83.0%	3.9%	11.4%
	Bagabag	11,869	13,298	214.0	0.51	2,707	5.0	30.8%	56.6%	6.2%	10.0	18.8	30.3%	49.0%	41.2%	83.0%	12.1%	6.5%
02-50-03-002	Baretbet	4,954	3,512	70.9	0.52	759	4.6	40.0%	53.6%	4.9%	13	19	43.5%	43.5%	47.8%	90.0%	7.7%	9.1%
02-50-03-003	Careb	521	1,943	372.8	0.50	394	4.9	40.0%	59.5%	8.0%	8	21	51.4%	47.6%	51.4%	88.0%	10.8%	6.1%
02-50-03-012	Santa Lucia	1,264	2,358	186.5	0.50	484	4.9	50.0%	56.8%	7.8%	9	17	11.7%	58.7%	26.6%	85.0%	14.2%	5.2%
02-50-03-015	Villa Coloma	507	2,187	431.6	0.51	454	4.8	20.0%	58.4%	5.5%	15	28	11.4%	26.0%	74.0%	85.0%	17.3%	5.4%
02-50-03-017	Villaros	3,512	1,216	34.6	0.53	239	5.1	5.0%	54.5%	3.7%	6	12	49.9%	38.0%	27.6%	88.0%	4.4%	8.5%
02-50-03-018	Tuao South	1,111	2,082	187.4	0.50	377	5.5	30.0%	56.8%	7.2%	9	16	13.9%	80.3%	19.7%	62.0%	18.3%	4.4%
	Bambang	26,417	20,574	126.5	0.51	4,364	4.7	22.4%	55.3%	5.3%	7.9	10.7	66.6%	62.8%	16.7%	64.3%	7.9%	9.6%
02-50-04-001	Abian	1,601	1,304	81.4	0.52	263	5.0	50.0%	56.2%	6.6%	10	16	70.2%	70.2%	13.0%	75.0%	12.2%	9.7%
02-50-04-002	Abingan	1,054	915	86.8	0.52	192	4.8	5.0%	52.8%	6.4%	10	8	60.9%	59.9%	16.1%	65.0%	12.7%	10.2%
02-50-04-008	Barat	550	1,458	264.9	0.52	306	4.8	10.0%	59.0%	6.4%	6	9	56.1%	81.6%	16.0%	70.0%	11.7%	6.5%
02-50-04-011	Dullao	3,005	920	30.6	0.52	217	4.2	5.0%	57.0%	4.7%	10	15	61.5%	64.7%	8.7%	60.0%	5.7%	10.2%
02-50-04-013	Indiana	957	1,563	163.3	0.52	290	5.4	20.0%	55.2%	6.2%	8	13	76.3%	77.6%	10.4%	70.0%	6.6%	9.0%
02-50-04-014	Mabuslo	6,807	2,092	30.7	0.53	433	4.8	30.0%	53.9%	3.8%	9	15	80.6%	74.9%	12.9%	65.0%	3.9%	13.7%
02-50-04-016	Manamtam	2,681	597	22.3	0.51	128	4.7	3.0%	57.8%	4.8%	6	10	80.8%	45.4%	43.8%	60.0%	6.3%	11.5%
02-50-04-017	Mauan	946	1,130	119.5	0.50	237	4.8	3.0%	53.9%	6.0%	9	8	60.9%	58.8%	14.3%	50.0%	8.8%	9.1%
02-50-04-018	Salinas	1,604	2,307	143.8	0.52	474	4.9	15.0%	53.6%	5.5%	9	12	57.5%	69.2%	11.4%	80.0%	8.2%	11.6%
02-50-04-021	San Antonio South	1,102	1,302	118.1	0.49	291	4.5	10.0%	56.9%	9.1%	9	7	61.4%	79.2%	0.0%	85.0%	14.9%	5.5%
02-50-04-022	San Fernando	621	1,918	308.6	0.52	408	4.7	70.0%	58.9%	4.8%	7	18	71.5%	52.4%	28.7%	75.0%	4.6%	2.8%
02-50-04-024	Santo Domingo (Taban	1,103	2,289	207.6	0.51	539	4.2	10.0%	55.3%	4.4%	9	7	90.0%	79.9%	10.0%	60.0%	6.6%	9.8%
02-50-04-025	Pallas	2,001	792	39.6	0.50	142	5.6	5.0%	50.7%	1.1%	4	3	92.8%	60.1%	39.2%	30.0%	3.7%	17.1%
02-50-04-026	Magsaysay Hills	526	1,274	242.4	0.52	280	4.6	50.0%	51.5%	6.1%	6	4	19.3%	18.3%	11.1%	70.0%	10.1%	12.7%
02-50-04-027	Santo Domingo West	1,859	713	38.3	0.52	164	4.3	50.0%	56.2%	4.1%	6	15	58.6%	49.6%	15.4%	50.0%	2.9%	5.0%
	Bayombong	11,729	14,579	161.5	0.51	3,096	4.7	29.9%	55.8%	4.6%	8.2	8.9	61.6%	50.4%	26.0%	73.3%	8.3%	8.7%
02-50-05-004	Buenavista (Vista Hi	665	2,376	357.5	0.51	511	4.6	80.0%	57.3%	4.8%	10	10	61.1%	56.7%	12.9%	75.0%	9.7%	11.4%
02-50-05-005	Busilac	1,164	2,590	222.5	0.50	533	4.9	30.0%	56.0%	5.6%	15	11	39.1%	33.3%	19.1%	70.0%	14.5%	6.5%
02-50-05-009	Magapuy	1,431	800	55.9	0.51	158	5.1	30.0%	56.0%	3.3%	3	9	74.6%	57.2%	34.8%	80.0%	8.7%	4.8%
02-50-05-010	Magsaysay	1,083	3,664	338.5	0.51	792	4.6	13.0%	56.2%	5.4%	9	14	45.8%	62.6%	10.3%	80.0%	17.5%	6.9%
02-50-05-011	Masoc	896	1,864	208.0	0.50	391	4.8	70.0%	53.1%	4.8%	9	13	55.2%	38.4%	23.0%	90.0%	9.4%	7.6%
02-50-05-012	Paitan	1,164	1,441	123.8	0.52	299	4.8	5.0%	56.3%	4.8%	8	8	72.0%	40.7%	43.5%	60.0%	8.7%	4.6%
02-50-05-019	Bansing	3,582	709	19.8	0.53	165	4.3	5.0%	53.8%	5.8%	10	6	61.0%	66.9%	28.7%	50.0%	1.9%	6.9%
02-50-05-020	Cabuaan	1,014	730	72.0	0.53	158	4.6	6.0%	55.2%	2.7%	6	5	69.2%	44.7%	29.6%	68.0%	3.3%	17.8%
02-50-05-022	Ipil-Cuneg	731	405	55.4	0.51	89	4.6	30.0%	58.4%	4.5%	4	4	76.2%	53.4%	32.1%	87.0%	0.7%	11.5%
	Diadi	12,207	6,103	55.6	0.52	1,231	4.9	26.9%	53.6%	3.9%	5.2	7.9	68.0%	41.6%	35.1%	79.5%	3.7%	12.9%
02-50-06-001	Arwas	811	695	85.7	0.51	126	5.5	30.0%	51.3%	5.0%	6	6	89.2%	46.8%	46.1%	50.0%	5.3%	6.6%
02-50-06-004	Decabacan	1,367	580	42.4	0.50	136	4.3	15.0%	51.3%	5.8%	2	6	58.6%	34.5%	31.0%	80.0%	3.9%	14.4%
02-50-06-006	Escoting	1,671	872	52.2	0.54	165	5.3	50.0%	54.1%	4.4%	8	12	83.3%	64.5%	27.2%	80.0%	6.0%	6.7%
02-50-06-007	Nagsabaran	946	1,105	116.9	0.52	228	4.8	50.0%	55.5%	3.1%	8	18	51.4%	28.2%	25.7%	95.0%	4.5%	14.2%
02-50-06-009	Pinya	1,688	506	30.0	0.50	104	4.9	10.0%	55.5%	3.1%	7	2	51.2%	25.4%	29.3%	80.0%	0.4%	15.5%
02-50-06-011	Ampaking	1,652	541	32.8	0.51	115	4.7	10.0%	51.1%	2.9%	2	4	61.9%	34.5%	31.0%	80.0%	1.8%	22.6%
02-50-06-012	Butao	998	904	90.6	0.51	161	5.6	20.0%	48.8%	6.5%	7	14	75.1%	83.4%	16.6%	90.0%	3.4%	17.1%
02-50-06-013	Langca	1,575	242	15.4	0.57	64	3.8	10.0%	57.3%	2.5%	3	3	88.9%	36.1%	57.4%	70.0%	1.8%	17.6%
02-50-06-014	Lurad	704	426	60.5	0.55	81	5.3	24.0%	52.4%	0.5%	6	9	70.5%	23.1%	52.6%	90.0%	3.5%	7.0%
02-50-06-015	Rosario	795	232	29.2	0.46	51	4.5	50.0%	60.8%	4.7%	3	5	49.6%	39.5%	34.1%	80.0%	6.4%	7.1%
	Dupax Del Norte	39,349	18,340	82.4	0.52	3,671	5.1	22.3%	52.9%	5.2%	8.9	12.5	54.5%	43.3%	28.7%	66.5%	5.5%	11.7%
02-50-07-002	Belance	2,139	2,043	95.5	0.50	355	5.8	20.0%	49.9%	2.8%	13	20	77.7%	72.8%	9.8%	75.0%	9.5%	7.3%
02-50-07-003	Bulala	5,668	529	9.3	0.53	107	4.9	20.0%	52.5%	5.1%	9	9	98.6%	49.5%	49.5%	95.0%	0.7%	11.6%
02-50-07-009	Inaban	2,187	1,455	66.5	0.49	327	4.4	10.0%	56.5%	6.2%	11	14	22.7%	43.9%	0.0%	80.0%	10.7%	7.7%
02-50-07-012	Mabasa	1,077	2,064	191.7	0.51	456	4.5	37.0%	56.7%	7.9%	9	11	48.0%	50.0%	5.0%	90.0%	11.3%	7.2%
02-50-07-013	Malasin (Pob.)	1,086	3,126	287.9	0.52	680	4.6	4.0%	57.4%	8.4%	14	18	47.0%	27.1%	60.5%	85.0%	15.7%	4.9%
02-50-07-015	Munguia	1,569	1,053	67.1	0.52	217	4.9	5.0%	55.6%	6.6%	8	14	32.8%	27.9%	9.6%	70.0%	6.1%	6.4%
02-50-07-016	Oyao	2,208	1,695	76.8	0.52	311	5.5	13.0%	48.1%	4.3%	8	13	76.4%	41.7%	42.7%	70.0%	3.4%	16.8%

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (3/24)

Code	Province/ Municipality/ Barangay	Area (ha)	Population (person)	Pop. Density (person/km ²)	Sex Ratio	No. of Household (household)	No. of Household Member (person /household)	Rate of Poverty Pop. (%)	Rate of Age15-64 Pop. (%)	Rate of Age Over 65 (%)	Variety of Religious Group	Variety of Ethnic Group	Rate of Agri. Worker Pop. (%)	Rate of Labor Pop. (%)	Rate of Self- employment Pop. (%)	Literacy Rate (%)	Rate of College Graduate Pop. (%)	Rate of No- education Pop. (%)
02-50-07-018	New Gumiad	5,291	430	8.1	0.52	69	6.2	11.0%	46.6%	6.4%	1	7	62.9%	89.7%	0.0%	80.0%	1.0%	33.6%
02-50-07-019	Yabbi	2,871	549	19.1	0.54	105	5.2	10.0%	47.8%	3.4%	8	8	99.1%	0.0%	99.1%	80.0%	2.0%	11.9%
02-50-07-020	Binuangan	9,475	1,432	15.1	0.51	255	5.6	80.0%	53.5%	2.3%	11	17	39.7%	30.6%	62.7%	30.0%	2.4%	10.1%
02-50-07-021	Bitnong	3,607	2,240	62.1	0.53	454	4.9	25.0%	55.1%	4.5%	9	8	28.6%	33.4%	9.5%	25.0%	3.0%	8.5%
02-50-07-022	Macabenga	888	1,092	123.0	0.52	203	5.4	50.0%	50.6%	4.7%	9	9	42.1%	67.3%	20.8%	5.0%	3.8%	16.1%
02-50-07-023	Parai	1,283	632	49.3	0.52	132	4.8	5.0%	57.4%	4.9%	6	9	32.5%	28.9%	3.5%	80.0%	2.3%	9.6%
	Dupax Del Sur	36,595	14,415	123.2	0.52	2,768	5.2	24.5%	53.8%	5.5%	4.9	10.3	65.1%	52.2%	26.7%	68.6%	8.1%	15.7%
02-50-08-001	Abaca	2,130	385	18.1	0.53	72	5.3	50.0%	53.3%	3.6%	4	11	61.9%	79.6%	8.9%	90.0%	3.1%	25.8%
02-50-08-003	Banila	3,097	835	27.0	0.55	178	4.7	40.0%	57.3%	4.8%	6	10	53.6%	16.3%	38.2%	75.0%	4.2%	12.4%
02-50-08-004	Carolotan	2,641	797	30.2	0.52	163	4.9	5.0%	53.4%	3.5%	6	13	63.0%	28.2%	35.9%	68.0%	2.1%	20.3%
02-50-08-008	Ganao (Lingad)	2,529	921	36.4	0.52	157	5.9	12.0%	54.7%	4.6%	2	10	82.3%	22.5%	68.4%	70.0%	1.3%	19.0%
02-50-08-011	Mangayang	589	1,694	287.6	0.51	347	4.9	5.0%	57.0%	7.0%	8	11	70.2%	65.0%	10.1%	70.0%	12.2%	5.8%
02-50-08-012	Palabotan	1,602	770	48.1	0.53	163	4.7	60.0%	58.1%	5.5%	3	14	67.5%	81.9%	6.3%	70.0%	9.3%	10.9%
02-50-08-013	Biruk	5,773	651	11.3	0.53	112	5.8	5.0%	45.2%	4.6%	8	8	63.2%	53.6%	27.2%	70.0%	0.7%	35.0%
02-50-08-014	Bagumbayan	835	883	105.8	0.58	176	5.0	30.0%	62.0%	6.6%	3	11	41.5%	51.5%	13.5%	90.0%	13.7%	5.6%
02-50-08-015	Balsain	232	661	284.9	0.49	130	5.1	25.0%	59.0%	7.8%	2	9	73.8%	85.7%	7.7%	70.0%	18.1%	5.0%
02-50-08-016	Canabay	2,673	739	27.6	0.51	143	5.2	60.0%	54.5%	5.5%	8	7	65.8%	38.8%	30.0%	30.0%	1.8%	9.6%
02-50-08-017	Domang	256	1,487	580.2	0.49	278	5.3	50.0%	57.7%	7.8%	4	13	63.5%	72.6%	9.1%	80.0%	28.1%	2.9%
02-50-08-018	Dopaj	423	1,665	394.0	0.51	321	5.2	10.0%	60.3%	8.9%	4	10	47.3%	55.2%	23.6%	99.0%	27.1%	1.4%
02-50-08-019	Kimbutan	2,765	1,097	39.7	0.51	190	5.8	5.0%	46.0%	3.2%	7	10	79.1%	42.2%	55.7%	30.0%	0.9%	25.6%
02-50-08-020	Kinabuan	1,290	775	60.1	0.54	152	5.1	10.0%	49.0%	3.7%	5	12	61.9%	33.1%	38.1%	90.0%	3.6%	18.7%
02-50-08-021	Sanguit	5,227	775	14.8	0.49	129	6.0	5.0%	50.1%	4.1%	3	8	72.0%	37.7%	46.9%	70.0%	1.8%	20.1%
02-50-08-023	Talbek	4,531	280	6.2	0.54	57	4.9	20.0%	43.3%	6.1%	5	7	75.0%	71.3%	7.5%	25.0%	0.7%	33.8%
	Kasibu	83,140	28,235	52.3	0.52	5,200	5.5	51.8%	51.0%	4.0%	7.2	7.7	80.3%	47.2%	42.0%	65.7%	6.3%	12.9%
02-50-09-001	Antutot	3,453	868	25.1	0.54	167	5.2	45.0%	48.6%	5.0%	11	13	83.6%	51.2%	45.0%	80.0%	4.8%	15.8%
02-50-09-002	Alimit	1,531	860	56.2	0.52	156	5.5	80.0%	51.7%	4.2%	5	4	83.3%	52.0%	41.7%	65.0%	3.2%	24.0%
02-50-09-003	Poblacion (Alloy)	498	1,504	301.9	0.50	295	5.1	40.0%	51.1%	3.8%	12	15	92.1%	46.8%	47.9%	60.0%	19.9%	6.0%
02-50-09-004	Bilet	1,412	319	22.6	0.53	55	5.8	75.0%	56.2%	5.2%	6	5	96.6%	50.6%	46.0%	60.0%	5.9%	13.0%
02-50-09-005	Binogawan	1,444	669	46.3	0.53	115	5.8	70.0%	56.2%	4.9%	5	10	85.1%	48.9%	45.9%	60.0%	10.7%	16.4%
02-50-09-006	Bua	3,872	858	22.2	0.50	161	5.3	20.0%	56.7%	3.7%	6	6	91.1%	47.8%	48.1%	80.0%	6.7%	7.3%
02-50-09-007	Biyoy	5,244	1,442	27.5	0.55	253	5.7	60.0%	47.7%	4.3%	6	2	61.4%	36.0%	36.2%	50.0%	1.4%	29.3%
02-50-09-008	Capisaan	1,659	575	34.7	0.52	96	6.0	50.0%	49.0%	4.6%	4	7	82.1%	90.6%	9.4%	80.0%	8.7%	13.5%
02-50-09-009	Cordon	7,239	1,027	14.2	0.54	185	5.6	60.0%	51.2%	3.3%	7	11	72.0%	42.4%	40.5%	20.0%	4.8%	8.2%
02-50-09-010	Didipio	3,752	1,354	36.1	0.53	245	5.5	90.0%	47.5%	2.5%	8	5	86.4%	66.7%	33.3%	65.0%	7.3%	16.3%
02-50-09-011	Dine	3,242	1,002	30.9	0.54	185	5.4	50.0%	51.1%	3.1%	5	4	64.1%	37.8%	32.0%	60.0%	6.2%	10.9%
02-50-09-012	Kakiduguen	4,121	667	16.2	0.53	119	5.6	60.0%	46.4%	7.1%	9	5	87.7%	48.8%	48.8%	60.0%	2.1%	17.1%
02-50-09-014	Lupa	1,053	818	77.7	0.50	156	5.2	60.0%	52.3%	2.7%	6	9	85.1%	47.2%	47.2%	70.0%	3.4%	15.7%
02-50-09-015	Macalong	1,391	1,184	85.1	0.50	225	5.3	50.0%	56.0%	3.6%	10	9	64.1%	49.2%	17.3%	70.0%	6.4%	5.6%
02-50-09-016	Malabing	1,778	521	29.3	0.53	93	5.6	50.0%	49.0%	4.5%	5	7	92.7%	58.9%	39.1%	80.0%	15.3%	11.2%
02-50-09-017	Muta	3,726	1,656	44.4	0.52	317	5.2	50.0%	52.0%	4.8%	12	10	92.1%	47.4%	48.4%	70.0%	4.6%	8.1%
02-50-09-018	Pao	4,602	1,038	22.6	0.53	181	5.7	50.0%	47.4%	2.6%	7	8	76.6%	47.1%	29.5%	50.0%	1.5%	9.8%
02-50-09-019	Papaya	5,710	746	13.1	0.52	142	5.3	25.0%	49.2%	4.7%	4	10	47.5%	62.5%	10.6%	65.0%	6.3%	15.3%
02-50-09-020	Pudi	1,603	1,176	73.4	0.54	218	5.4	20.0%	53.0%	5.3%	10	11	93.4%	51.8%	46.7%	60.0%	7.8%	9.8%
02-50-09-021	Tokod	3,977	566	14.2	0.50	103	5.5	50.0%	49.0%	4.2%	3	4	88.1%	53.4%	45.6%	80.0%	5.5%	14.5%
02-50-09-022	Seguem	1,359	525	38.6	0.51	103	5.1	50.0%	53.5%	4.8%	8	5	83.5%	47.7%	45.1%	50.0%	7.0%	9.9%
02-50-09-023	Tadji	7,618	702	9.2	0.50	126	5.6	30.0%	48.9%	3.3%	6	7	79.2%	41.6%	41.6%	60.0%	6.3%	16.1%
02-50-09-024	Wangal	1,417	786	55.5	0.53	145	5.4	70.0%	47.8%	3.7%	4	2	94.4%	14.6%	82.6%	70.0%	7.2%	11.4%
02-50-09-025	Watwat	1,154	1,087	94.2	0.53	203	5.4	30.0%	49.7%	3.7%	9	15	71.1%	42.2%	51.0%	65.0%	5.4%	7.1%
02-50-09-026	Camamasi	2,117	390	18.4	0.54	66	5.9	70.0%	51.5%	3.7%	5	2	93.3%	46.7%	46.7%	80.0%	5.3%	20.4%
02-50-09-027	Catarawan	1,602	615	38.4	0.53	107	5.7	50.0%	49.4%	2.3%	5	4	96.6%	59.3%	40.7%	75.0%	3.1%	16.8%
02-50-09-028	Nantawacan	2,369	1,784	75.3	0.51	307	5.8	50.0%	52.8%	1.3%	11	10	77.7%	14.8%	78.8%	70.0%	8.0%	4.5%
02-50-09-029	Alloy	1,325	799	60.3	0.52	162	4.9	60.0%	48.6%	5.7%	8	12	71.7%	43.4%	34.8%	75.0%	4.7%	12.8%
02-50-09-030	Kongkong	1,533	1,827	119.2	0.51	347	5.3	20.0%	54.6%	4.0%	12	8	60.7%	36.8%	40.4%	80.0%	7.0%	7.2%
02-50-09-031	Pacquet (Illongot Re)	1,339	870	65.0	0.54	167	5.2	70.0%	51.2%	3.5%	7	11	54.7%	32.2%	39.1%	60.0%	2.7%	13.6%
	Kayapa	58,395	14,651	34.8	0.52	2,655	5.4	43.4%	52.8%	4.4%	5.5	4.2	73.3%	41.4%	37.3%	61.7%	4.2%	19.4%
02-50-10-001	Acacia	1,300	903	69.5	0.51	168	5.4	50.0%	52.8%	4.3%	6	3	60.8%	35.5%	41.0%	60.0%	2.1%	11.0%
02-50-10-002	Amilong Labeng	2,049	219	10.7	0.50	43	5.1	40.0%	47.0%	3.5%	6	2	72.2%	49.8%	32.9%	70.0%	0.7%	38.0%

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (4/24)

Code	Province/ Municipality/ Barangay	Area (ha)	Population (person)	Pop. Density (person/km ²)	Sex Ratio	No. of Household (household)	No. of Household Member (person /household)	Rate of Poverty Pop. (%)	Rate of Age15-64 Pop. (%)	Rate of Age Over 65 (%)	Variety of Religious Group	Variety of Ethnic Group	Rate of Agri. Worker Pop. (%)	Rate of Labor Pop. (%)	Rate of Self- employment Pop. (%)	Literacy Rate (%)	Rate of College Graduate Pop. (%)	Rate of No- education Pop. (%)
02-50-10-004	Baan	2,295	785	34.2	0.52	157	5.0	80.0%	52.5%	6.3%	6	14	39.9%	64.1%	0.0%	90.0%	11.5%	6.8%
02-50-10-005	Babadi	1,239	803	64.8	0.54	122	6.6	40.0%	47.4%	3.2%	5	2	64.1%	32.0%	39.9%	77.0%	0.4%	24.8%
02-50-10-006	Balangabang	1,551	393	25.3	0.52	63	6.2	40.0%	56.3%	2.4%	3	3	81.2%	37.6%	49.5%	50.0%	5.7%	12.5%
02-50-10-007	Banao	4,456	632	14.2	0.55	105	6.0	40.0%	51.9%	4.7%	6	1	69.0%	56.5%	26.8%	60.0%	1.9%	21.5%
02-50-10-008	Binalian	2,513	667	26.5	0.48	113	5.9	20.0%	49.0%	5.4%	5	1	76.5%	52.9%	29.4%	50.0%	1.5%	26.0%
02-50-10-010	Cabalatan-Alang	2,607	181	6.9	0.53	39	4.6	40.0%	52.2%	7.0%	5	2	71.1%	50.1%	33.0%	60.0%	1.5%	23.8%
02-50-10-011	Cabanglasan	1,357	684	50.4	0.51	116	5.9	70.0%	53.1%	4.8%	6	4	78.8%	44.5%	43.7%	50.0%	4.9%	16.8%
02-50-10-012	Kayapa-Proper East	2,007	204	10.2	0.54	45	4.5	60.0%	53.6%	6.8%	5	8	76.9%	49.5%	29.7%	0.0%	3.0%	21.3%
02-50-10-014	Mapayao	3,700	1,167	31.5	0.52	209	5.6	10.0%	55.1%	4.7%	6	4	94.1%	1.0%	93.1%	75.0%	4.6%	18.9%
02-50-10-015	Nansiakan	3,169	1,268	40.0	0.51	239	5.3	70.0%	53.0%	2.3%	6	3	96.6%	15.3%	82.8%	60.0%	4.4%	22.6%
02-50-10-017	Pangawan	1,004	453	45.1	0.52	100	4.5	70.0%	53.5%	8.5%	6	7	65.0%	50.0%	40.0%	0.0%	4.9%	15.2%
02-50-10-018	Pinayag	3,577	1,478	41.3	0.54	252	5.9	20.0%	50.0%	2.8%	4	6	74.9%	36.0%	48.5%	80.0%	1.4%	37.5%
02-50-10-019	Pinkian	3,215	1,045	32.5	0.53	176	5.9	30.0%	58.5%	3.8%	10	7	70.2%	59.6%	21.9%	70.0%	11.2%	10.6%
02-50-10-020	San Fabian	1,294	669	51.7	0.53	133	5.0	15.0%	52.9%	6.9%	7	9	69.4%	64.9%	9.7%	85.0%	13.3%	11.5%
02-50-10-024	Balete	5,255	472	9.0	0.53	93	5.1	50.0%	51.5%	5.1%	8	2	70.5%	24.2%	55.8%	60.0%	1.0%	12.2%
02-50-10-025	Buyasyas	2,667	321	12.0	0.53	60	5.4	30.0%	55.4%	1.8%	2	1	64.4%	52.8%	23.2%	50.0%	0.4%	10.6%
02-50-10-026	Cabuyao	5,371	697	13.0	0.52	121	5.8	5.0%	48.5%	5.2%	3	1	70.0%	40.0%	40.8%	40.0%	0.4%	27.0%
02-50-10-027	Castillo Village	357	472	132.1	0.50	91	5.2	30.0%	54.6%	2.5%	5	8	70.6%	40.3%	40.3%	0.0%	10.5%	15.7%
02-50-10-028	Latbang	6,331	782	12.4	0.51	140	5.6	95.0%	51.0%	2.4%	4	1	92.5%	53.8%	39.6%	50.0%	1.1%	29.0%
02-50-10-030	Tidang Village	1,082	356	32.9	0.49	70	5.1	50.0%	61.2%	2.8%	7	4	83.3%	0.0%	0.0%	0.0%	5.3%	13.5%
	Quezon	23,309	15,986	97.9	0.53	3,358	4.8	35.1%	55.0%	3.8%	7.8	8.0	71.7%	57.2%	26.4%	89.9%	5.4%	7.6%
02-50-11-001	Aurora	748	1,059	141.6	0.52	210	5.0	40.0%	56.2%	3.5%	7	4	50.0%	35.7%	28.6%	90.0%	5.1%	1.8%
02-50-11-002	Baresbes	611	1,005	164.6	0.51	214	4.7	6.0%	57.7%	4.5%	5	8	89.4%	89.9%	0.5%	90.0%	14.3%	8.9%
02-50-11-003	Buliwao	4,162	2,191	52.6	0.52	447	4.9	40.0%	57.1%	3.8%	11	6	58.6%	41.6%	17.4%	97.0%	4.3%	2.5%
02-50-11-004	Bonifacio	1,831	520	28.4	0.56	118	4.4	60.0%	55.7%	4.5%	7	7	90.2%	64.5%	32.2%	95.0%	0.0%	9.2%
02-50-11-005	Calaocan	1,651	627	38.0	0.55	134	4.7	40.0%	54.8%	3.9%	8	10	51.1%	46.4%	28.0%	80.0%	3.5%	8.1%
02-50-11-006	Caliat (Pop.)	856	1,581	184.8	0.52	372	4.3	40.0%	59.9%	5.7%	6	7	45.8%	57.1%	40.0%	90.0%	9.1%	5.0%
02-50-11-007	Darubba	974	1,568	161.0	0.51	351	4.5	50.0%	57.3%	3.5%	10	12	94.3%	57.2%	42.8%	80.0%	5.7%	6.4%
02-50-11-008	Maddiangat	790	1,573	199.0	0.51	329	4.8	30.0%	55.3%	4.5%	8	9	39.7%	43.1%	13.9%	95.0%	9.3%	9.1%
02-50-11-009	Nalubbunan	1,996	1,211	60.7	0.54	254	4.8	20.0%	57.4%	4.2%	7	6	80.2%	80.2%	0.9%	97.0%	10.4%	5.6%
02-50-11-010	Runruno	6,243	3,054	48.9	0.54	604	5.1	60.0%	52.4%	2.7%	13	16	92.1%	79.0%	13.1%	95.0%	2.4%	8.1%
02-50-11-011	Massin	2,030	827	40.7	0.54	185	4.5	30.0%	51.5%	4.0%	5	6	83.6%	45.8%	50.7%	95.0%	0.8%	10.9%
02-50-11-012	Dagupan	1,417	770	54.4	0.51	140	5.5	5.0%	45.3%	1.4%	7	5	85.2%	46.1%	48.4%	75.0%	0.4%	16.0%
	Sta. Fe	28,439	11,586	94.5	0.52	2,260	5.1	42.1%	53.4%	4.7%	6.3	6.9	77.5%	41.3%	48.4%	84.6%	6.5%	14.2%
02-50-12-002	Bacneng	2,130	1,160	54.5	0.50	213	5.4	30.0%	51.0%	4.7%	7	3	95.2%	46.2%	49.5%	90.0%	2.9%	15.0%
02-50-12-003	Baliling	536	1,805	337.0	0.50	339	5.3	20.0%	59.0%	2.6%	11	20	72.7%	40.8%	45.5%	90.0%	19.3%	1.4%
02-50-12-004	Bantinan	881	1,056	119.8	0.51	195	5.4	40.0%	49.3%	5.8%	6	7	66.9%	47.1%	49.9%	90.0%	1.3%	23.8%
02-50-12-005	Baracbac	403	456	113.1	0.52	102	4.5	30.0%	55.0%	5.9%	5	4	97.8%	50.8%	47.5%	75.0%	5.5%	16.5%
02-50-12-006	Buyasyas	3,089	498	16.1	0.53	93	5.4	50.0%	55.5%	4.0%	4	3	94.6%	48.9%	51.1%	80.0%	2.6%	20.9%
02-50-12-008	Imugan	1,294	681	52.6	0.53	152	4.5	40.0%	59.6%	3.7%	4	10	71.1%	40.7%	57.8%	85.0%	19.6%	9.3%
02-50-12-010	Sinapaoan	1,395	633	45.4	0.54	117	5.4	60.0%	56.1%	3.8%	9	3	84.9%	39.9%	45.0%	80.0%	0.9%	9.4%
02-50-12-011	Tactac	588	762	129.5	0.53	146	5.2	50.0%	54.0%	5.5%	9	17	88.6%	44.3%	46.8%	85.0%	9.9%	10.9%
02-50-12-012	Villa Flores	472	1,771	375.4	0.51	344	5.1	50.0%	54.2%	4.3%	8	10	84.3%	43.3%	48.1%	90.0%	13.7%	2.1%
02-50-12-013	Atbu	2,079	406	19.5	0.49	68	6.0	20.0%	44.5%	6.3%	3	4	81.7%	35.9%	52.8%	80.0%	0.3%	20.3%
02-50-12-014	Balete	5,684	569	10.0	0.52	117	4.9	40.0%	54.3%	3.7%	8	2	59.7%	26.9%	59.7%	80.0%	2.0%	23.2%
02-50-12-015	Canabuan	5,964	1,221	20.5	0.51	244	5.0	60.0%	51.0%	6.5%	8	8	46.4%	46.4%	48.8%	85.0%	4.3%	20.7%
02-50-12-016	Malico	1,671	282	16.9	0.52	70	4.0	60.0%	53.9%	4.6%	3	3	99.0%	60.4%	38.5%	85.0%	7.1%	10.7%
02-50-12-018	Unib	2,254	286	12.7	0.54	60	4.8	40.0%	49.3%	5.1%	3	2	42.4%	6.1%	36.4%	90.0%	2.2%	14.7%
	Solano	3,038	8,022	310.5	0.51	1,752	4.6	10.0%	55.5%	6.3%	9.5	9.3	45.0%	43.7%	11.6%	67.8%	9.6%	9.2%
02-50-13-001	Aggub	684	2,419	353.6	0.53	523	4.6	10.0%	57.5%	7.8%	11	10	47.9%	52.3%	21.8%	58.0%	13.7%	1.2%
02-50-13-002	Bangaan	323	918	284.4	0.49	201	4.6	5.0%	59.6%	5.2%	7	5	71.5%	57.3%	14.2%	80.0%	6.8%	6.5%
02-50-13-004	Bascaran	625	3,045	487.3	0.50	684	4.5	5.0%	55.5%	7.3%	13	17	60.7%	65.3%	10.2%	68.0%	15.4%	5.3%
02-50-13-021	Communal	1,406	1,640	116.6	0.51	344	4.8	20.0%	49.3%	4.9%	7	5	0.0%	0.0%	0.0%	65.0%	2.7%	23.8%
	Villaverd	5,796	7,001	155.4	0.50	1,406	5.1	16.8%	53.6%	4.4%	8.2	4.6	63.3%	60.8%	23.1%	84.6%	11.3%	8.6%
02-50-14-003	Cabuluan	2,037	1,312	64.4	0.50	260	5.0	7.0%	50.8%	3.3%	9	3	63.6%	54.5%	22.7%	85.0%	6.4%	13.0%
02-50-14-004	Nagbitin	1,081	1,721	159.3	0.51	355	4.8	5.0%	55.0%	4.2%	10	4	63.1%	68.0%	19.4%	85.0%	9.3%	6.1%
02-50-14-005	Ocapon	269	789	293.2	0.49	149	5.3	60.0%	50.3%	3.6%	8	2	72.3%	66.5%	21.3%	80.0%	9.1%	15.4%

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (7/24)

Code	Province/ Municipality/ Barangay	Area (ha)	Population (person)	Pop. Density (person/km ²)	Sex Ratio	No. of Household (household)	No. of Household Member (person /household)	Rate of Poverty Pop. (%)	Rate of Age15-64 Pop. (%)	Rate of Age Over 65 (%)	Variety of Religious Group	Variety of Ethnic Group	Rate of Agri. Worker Pop. (%)	Rate of Labor Pop. (%)	Rate of Self- employment Pop. (%)	Literacy Rate (%)	Rate of College Graduate Pop. (%)	Rate of No- education Pop. (%)
14-27-03-017	Pindongan	250	1,127	450.3	0.49	194	5.8	72.1%	49.0%	6.5%	5	5	59.4%	50.0%	35.7%	57.4%	18.8%	13.9%
14-27-03-018	Poblacion	134	1,596	1,195.2	0.50	299	5.3	72.1%	58.6%	6.4%	15	12	22.6%	50.0%	17.7%	18.2%	46.8%	3.5%
14-27-03-020	Tuplac	474	1,207	254.4	0.50	225	5.4	72.1%	49.8%	7.9%	6	8	57.4%	50.0%	34.6%	57.8%	23.9%	12.3%
14-27-03-021	Bolog	2,083	1,341	64.4	0.53	250	5.4	72.1%	49.2%	4.8%	11	8	82.3%	50.0%	45.1%	53.0%	9.0%	16.1%
	Lagawe	23,151	9,724	98.3	0.46	1,891	5.1	72.1%	51.0%	7.4%	5.6	4.4	75.5%	49.6%	42.3%	61.1%	10.0%	16.2%
14-27-04-001	Abinuan	3,015	510	16.9	0.50	104	4.9	72.1%	50.2%	6.0%	4	2	88.9%	50.0%	47.8%	73.0%	2.8%	20.9%
14-27-04-003	Banga	853	110	12.9	0.50	20	5.5	72.1%	47.4%	7.8%	2	2	90.8%	49.1%	46.8%	72.0%	7.6%	22.8%
14-27-04-005	Boliwong	1,114	1,259	113.1	0.50	238	5.3	72.1%	47.5%	10.4%	9	12	64.5%	50.0%	36.0%	57.0%	8.0%	12.8%
14-27-04-006	Burnay	435	927	213.1	0.30	167	5.6	72.1%	51.2%	11.6%	6	6	82.4%	50.0%	44.8%	49.0%	11.8%	16.4%
14-27-04-008	Buyabuyan	2,534	463	18.3	0.50	90	5.1	72.1%	48.8%	6.1%	5	1	91.4%	50.0%	48.9%	75.0%	4.9%	22.9%
14-27-04-009	Caba	1,532	742	48.4	0.29	136	5.5	72.1%	52.3%	6.4%	11	4	61.7%	50.0%	41.1%	44.0%	16.7%	11.8%
14-27-04-010	Cudog	641	1,231	192.1	0.54	251	4.9	72.1%	47.6%	11.0%	9	7	67.1%	50.8%	42.9%	41.0%	15.7%	18.7%
14-27-04-011	Dulao	1,686	438	26.0	0.49	90	4.9	72.0%	51.8%	2.9%	4	6	83.0%	50.0%	45.3%	76.0%	3.8%	13.2%
14-27-04-013	Jucbong	1,845	388	21.0	0.50	82	4.7	72.1%	55.4%	6.9%	5	5	87.5%	50.0%	45.8%	69.0%	13.7%	5.2%
14-27-04-014	Luta	377	173	45.9	0.43	40	4.3	72.1%	55.6%	7.2%	2	2	90.2%	50.0%	48.8%	70.0%	8.6%	19.7%
14-27-04-016	Montabiong	1,331	489	36.8	0.48	107	4.6	72.1%	56.3%	8.3%	4	4	90.4%	50.0%	48.2%	67.0%	8.8%	17.3%
14-27-04-018	Ollicon	2,425	461	19.0	0.36	83	5.6	72.1%	48.3%	7.9%	5	3	69.8%	50.0%	26.7%	74.0%	6.5%	15.5%
14-27-04-020	Poblacion South	135	769	569.7	0.52	148	5.2	72.1%	59.9%	7.7%	14	12	25.2%	42.9%	28.7%	23.0%	33.0%	10.1%
14-27-04-021	Ponghal	598	271	45.3	0.50	50	5.4	72.1%	49.7%	4.1%	3	1	76.6%	50.0%	45.4%	64.0%	3.2%	22.9%
14-27-04-022	Pullaan	956	293	30.7	0.64	50	5.9	72.1%	44.6%	9.4%	3	2	82.8%	50.0%	47.6%	70.0%	5.1%	22.3%
14-27-04-023	Tungnod	275	678	246.1	0.34	127	5.3	72.1%	45.8%	6.3%	5	3	60.1%	50.0%	40.8%	52.0%	10.9%	9.5%
14-27-04-024	Tupaya	3,400	522	15.4	0.49	108	4.8	72.1%	54.3%	5.5%	4	3	70.3%	50.0%	34.2%	62.0%	9.4%	14.2%
	Lamut	12,001	11,379	117.3	0.49	2,160	5.3	72.1%	53.0%	4.6%	7.8	5.3	85.3%	50.4%	45.4%	52.8%	18.0%	10.7%
14-27-05-002	Ambasa	339	506	149.4	0.45	104	4.9	72.1%	51.0%	3.7%	6	4	95.2%	50.0%	48.7%	55.3%	6.7%	19.8%
14-27-05-004	Hapid	1,961	1,226	62.5	0.50	240	5.1	72.1%	55.0%	3.8%	12	4	73.6%	50.0%	41.5%	49.8%	15.8%	14.0%
14-27-05-006	Lucban	400	646	161.3	0.50	123	5.3	72.1%	54.7%	4.4%	3	10	70.2%	50.0%	40.1%	45.4%	20.2%	7.4%
14-27-05-007	Mabatobato(Lamut)	1,251	1,587	126.8	0.49	313	5.1	72.1%	56.5%	6.0%	11	9	82.8%	50.0%	46.0%	55.7%	25.7%	2.9%
14-27-05-008	Magulon	918	1,020	111.1	0.48	197	5.2	72.1%	49.0%	3.7%	9	5	95.7%	51.9%	46.7%	50.2%	6.7%	20.9%
14-27-05-009	Nayon	686	1,045	152.3	0.50	205	5.1	72.1%	53.8%	3.2%	11	7	78.8%	50.2%	42.0%	48.3%	34.7%	7.8%
14-27-05-010	Panopdopan	427	1,010	236.5	0.49	166	6.1	72.1%	55.5%	5.3%	7	6	85.0%	50.1%	45.7%	49.6%	22.1%	6.4%
14-27-05-011	Payawan	2,081	1,110	53.3	0.49	223	5.0	72.1%	55.3%	3.3%	7	4	84.1%	50.0%	45.6%	57.4%	12.3%	6.9%
14-27-05-016	Bimpal	1,073	1,134	105.7	0.49	198	5.7	72.1%	48.0%	5.5%	6	4	82.4%	50.0%	46.1%	54.3%	15.0%	15.9%
14-27-05-017	Holowon	679	562	82.8	0.50	103	5.5	72.1%	59.2%	6.3%	5	3	88.6%	50.0%	47.8%	55.6%	8.1%	4.3%
14-27-05-019	Sanafag	1,521	766	50.4	0.49	157	4.9	72.1%	52.8%	5.6%	9	5	91.9%	50.7%	45.8%	60.3%	11.6%	11.3%
14-27-05-020	Umilag	664	767	115.4	0.50	131	5.9	72.1%	45.0%	4.8%	7	3	94.8%	50.0%	48.8%	52.4%	36.9%	10.5%
	Mavovao	20,316	13,092	107.8	0.57	2,683	4.9	72.1%	52.5%	5.2%	5.9	2.2	82.3%	50.2%	45.7%	58.2%	7.1%	24.0%
14-27-06-001	Aduyongan	385	528	137.0	0.51	105	5.0	72.1%	48.8%	6.4%	4	1	83.0%	50.0%	42.8%	60.0%	1.5%	15.7%
14-27-06-002	Alimit	1,985	561	28.3	0.50	98	5.7	72.1%	56.6%	8.5%	6	1	87.4%	50.0%	46.7%	49.0%	0.7%	31.3%
14-27-06-003	Ayangan	1,167	502	43.0	0.54	107	4.7	72.1%	50.5%	5.9%	7	2	92.9%	49.1%	48.2%	45.0%	0.8%	23.1%
14-27-06-004	Balangbang	606	956	157.9	0.62	211	4.5	72.1%	57.9%	4.9%	7	2	57.8%	52.1%	36.2%	48.0%	8.6%	14.4%
14-27-06-005	Banao	987	502	50.9	0.50	86	5.8	72.1%	48.7%	3.9%	8	3	90.0%	49.5%	47.8%	75.0%	1.0%	42.3%
14-27-06-009	Buninan	576	600	104.1	0.67	117	5.1	72.1%	53.5%	8.3%	8	2	66.2%	50.0%	44.9%	60.0%	9.4%	17.1%
14-27-06-010	Chaya	927	672	72.5	0.58	134	5.0	72.1%	53.1%	7.8%	7	3	98.5%	50.0%	49.7%	50.0%	8.7%	25.3%
14-27-06-011	Chumang	729	701	96.1	0.57	133	5.3	72.1%	56.9%	4.9%	4	2	97.6%	50.9%	49.0%	70.0%	13.3%	20.8%
14-27-06-014	Guinihon	427	414	97.0	0.51	84	4.9	72.1%	45.3%	5.5%	6	3	81.3%	50.0%	42.0%	50.0%	5.7%	20.6%
14-27-06-015	Inwaloy	1,036	300	29.0	0.63	72	4.2	72.1%	54.3%	5.0%	5	2	70.9%	50.0%	46.8%	58.0%	3.8%	28.5%
14-27-06-018	Langayan	441	500	113.5	0.60	100	5.0	72.1%	52.9%	1.1%	5	2	65.8%	50.0%	44.2%	48.0%	2.9%	24.3%
14-27-06-019	Liwo	1,664	311	18.7	0.77	93	3.3	72.1%	58.3%	5.5%	7	2	80.3%	49.8%	46.0%	60.0%	11.6%	20.0%
14-27-06-020	Maga	927	349	37.7	0.53	68	5.1	72.1%	51.8%	4.4%	4	1	96.5%	50.5%	48.8%	54.0%	4.0%	34.6%
14-27-06-021	Magulon	1,745	442	25.3	0.54	87	5.1	72.1%	51.2%	2.2%	6	3	98.2%	50.0%	49.7%	75.0%	3.4%	20.1%
14-27-06-022	Mapawoy	312	649	207.8	0.59	162	4.0	72.1%	56.0%	5.1%	6	4	43.7%	50.0%	46.5%	52.0%	8.0%	24.8%
14-27-06-023	Mayoyao Proper	172	417	242.8	0.50	87	4.8	72.1%	53.4%	9.2%	6	2	96.1%	51.3%	48.3%	60.0%	17.7%	14.8%
14-27-06-024	Mongol	399	432	108.2	0.70	98	4.4	72.1%	51.1%	5.8%	4	1	90.8%	49.6%	48.7%	56.0%	4.1%	20.2%
14-27-06-025	Nalbu	742	412	55.5	0.51	68	6.1	72.1%	48.6%	2.0%	6	1	98.8%	49.9%	49.9%	50.0%	0.0%	35.9%
14-27-06-026	Nattum	2,414	741	30.7	0.57	170	4.4	72.1%	50.4%	5.6%	7	1	87.9%	50.0%	49.5%	58.0%	0.0%	53.7%
14-27-06-027	Palaad	519	330	63.6	0.67	61	5.4	72.1%	47.4%	2.5%	5	1	92.5%	50.0%	48.0%	75.0%	0.9%	13.6%
14-27-06-028	Poblacion	179	874	488.8	0.51	159	5.5	72.1%	56.7%	4.8%	7	7	48.3%	50.0%	27.9%	49.0%	28.5%	9.0%

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (8/24)

Code	Province/ Municipality/ Barangay	Area (ha)	Population (person)	Pop. Density (person/km ²)	Sex Ratio	No. of Household (household)	No. of Household Member (person /household)	Rate of Poverty Pop. (%)	Rate of Age15-64 Pop. (%)	Rate of Age Over 65 (%)	Variety of Religious Group	Variety of Ethnic Group	Rate of Agri. Worker Pop. (%)	Rate of Labor Pop. (%)	Rate of Self- employment Pop. (%)	Literacy Rate (%)	Rate of College Graduate Pop. (%)	Rate of No- education Pop. (%)
14-27-06-030	Talbot	609	461	75.7	0.44	92	5.0	72.1%	51.0%	4.0%	5	2	91.2%	50.0%	47.0%	70.0%	1.4%	12.9%
14-27-06-033	Tulae	253	350	138.5	0.57	74	4.7	72.1%	49.7%	8.2%	5	2	70.5%	50.0%	43.3%	70.0%	10.0%	26.0%
14-27-06-035	Bato-Alatbang	309	689	223.3	0.45	135	5.1	72.1%	53.9%	6.1%	6	4	91.6%	51.1%	46.7%	60.0%	31.9%	12.9%
14-27-06-036	Epeng	807	399	49.5	0.73	82	4.9	72.1%	54.0%	1.5%	6	2	78.5%	50.0%	46.5%	52.0%	0.0%	37.0%
Alfonso Lista (Potia)		1,784	1,177	66.0	0.56	247	4.8	53.0%	57.6%	4.4%	10.0	12.0	66.5%	50.7%	39.3%	60.0%	6.1%	6.3%
14-27-07-018	Santo Domingo(Cabicalan)	1,784	1,177	66.0	0.56	247	4.8	53.0%	57.6%	4.4%	10	12	66.5%	50.7%	39.3%	60.0%	6.1%	6.3%
Aguinaldo		34,591	7,075	61.6	0.52	1,483	4.9	72.1%	51.0%	4.5%	5.9	2.3	95.0%	50.8%	46.6%	56.3%	5.1%	15.7%
14-27-08-002	Bunhian	521	929	178.2	0.70	163	5.7	72.1%	51.9%	4.0%	7	3	98.3%	50.0%	49.2%	54.5%	10.3%	17.8%
14-27-08-006	Galongon	1,567	1,115	71.2	0.48	230	4.8	72.1%	49.7%	4.8%	9	3	88.8%	50.0%	45.2%	14.0%	7.7%	12.4%
14-27-08-007	Halag	7,867	1,882	23.9	0.49	436	4.3	72.1%	56.3%	2.4%	8	3	98.7%	50.0%	49.6%	62.0%	3.0%	11.9%
14-27-08-008	Itab	19,585	895	4.6	0.52	166	5.4	72.1%	55.1%	3.1%	6	1	96.5%	49.5%	48.2%	66.4%	0.0%	12.5%
14-27-08-009	Jacmal	642	604	94.1	0.48	132	4.6	72.1%	46.7%	6.3%	2	2	99.3%	50.0%	49.6%	64.0%	9.1%	11.3%
14-27-08-010	Majlong	983	523	53.2	0.52	100	5.2	72.1%	50.7%	3.4%	5	1	89.2%	50.0%	44.6%	60.0%	2.2%	11.9%
14-27-08-013	Ta-ang	1,428	546	38.2	0.48	129	4.2	72.1%	47.9%	8.3%	5	2	95.1%	57.1%	39.6%	60.0%	6.2%	11.5%
14-27-08-014	Talite	1,998	581	29.1	0.52	127	4.6	72.1%	49.9%	3.5%	5	3	93.9%	50.0%	46.9%	69.7%	2.6%	36.5%
Hingyon		6,430	9,789	209.6	0.50	2,063	4.7	72.1%	50.2%	12.4%	6.8	5.1	78.0%	48.6%	43.1%	65.2%	10.8%	21.3%
14-27-09-001	Anao	292	348	119.0	0.50	102	3.4	72.1%	57.1%	15.6%	5	3	94.1%	48.3%	49.2%	65.0%	9.2%	18.4%
14-27-09-002	Bangtino	479	308	64.3	0.49	70	4.4	72.1%	47.0%	14.4%	3	1	78.0%	39.8%	48.7%	74.0%	4.4%	25.1%
14-27-09-003	Bitu	378	346	91.5	0.49	74	4.7	72.1%	50.3%	14.1%	8	5	75.1%	45.6%	44.8%	68.0%	15.6%	24.4%
14-27-09-004	Cababuyan	154	706	459.1	0.50	147	4.8	72.1%	51.5%	9.7%	10	6	85.0%	50.0%	46.0%	70.0%	10.8%	22.9%
14-27-09-005	Mompolia	657	1,419	215.9	0.50	327	4.3	72.1%	51.2%	12.2%	7	10	85.3%	50.0%	44.8%	72.0%	11.7%	23.1%
14-27-09-006	Namulditan	420	1,026	244.3	0.50	200	5.1	72.1%	49.1%	12.9%	6	7	80.0%	50.0%	43.3%	75.0%	13.5%	19.4%
14-27-09-007	O-ong	769	1,488	193.6	0.50	298	5.0	72.1%	46.2%	10.0%	7	6	75.8%	50.0%	41.3%	69.0%	8.8%	23.5%
14-27-09-008	Piwong	205	1,097	536.4	0.50	204	5.4	72.1%	53.9%	8.2%	8	7	63.6%	49.5%	41.4%	23.0%	3.0%	23.5%
14-27-09-009	Poblacion (Hingyon)	304	970	318.8	0.49	208	4.7	72.1%	50.7%	13.5%	9	4	79.9%	50.0%	44.3%	38.0%	20.1%	9.8%
14-27-09-010	Ubuag	1,083	456	42.1	0.50	96	4.8	72.1%	46.4%	16.2%	4	3	78.2%	50.0%	39.5%	78.0%	9.8%	18.1%
14-27-09-011	Umalbong	1,172	746	63.7	0.50	162	4.6	72.1%	49.1%	11.7%	4	3	72.4%	50.0%	37.2%	77.0%	12.8%	20.3%
14-27-09-012	Northern Cababuyan	517	859	166.3	0.50	175	4.9	72.1%	49.7%	10.6%	10	6	68.2%	50.0%	36.9%	73.0%	9.7%	26.9%
Tinoc		33,185	9,740	48.7	0.50	1,680	5.8	64.2%	49.2%	4.6%	5.8	4.6	94.4%	49.7%	50.2%	51.6%	7.0%	29.5%
14-27-10-001	Ahin	5,529	707	128	0.53	118	6.0	70.0%	47.0%	3.7%	5	5	98.8%	50.0%	49.9%	49.5%	4.1%	18.0%
14-27-10-002	Ap-apid	1,049	621	59.2	0.53	97	6.4	50.0%	46.7%	2.9%	4	5	92.6%	50.0%	50.0%	51.5%	2.0%	20.8%
14-27-10-003	Binablayan	2,310	1,296	56.1	0.52	219	5.9	65.0%	57.9%	3.9%	9	1	93.4%	50.0%	50.0%	48.3%	4.7%	15.2%
14-27-10-004	Danggo	5,978	470	7.9	0.47	84	5.6	60.0%	51.4%	5.5%	5	3	96.7%	50.0%	50.0%	51.1%	1.1%	15.3%
14-27-10-005	Eheb	2,327	372	16.0	0.52	71	5.2	80.0%	42.2%	4.9%	6	3	97.6%	50.0%	49.8%	48.4%	3.7%	25.1%
14-27-10-006	Gumhang	1,504	764	50.8	0.53	124	6.2	70.0%	50.6%	2.6%	4	3	96.6%	50.0%	49.9%	53.2%	1.4%	21.8%
14-27-10-007	Impugong	1,203	904	75.2	0.50	163	5.5	65.0%	47.6%	7.1%	8	6	96.5%	50.1%	49.9%	55.1%	3.8%	31.8%
14-27-10-008	Luhong	5,429	869	16.0	0.50	138	6.3	70.0%	47.7%	5.7%	7	5	96.0%	49.9%	50.1%	52.3%	10.7%	49.6%
14-27-10-009	Tinoc	817	1,609	196.9	0.40	284	5.7	50.0%	48.7%	3.9%	4	8	79.2%	46.7%	52.8%	52.5%	17.0%	30.6%
14-27-10-010	Tukucan	2,068	1,002	48.4	0.50	190	5.3	75.0%	50.3%	5.1%	5	6	96.8%	50.0%	49.8%	54.2%	10.7%	49.4%
14-27-10-011	Tulludan	2,376	509	21.4	0.51	88	5.8	65.0%	48.0%	4.3%	5	4	97.5%	50.0%	50.0%	49.1%	10.7%	44.5%
14-27-10-012	Wangwang	2,595	617	23.8	0.53	104	5.9	50.0%	52.8%	5.4%	7	6	91.6%	50.0%	49.8%	54.5%	13.5%	31.6%
Asipulo		19,508	12,294	81.2	0.50	2,129	5.8	65.0%	52.2%	10.5%	6.0	4.1	92.1%	49.9%	48.8%	70.4%	7.0%	23.5%
14-27-11-001	Amduntog	2,412	1,866	77.4	0.48	314	5.9	65.0%	48.6%	8.1%	9	10	94.5%	50.0%	49.0%	64.0%	16.2%	18.8%
14-27-11-002	Antipolo	818	1,144	139.8	0.48	198	5.8	65.0%	51.3%	5.6%	4	6	91.8%	50.0%	48.3%	74.0%	13.9%	13.2%
14-27-11-003	Camandag	3,046	2,979	97.8	0.51	534	5.6	65.0%	47.9%	3.9%	5	5	92.6%	49.6%	49.5%	70.0%	2.8%	22.9%
14-27-11-004	Cawayan	3,319	1,223	36.9	0.51	221	5.5	65.0%	46.1%	5.5%	4	3	95.0%	50.0%	49.8%	72.0%	1.4%	25.9%
14-27-11-005	Hallap	471	914	194.0	0.51	177	5.2	65.0%	45.7%	4.6%	10	3	90.0%	49.9%	48.2%	65.0%	5.9%	26.2%
14-27-11-006	Namal	2,701	1,576	58.3	0.51	251	6.3	65.0%	45.5%	4.5%	3	2	95.9%	50.0%	48.8%	75.0%	0.8%	37.0%
14-27-11-007	Nungawa	1,620	634	39.1	0.54	97	6.5	65.0%	47.4%	8.5%	5	3	89.8%	50.0%	48.5%	74.0%	10.5%	19.3%
14-27-11-008	Panubtuban	1,362	760	55.8	0.48	133	5.7	65.0%	49.1%	4.3%	6	3	91.5%	50.0%	47.9%	71.0%	1.8%	27.8%
14-27-11-009	Pula	3,759	1,198	31.9	0.52	204	5.9	65.0%	88.3%	50.0%	8	2	88.3%	50.0%	48.9%	69.0%	9.3%	20.6%
Min		104	110	1.7	0.29	20	3.3	0.0%	42.2%	0.0%	1	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Max		26,998	3,945	1,195.2	0.77	792	6.7	100.0%	65.5%	16.2%	15	28	100.0%	100.0%	99.1%	99.0%	46.8%	55.2%
Average		2,097	995	103.1	0.52	196	5.1	46.7%	52.8%	5.2%	7	7	73.0%	51.7%	35.2%	64.9%	7.1%	15.4%
Total		855,706	406,073			80,056												

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (9/24)

Code	Province/ Municipality/ Barangay	Rate of Water Supply Level I (%)	Rate of Water Supply Level II (%)	Rate of Water Supply Level III (%)	Rate of Electricity (%)	Distance to Poblacion (km)	Travel Time to Poblacion (minute)	Existence of Telecom. Facility (1: exist, 0: none)	Existence of Hospital (1: exist, 1: none)	Existence of Clinic (1: exist, 2: none)	Existence of Community Hospital (1: exist, 3: none)	Existence of Rural Health Sta. (1: exist, 4: none)	Existence of Any Medical Facility (1: exist, 5: none)	Ancestral Land (1: exist, 6: none)	Boundary Issue (1: exist, 7: none)	Kaingin Issue (1: exist, 8: none)	Existence of PO (1: exist, 9: none)	Reforestation Project (1: exist, 10: none)	Forest Management Area (1: exist, 11: none)
ISABELA		59.5%	33.7%	0.2%	56.1%	13.8	52.1	12	0	0	1	18	19	0	0	10	5	4	9
	Angadanan	100.0%	0.0%	0.0%	100.0%	4.0	7.0	0	0	0	0	1	1	0	0	0	0	0	0
02-31-02-010	Bunnay	100.0%	0.0%	0.0%	100.0%	4	7	0	0	0	0	1	1	0	0	0	0	0	0
	Gordon	16.2%	25.6%	0.0%	0.5%	15.0	60.0	0	0	0	0	0	0	0	0	0	0	0	0
02-31-09-005	Dallao	32.0%	51.0%	0.0%	0.0%	14	45	0	0	0	0	1	1	0	0	0	0	0	0
02-31-09-018	Taliktik	0.4%	0.1%	0.0%	1.0%	16	75	0	0	0	0	1	1	0	0	0	0	0	0
	Echague	90.5%	9.5%	0.0%	49.2%	23.7	165.8	1	0	0	0	6	6	0	0	3	0	2	3
02-31-12-004	Aromin	100.0%	0.0%	0.0%	60.0%	9	60	0	0	0	0	1	1	0	0	0	0	0	0
02-31-12-005	Babaran	100.0%	0.0%	0.0%	65.0%	5	45	0	0	0	0	1	1	0	0	1	0	0	0
02-31-12-007	Benguet	98.0%	2.0%	0.0%	85.0%	41	120	1	0	0	0	1	1	0	0	1	0	0	1
02-31-12-025	Mabbayad	95.0%	5.0%	0.0%	0.0%	36	320	0	0	0	0	1	1	0	0	0	0	1	0
02-31-12-027	Madadamian	100.0%	0.0%	0.0%	0.0%	30	290	0	0	0	0	1	1	0	0	0	0	1	1
02-31-12-046	San Felipe	50.0%	50.0%	0.0%	85.0%	21	160	0	0	0	0	1	1	0	0	1	0	0	1
	Jones	46.7%	0.0%	0.0%	55.9%	15.9	68.8	4	0	0	0	6	6	0	0	4	2	1	4
02-31-15-014	Dicamay II	28.6%	0.0%	0.0%	90.0%	32	180	1	0	0	0	1	1	0	0	1	1	1	1
02-31-15-017	Divinan	22.8%	0.0%	0.0%	100.0%	7	30	0	0	0	0	0	0	0	0	1	0	0	0
02-31-15-018	Dumawang	37.3%	0.0%	0.0%	100.0%	26	45	1	0	0	0	0	0	0	0	0	0	0	1
02-31-15-021	Linamanan	34.6%	0.0%	0.0%	0.0%	11	120	1	0	0	0	1	1	0	0	0	0	0	0
02-31-15-031	Papan Weste	97.0%	0.0%	0.0%	97.0%	17	60	0	0	0	0	1	1	0	0	1	1	0	1
02-31-15-033	Pongpongan	90.0%	0.0%	0.0%	0.0%	6	15	0	0	0	0	1	1	0	0	0	0	0	0
02-31-15-038	San Sebastian	27.0%	0.0%	0.0%	0.0%	8	40	1	0	0	0	1	1	0	0	1	0	0	1
02-31-15-040	Santa Isabel	36.5%	0.0%	0.0%	60.0%	20	60	0	0	0	0	1	1	0	0	0	0	0	0
	Ramon	20.0%	80.0%	0.0%	95.0%	9.0	30.0	1	0	0	0	1	1	0	0	0	0	0	0
02-31-24-021	General Aquinaldo	20.0%	80.0%	0.0%	95.0%	9	30	1	0	0	0	1	1	0	0	0	0	0	0
	San Agustin	62.9%	35.7%	1.4%	90.4%	14.7	21.3	5	0	0	0	4	4	0	0	2	2	1	1
02-31-27-001	Bautista	90.0%	10.0%	0.0%	70.0%	18	40	0	0	0	0	0	0	0	0	0	1	1	1
02-31-27-003	Dabubu Grande	70.0%	20.0%	10.0%	98.0%	11	15	1	0	0	0	1	1	0	0	0	1	0	0
02-31-27-007	Mapalad	90.0%	10.0%	0.0%	95.0%	16	17	1	0	0	0	0	0	0	0	1	0	0	0
02-31-27-012	Palacian	40.0%	60.0%	0.0%	86.0%	16	30	1	0	0	0	0	0	0	0	0	0	0	0
02-31-27-013	Panang	40.0%	60.0%	0.0%	96.0%	14	16	1	0	0	0	1	1	0	0	1	0	0	0
02-31-27-017	Salay	70.0%	30.0%	0.0%	91.0%	14	16	0	0	0	0	1	1	0	0	0	0	0	0
02-31-27-019	Santo Nino	40.0%	60.0%	0.0%	97.0%	14	15	1	0	0	0	1	1	0	0	0	0	0	0
	San Guillermo	80.0%	85.0%	0.0%	2.0%	14.0	12.0	1	0	0	1	0	1	0	0	1	1	0	1
02-31-28-017	San Francisco Sur	80.0%	85.0%	0.0%	2.0%	14	12	1	0	0	0	1	1	0	0	1	1	0	1
NUEVA VIZCAYA		36.5%	31.5%	13.1%	43.5%	14.4	76.2	69	0	40	1	102	140	24	11	1	65	80	73
	Ambaguio	6.5%	24.8%	30.9%	5.6%	6.8	151.9	3	0	5	0	2	7	1	0	0	1	2	3
02-50-01-001	Ammueg	2.0%	98.0%	0.0%	0.0%	8	90	0	0	0	0	1	1	0	0	0	0	0	1
02-50-01-004	Camandag	0.0%	0.0%	100.0%	0.0%	15	300	0	0	1	0	0	1	0	0	0	0	0	1
02-50-01-005	Labang	0.0%	0.0%	30.0%	0.0%	5	90	1	0	0	0	0	1	0	0	0	0	0	0
02-50-01-006	Napo	0.0%	50.0%	0.0%	5.0%	8	420	0	0	1	0	0	1	1	0	0	0	1	0
02-50-01-007	Poblacion	35.0%	35.0%	7.3%	0.0%	1	45	1	0	0	0	1	1	0	0	0	1	0	0
02-50-01-008	Salingsingan	10.0%	0.0%	0.0%	0.0%	3	90	0	0	1	0	0	1	0	0	0	0	0	0
02-50-01-009	Tiblac	0.0%	0.0%	30.0%	40.0%	13	90	1	0	0	1	0	1	0	0	0	0	1	1
02-50-01-010	Dulli	5.0%	15.0%	0.0%	0.0%	3	90	0	0	0	0	0	0	0	0	0	0	0	0
	Aritao	35.3%	38.2%	4.0%	39.9%	10.3	40.6	6	0	8	0	5	12	0	1	0	7	6	11
02-50-02-002	Beti	49.4%	51.6%	0.0%	100.0%	9	30	1	0	1	0	0	1	0	0	0	0	0	1
02-50-02-003	Bone North	66.9%	33.1%	0.0%	95.0%	1	3	1	0	0	0	1	1	0	0	0	0	0	1
02-50-02-004	Bone South	66.9%	33.1%	0.0%	95.0%	1	3	0	0	0	0	0	0	0	0	0	0	0	1
02-50-02-005	Calititan	68.4%	31.6%	0.0%	95.0%	1	10	1	0	1	0	1	1	0	0	0	0	0	1
02-50-02-006	Comon	47.0%	53.0%	0.0%	98.0%	4	5	1	0	0	0	0	1	0	0	0	1	1	1
02-50-02-008	Darapidap	100.0%	0.0%	0.0%	80.0%	3	3	1	0	1	0	0	1	0	0	0	0	0	0
02-50-02-009	Kirang	27.0%	74.0%	0.0%	100.0%	1	3	1	0	0	0	1	1	0	0	0	1	1	1
02-50-02-012	Santa Clara	26.8%	73.1%	0.0%	0.0%	14	30	0	0	1	0	0	1	0	0	0	0	0	1
02-50-02-014	Tucanon	24.2%	75.8%	0.0%	0.0%	8	90	0	0	1	0	0	1	0	0	0	0	0	0
02-50-02-016	Anayo	5.0%	0.0%	0.0%	0.0%	8	45	0	0	0	0	0	0	0	0	0	1	0	0
02-50-02-017	Baan	5.0%	30.0%	0.0%	5.0%	17	45	0	0	0	0	1	1	0	0	0	1	1	1
02-50-02-018	Balite	2.1%	0.0%	65.0%	0.0%	30	30	0	0	0	0	0	0	0	1	0	1	1	0

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (10/24)

Code	Province/ Municipality/ Barangay	Rate of Water Supply Level I (%)	Rate of Water Supply Level II (%)	Rate of Water Supply Level III (%)	Rate of Electricity (%)	Distance to Poblacion (km)	Travel Time to Poblacion (minute)	Existence of Telecom. Facility (1: exist, 0: none)	Existence of Hospital (1: exist, 1: none)	Existence of Clinic (1: exist, 2: none)	Existence of Community Hospital (1: exist, 3: none)	Existence of Rural Health Sta. (1: exist, 4: none)	Existence of Any Medical Facility (1: exist, 5: none)	Ancestral Land (1: exist, 6: none)	Boundary Issue (1: exist, 7: none)	Kaingin Issue (1: exist, 8: none)	Existence of PO (1: exist, 9: none)	Reforestation Project (1: exist, 10: none)	Forest Management Area (1: exist, 11: none)
02-50-02-019	Canabuan	5.0%	0.0%	0.0%	0.0%	20	2	0	0	0	0	0	0	0	0	0	0	0	0
02-50-02-020	Canarem	6.1%	93.9%	0.0%	5.0%	8	2	0	0	1	0	0	1	0	0	0	0	0	0
02-50-02-021	Latar-Nocnoc-San Fra	100.0%	0.0%	0.0%	5.0%	8	30	0	0	0	0	0	0	0	0	0	0	1	1
02-50-02-022	Ocao-Capinaan	0.0%	0.0%	2.4%	0.0%	14	60	0	0	0	1	1	0	0	0	0	1	0	1
02-50-02-023	Yaway	0.0%	100.0%	0.0%	0.0%	30	300	0	0	1	0	0	1	0	0	0	1	1	1
	Bagabag	70.6%	5.7%	8.3%	76.5%	5.5	13.0	3	0	2	0	2	4	0	0	0	1	2	3
02-50-03-002	Baretbet	80.0%	0.0%	20.0%	40.0%	4	10	0	0	0	0	0	0	0	0	0	0	0	0
02-50-03-003	Careb	87.6%	12.4%	0.0%	71.0%	9	15	1	0	0	0	1	1	0	0	0	1	0	1
02-50-03-012	Santa Lucia	22.8%	0.5%	13.5%	90.0%	5	15	0	0	0	0	1	1	0	0	0	0	1	1
02-50-03-015	Villa Coloma	78.0%	6.0%	16.0%	78.0%	1	3	1	0	1	0	0	1	0	0	0	0	0	0
02-50-03-017	Villaros	70.0%	0.0%	0.0%	85.0%	10	30	0	0	0	0	0	0	0	0	0	0	1	0
02-50-03-018	Tuao South	85.0%	15.0%	0.0%	95.0%	4	5	1	0	1	0	0	1	0	0	0	0	0	1
	Bambang	64.7%	20.3%	7.7%	80.8%	5.9	23.7	10	0	1	0	13	14	0	0	0	4	8	2
02-50-04-001	Abian	10.0%	0.0%	90.0%	100.0%	5	15	1	0	0	0	1	1	0	0	0	0	0	0
02-50-04-002	Abinganan	75.0%	0.0%	0.0%	95.0%	7	15	1	0	0	0	1	1	0	0	0	1	1	0
02-50-04-008	Barat	70.0%	10.0%	20.0%	90.0%	5	20	0	0	0	0	1	1	0	0	0	0	1	0
02-50-04-011	Dullao	100.0%	0.0%	0.0%	80.0%	4	8	1	0	0	0	1	1	0	0	0	0	0	1
02-50-04-013	Indiana	75.0%	0.0%	0.0%	90.0%	7	20	1	0	0	0	1	1	0	0	0	1	0	0
02-50-04-014	Mabuslo	10.0%	90.0%	0.0%	90.0%	12	30	1	0	0	0	1	1	0	0	0	1	1	0
02-50-04-016	Manamtam	30.0%	70.0%	0.0%	37.0%	5	60	0	0	0	0	1	1	0	0	0	0	0	0
02-50-04-017	Mauan	90.0%	0.0%	0.0%	90.0%	8	30	1	0	0	0	1	1	0	0	0	0	1	0
02-50-04-018	Salinas	70.0%	20.0%	0.0%	90.0%	12	30	0	0	0	0	1	1	0	0	0	0	1	0
02-50-04-021	San Antonio South	100.0%	0.0%	0.0%	90.0%	4	10	1	0	0	0	1	1	0	0	0	0	0	0
02-50-04-022	San Fernando	20.0%	80.0%	0.0%	90.0%	3	15	0	0	0	0	1	1	0	0	0	0	1	0
02-50-04-024	Santo Domingo (Taban	80.0%	15.0%	5.0%	90.0%	2	5	1	0	1	0	0	1	0	0	0	0	0	0
02-50-04-025	Pallas	60.0%	20.0%	0.0%	60.0%	0	80	0	0	0	0	1	1	0	0	0	0	1	0
02-50-04-026	Magsaysay Hills	80.0%	0.0%	0.0%	30.0%	6	2	1	0	0	0	0	0	0	0	0	0	0	0
02-50-04-027	Santo Domingo West	100.0%	0.0%	0.0%	90.0%	10	15	1	0	0	0	1	1	0	0	0	1	1	1
	Bayombong	49.0%	21.7%	18.9%	57.8%	5.2	21.9	4	0	0	0	8	8	0	0	0	3	4	2
02-50-05-004	Buenavista (Vista Hi	70.0%	30.0%	0.0%	90.0%	7	10	1	0	0	0	1	1	0	0	0	1	1	1
02-50-05-005	Busilac	15.0%	5.0%	80.0%	90.0%	4	2	0	0	0	0	1	1	0	0	0	0	1	0
02-50-05-009	Magapuy	36.0%	0.0%	0.0%	70.0%	12	30	0	0	0	0	1	1	0	0	0	1	1	0
02-50-05-010	Magsaysay	100.0%	0.0%	0.0%	100.0%	1	10	1	0	0	0	1	1	0	0	0	0	1	0
02-50-05-011	Masoc	10.0%	0.0%	90.0%	80.0%	5	15	1	0	0	0	1	1	0	0	0	1	0	0
02-50-05-012	Paitan	70.0%	30.0%	0.0%	40.0%	3	20	0	0	0	0	1	1	0	0	0	0	0	0
02-50-05-019	Bansing	30.0%	40.0%	0.0%	0.0%	3	30	0	0	0	0	1	1	0	0	0	0	0	0
02-50-05-020	Cabuaan	80.0%	20.0%	0.0%	50.0%	3	60	1	0	0	0	1	1	0	0	0	0	0	0
02-50-05-022	Ipil-Cuneg	30.0%	70.0%	0.0%	0.0%	10	20	0	0	0	0	0	0	0	0	0	0	0	1
	Diadi	45.5%	34.5%	17.5%	43.5%	8.9	47.5	1	0	1	0	4	5	1	0	0	6	7	8
02-50-06-001	Arwas	30.0%	50.0%	20.0%	82.0%	6	30	0	0	0	0	0	0	0	0	0	1	1	1
02-50-06-004	Decabacan	0.0%	75.0%	0.0%	42.0%	10	200	0	0	0	0	1	1	0	0	0	1	0	1
02-50-06-006	Escoting	60.0%	40.0%	0.0%	100.0%	6	30	0	0	1	0	0	1	0	0	0	0	1	1
02-50-06-007	Nagsabaran	95.0%	5.0%	0.0%	90.0%	7	10	0	0	0	0	1	1	0	0	0	1	1	0
02-50-06-009	Pinya	100.0%	0.0%	0.0%	0.0%	7	45	0	0	0	0	1	1	0	0	0	0	1	1
02-50-06-011	Ampakling	75.0%	0.0%	25.0%	0.0%	16	30	0	0	0	0	0	0	0	0	0	0	0	1
02-50-06-012	Butao	75.0%	25.0%	0.0%	41.0%	12	60	0	0	0	0	0	0	0	0	0	0	0	1
02-50-06-013	Langca	0.0%	50.0%	50.0%	0.0%	7	20	0	0	0	0	0	0	0	0	0	1	1	0
02-50-06-014	Lurad	0.0%	100.0%	0.0%	30.0%	8	40	1	0	0	0	1	1	0	0	0	1	1	1
02-50-06-015	Rosario	20.0%	0.0%	80.0%	0.0%	10	10	0	0	0	0	0	0	1	0	0	1	1	1
	Dupax Del Norte	43.1%	53.4%	0.0%	56.2%	23.0	108.3	9	0	0	0	13	13	3	0	1	9	7	8
02-50-07-002	Belance	0.0%	100.0%	0.0%	75.0%	57	150	1	0	0	0	1	1	0	0	0	0	0	0
02-50-07-003	Bulala	100.0%	0.0%	0.0%	0.0%	20	90	0	0	0	0	1	1	0	0	0	1	1	0
02-50-07-009	Inaban	10.0%	90.0%	0.0%	95.0%	1	3	1	0	0	0	1	1	0	0	0	1	0	1
02-50-07-012	Mabasa	95.0%	5.0%	0.0%	95.0%	7	60	1	0	0	0	1	1	0	0	0	1	1	1
02-50-07-013	Malasin (Pob.)	80.0%	20.0%	0.0%	95.0%	0	0	1	0	0	0	1	1	0	0	0	1	0	1
02-50-07-015	Munguia	20.0%	80.0%	0.0%	80.0%	7	10	1	0	0	0	1	1	0	0	0	1	1	1
02-50-07-016	Oyao	0.0%	60.0%	0.0%	50.0%	20	150	1	0	0	0	1	1	0	0	0	1	0	1

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (11/24)

Code	Province/ Municipality/ Barangay	Rate of Water Supply Level I (%)	Rate of Water Supply Level II (%)	Rate of Water Supply Level III (%)	Rate of Electricity (%)	Distance to Poblacion (km)	Travel Time to Poblacion (minute)	Existence of Telecom. Facility (1: exist, 0: none)	Existence of Hospital (1: exist, 1: none)	Existence of Clinic (1: exist, 2: none)	Existence of Community Hospital (1: exist, 3: none)	Existence of Rural Health Sta. (1: exist, 4: none)	Existence of Any Medical Facility (1: exist, 5: none)	Ancestral Land (1: exist, 6: none)	Boundary Issue (1: exist, 7: none)	Kaingin Issue (1: exist, 8: none)	Existence of PO (1: exist, 9: none)	Reforestation Project (1: exist, 10: none)	Forest Management Area (1: exist, 11: none)
02-50-07-018	New Gumiad	0.0%	100.0%	0.0%	100.0%	58	540	0	0	0	0	1	1	1	0	0	0	0	0
02-50-07-019	Yabbi	100.0%	0.0%	0.0%	0.0%	0	45	0	0	0	0	1	1	1	0	0	0	0	0
02-50-07-020	Binnuangan	0.0%	100.0%	0.0%	0.0%	60	180	1	0	0	0	1	1	1	0	1	1	1	1
02-50-07-021	Bitnong	25.1%	69.0%	0.0%	75.0%	12	30	0	0	0	0	1	1	0	0	0	1	1	1
02-50-07-022	Macabenga	100.0%	0.0%	0.0%	15.0%	50	120	1	0	0	0	1	1	0	0	0	1	1	0
02-50-07-023	Parai	30.0%	70.0%	0.0%	50.0%	7	30	1	0	0	0	1	1	0	0	0	0	1	1
	Dupax Del Sur	39.4%	30.3%	14.7%	39.6%	25.3	104.6	4	0	0	0	13	13	5	0	0	6	10	3
02-50-08-001	Abaca	40.0%	0.0%	0.0%	0.0%	82	260	1	0	0	0	1	1	1	0	0	1	1	0
02-50-08-003	Banila	60.0%	40.0%	0.0%	16.0%	15	150	0	0	0	0	1	1	0	0	0	0	1	0
02-50-08-004	Carolotan	10.0%	30.0%	60.0%	0.0%	9	30	0	0	0	0	1	1	1	0	0	0	1	1
02-50-08-008	Ganao (Lingad)	0.0%	75.0%	0.0%	2.0%	25	120	0	0	0	0	1	1	1	0	0	1	1	0
02-50-08-011	Mangayang	100.0%	0.0%	0.0%	100.0%	4	10	0	0	0	0	1	1	0	0	0	0	0	0
02-50-08-012	Palabotan	95.0%	0.0%	0.0%	80.0%	3	10	0	0	0	0	1	1	0	0	0	0	0	0
02-50-08-013	Biruk	0.0%	25.0%	0.0%	0.0%	34	240	0	0	0	0	1	1	0	0	0	0	1	0
02-50-08-014	Bagumbayan	95.0%	0.0%	5.0%	95.0%	0	2	1	0	0	0	1	1	0	0	0	0	0	1
02-50-08-015	Balsain	80.0%	0.0%	20.0%	90.0%	0	5	1	0	0	0	0	0	0	0	0	1	1	0
02-50-08-016	Canabay	0.0%	60.0%	40.0%	0.0%	15	120	0	0	0	0	0	0	0	0	0	0	1	0
02-50-08-017	Domang	70.0%	0.0%	30.0%	100.0%	0	5	0	0	0	0	1	1	0	0	0	1	1	0
02-50-08-018	Dopaj	20.0%	0.0%	80.0%	99.0%	0	1	1	0	0	0	1	1	0	0	0	1	1	1
02-50-08-019	Kimbutan	0.0%	100.0%	0.0%	2.0%	45	240	0	0	0	0	1	1	1	0	0	0	0	0
02-50-08-020	Kinabuan	0.0%	80.0%	0.0%	0.0%	20	60	0	0	0	0	1	1	0	0	0	0	0	0
02-50-08-021	Sanguit	60.0%	0.0%	0.0%	0.0%	30	180	0	0	0	0	0	0	0	0	0	0	0	0
02-50-08-023	Talbek	0.0%	75.0%	0.0%	50.0%	124	240	0	0	0	0	1	1	1	0	0	1	1	0
	Kasibu	12.1%	50.2%	23.5%	9.1%	17.4	118.5	4	0	16	1	2	17	5	4	0	7	6	9
02-50-09-001	Antutot	5.0%	65.0%	0.0%	7.0%	12	30	0	0	1	0	0	1	0	0	0	0	0	0
02-50-09-002	Alimit	0.0%	100.0%	0.0%	0.0%	36	240	0	0	0	0	0	0	0	0	0	0	0	0
02-50-09-003	Poblacion (Alloy)	40.0%	60.0%	0.0%	11.0%	4	20	1	0	1	1	1	1	0	0	0	0	0	0
02-50-09-004	Bilet	0.0%	10.0%	90.0%	0.0%	24	240	0	0	1	0	0	1	0	1	0	0	0	0
02-50-09-005	Binogawan	0.0%	100.0%	0.0%	0.0%	23	120	0	0	1	0	0	1	0	0	0	0	0	0
02-50-09-006	Bua	50.0%	0.0%	40.0%	0.0%	7	50	0	0	1	0	0	1	0	0	0	0	0	1
02-50-09-007	Biyoy	90.0%	10.0%	0.0%	0.0%	32	120	0	0	1	0	0	1	0	0	0	1	0	1
02-50-09-008	Capisaan	0.0%	100.0%	0.0%	1.0%	14	90	0	0	0	0	1	1	0	0	0	1	0	0
02-50-09-009	Cordon	50.0%	50.0%	0.0%	19.0%	7	30	0	0	1	0	0	1	0	0	0	0	0	0
02-50-09-010	Didipio	0.0%	100.0%	0.0%	30.0%	30	420	0	0	0	0	0	0	0	0	0	0	0	0
02-50-09-011	Dine	0.0%	0.0%	100.0%	0.0%	14	90	0	0	0	0	0	0	1	0	0	1	0	0
02-50-09-012	Kakiduguen	0.0%	100.0%	0.0%	0.0%	38	60	0	0	0	0	0	0	0	1	0	0	0	0
02-50-09-014	Lupa	5.0%	0.0%	90.0%	0.0%	7	80	0	0	1	0	0	1	1	0	0	0	0	1
02-50-09-015	Macalong	5.0%	95.0%	0.0%	39.0%	8	90	0	0	1	0	0	1	0	0	0	1	0	1
02-50-09-016	Malabing	30.0%	20.0%	0.0%	30.0%	18	90	0	0	0	0	0	0	0	0	0	0	0	0
02-50-09-017	Muta	0.0%	0.0%	40.0%	0.0%	9	40	0	0	0	0	0	0	0	0	0	1	1	0
02-50-09-018	Pao	0.0%	100.0%	0.0%	0.0%	28	360	0	0	1	0	0	1	1	1	0	0	0	0
02-50-09-019	Papaya	0.0%	100.0%	0.0%	11.0%	16	40	0	0	0	0	0	0	0	0	0	0	1	1
02-50-09-020	Pudi	25.0%	25.0%	50.0%	25.0%	2	180	0	0	0	0	0	0	0	0	0	0	0	0
02-50-09-021	Tokod	0.0%	10.0%	90.0%	0.0%	32	180	0	0	0	0	0	0	0	1	0	0	0	0
02-50-09-022	Seguem	0.0%	0.0%	60.0%	0.0%	8	45	0	0	0	0	0	0	1	0	0	0	1	0
02-50-09-023	Tadji	0.0%	100.0%	0.0%	0.0%	25	60	0	0	1	0	0	1	0	0	0	0	0	1
02-50-09-024	Wangal	2.0%	0.0%	0.0%	21.0%	19	90	0	0	1	0	0	1	0	0	0	0	0	0
02-50-09-025	Watwat	5.0%	95.0%	0.0%	14.0%	2	60	1	0	1	0	0	1	0	0	0	0	1	1
02-50-09-026	Camamasi	0.0%	80.0%	0.0%	0.0%	28	340	0	0	0	0	0	0	0	0	0	0	0	0
02-50-09-027	Catarawan	0.0%	100.0%	0.0%	0.0%	26	150	0	0	1	0	0	1	0	0	0	0	0	0
02-50-09-028	Nantawacan	0.0%	25.0%	65.0%	0.0%	35	180	1	0	0	0	0	0	0	0	0	1	1	1
02-50-09-029	Alloy	5.0%	0.0%	0.0%	19.0%	3	0	1	0	0	0	0	0	0	0	0	0	0	0
02-50-09-030	Kongkong	50.0%	50.0%	0.0%	44.0%	7	30	0	0	1	0	0	1	0	0	0	0	0	1
02-50-09-031	Pacquet (Illongot Re	0.0%	10.0%	80.0%	2.0%	10	30	0	0	1	0	0	1	1	0	0	1	1	0
	Kayapa	60.4%	40.1%	0.0%	7.1%	19.7	195.5	8	0	0	0	22	22	2	2	0	8	12	3
02-50-10-001	Acacia	20.0%	80.0%	0.0%	0.0%	48	60	0	0	0	0	1	1	0	0	0	1	1	0
02-50-10-002	Amilong Labeng	100.0%	0.0%	0.0%	0.0%	10	180	0	0	0	0	1	1	0	0	0	0	0	0

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (12/24)

Code	Province/ Municipality/ Barangay	Rate of Water Supply Level I (%)	Rate of Water Supply Level II (%)	Rate of Water Supply Level III (%)	Rate of Electricity (%)	Distance to Poblacion (km)	Travel Time to Poblacion (minute)	Existence of Telecom. Facility (1: exist, 0: none)	Existence of Hospital (1: exist, 1: none)	Existence of Clinic (1: exist, 2: none)	Existence of Community Hospital (1: exist, 3: none)	Existence of Rural Health Sta. (1: exist, 4: none)	Existence of Any Medical Facility (1: exist, 5: none)	Ancestral Land (1: exist, 6: none)	Boundary Issue (1: exist, 7: none)	Kaingin Issue (1: exist, 8: none)	Existence of PO (1: exist, 9: none)	Reforestation Project (1: exist, 10: none)	Forest Management Area (1: exist, 11: none)
02-50-10-004	Baan	75.0%	25.0%	0.0%	11.0%	20	60	1	0	0	0	1	1	0	0	0	1	1	1
02-50-10-005	Babadi	100.0%	0.0%	0.0%	0.0%	27	500	0	0	0	0	1	1	1	1	0	0	0	0
02-50-10-006	Balangabang	0.0%	100.0%	0.0%	0.0%	5	60	0	0	0	0	1	1	0	0	0	0	1	0
02-50-10-007	Banao	100.0%	0.0%	0.0%	0.0%	35	600	1	0	0	0	1	1	0	0	0	0	0	0
02-50-10-008	Binalian	60.0%	50.0%	0.0%	0.0%	12	180	0	0	0	0	1	1	0	0	0	0	1	0
02-50-10-010	Cabalatan-Alang	75.0%	25.0%	0.0%	0.0%	20	290	1	0	0	0	1	1	0	0	0	0	1	0
02-50-10-011	Cabanglasan	80.0%	20.0%	0.0%	10.0%	13	30	0	0	0	0	1	1	0	0	0	0	0	0
02-50-10-012	Kayapa-Proper East	0.0%	100.0%	0.0%	0.0%	13	60	0	0	0	0	1	1	0	0	0	0	0	0
02-50-10-014	Mapayao	90.0%	10.0%	0.0%	0.0%	32	240	0	0	0	0	1	1	0	1	0	1	1	0
02-50-10-015	Nansiakan	20.0%	80.0%	0.0%	0.0%	25	350	0	0	0	0	1	1	0	0	0	0	0	0
02-50-10-017	Pangawan	0.0%	100.0%	0.0%	0.0%	7	20	0	0	0	0	1	1	0	0	0	0	0	0
02-50-10-018	Pinayag	95.0%	5.0%	0.0%	0.0%	54	180	1	0	0	0	1	1	0	0	0	1	0	0
02-50-10-019	Pingkian	95.0%	5.0%	0.0%	50.0%	16	90	1	0	0	0	1	1	0	0	0	1	1	1
02-50-10-020	San Fabian	78.0%	22.0%	0.0%	80.0%	21	80	1	0	0	0	1	1	0	0	0	1	1	0
02-50-10-024	Balete	90.0%	10.0%	0.0%	0.0%	2	45	1	0	0	0	1	1	0	0	0	0	1	0
02-50-10-025	Buyasyas	80.0%	20.0%	0.0%	0.0%	21	120	1	0	0	0	1	1	0	0	0	1	1	0
02-50-10-026	Cabuyao	95.0%	5.0%	0.0%	0.0%	12	480	0	0	0	0	1	1	0	0	0	0	0	0
02-50-10-027	Castillo Village	0.0%	100.0%	0.0%	5.0%	3	5	0	0	0	0	1	1	0	0	0	0	1	0
02-50-10-028	Latbang	75.0%	0.0%	0.0%	0.0%	32	550	0	0	0	0	1	1	0	0	0	0	0	0
02-50-10-030	Tidang Village	0.0%	100.0%	0.0%	0.0%	5	120	0	0	0	0	1	1	1	0	0	1	1	1
	Quezon	33.7%	21.1%	12.9%	44.3%	8.5	48.3	4	0	1	0	4	5	0	1	0	4	6	8
02-50-11-001	Aurora	100.0%	0.0%	0.0%	0.0%	3	10	1	0	0	0	0	0	0	0	0	0	0	1
02-50-11-002	Baresbes	99.0%	1.0%	0.0%	97.0%	8	15	1	0	0	0	1	1	0	0	0	0	0	0
02-50-11-003	Buliwao	90.0%	0.0%	0.0%	95.0%	4	10	0	0	0	0	0	0	0	0	0	0	0	0
02-50-11-004	Bonifacio	50.0%	2.0%	0.0%	0.0%	10	210	0	0	0	0	0	0	0	0	0	0	1	1
02-50-11-005	Calaocan	10.0%	0.0%	0.0%	20.0%	4	10	0	0	1	0	0	1	0	0	0	1	1	1
02-50-11-006	Caliat (Pob.)	0.0%	0.0%	35.0%	0.0%	6	15	1	0	0	0	1	1	0	0	0	1	1	1
02-50-11-007	Darubba	0.0%	100.0%	0.0%	0.0%	3	5	0	0	0	0	1	1	0	0	0	1	0	0
02-50-11-008	Maddiangat	0.0%	50.0%	0.0%	95.0%	6	45	1	0	0	0	1	1	0	0	0	0	0	1
02-50-11-009	Nalubbunan	0.0%	40.0%	0.0%	35.0%	4	20	0	0	0	0	0	0	0	1	0	1	1	1
02-50-11-010	Runruno	5.0%	30.0%	0.0%	60.0%	25	90	0	0	0	0	0	0	0	0	0	0	1	1
02-50-11-011	Massin	20.0%	30.0%	50.0%	0.0%	5	30	0	0	0	0	0	0	0	0	0	0	0	0
02-50-11-012	Dagupan	30.0%	0.0%	70.0%	40.0%	25	120	0	0	0	0	0	0	0	0	0	0	1	1
	Sta. Fe	4.5%	41.0%	16.3%	40.1%	11.7	46.6	6	0	6	0	1	7	7	2	0	6	8	7
02-50-12-002	Bacneng	30.0%	50.0%	0.0%	100.0%	4	20	0	0	1	0	0	1	0	0	0	0	0	0
02-50-12-003	Baliling	33.3%	33.3%	33.3%	1.0%	5	7	1	0	1	0	0	1	0	0	0	1	1	1
02-50-12-004	Bantinan	0.0%	0.0%	0.0%	0.0%	44	90	0	0	1	0	0	1	1	0	0	0	0	1
02-50-12-005	Baracbac	0.0%	14.0%	0.0%	50.0%	1	3	0	0	1	0	0	1	0	0	0	0	0	1
02-50-12-006	Buyasyas	0.0%	0.0%	0.0%	0.0%	16	120	0	0	1	0	0	1	0	0	0	1	1	1
02-50-12-008	Imugan	0.0%	95.0%	0.0%	98.0%	7	30	1	0	1	0	0	1	1	0	0	1	1	1
02-50-12-010	Sinapaoan	0.0%	0.0%	50.0%	12.0%	7	20	1	0	0	0	0	0	1	0	0	0	0	1
02-50-12-011	Tactac	0.0%	95.0%	5.0%	100.0%	6	10	1	0	0	0	1	1	0	1	0	1	0	0
02-50-12-012	Villa Flores	0.0%	0.0%	100.0%	90.0%	1	3	1	0	0	0	0	0	0	0	0	0	0	0
02-50-12-013	Atbu	0.0%	60.0%	0.0%	40.0%	10	60	0	0	0	0	0	0	1	1	0	0	1	0
02-50-12-014	Balete	0.0%	26.0%	0.0%	60.0%	6	20	0	0	0	0	0	0	0	0	0	1	1	1
02-50-12-015	Canabuan	0.0%	0.0%	0.0%	0.0%	30	120	0	0	0	0	0	0	1	0	0	0	1	0
02-50-12-016	Malico	0.0%	100.0%	0.0%	50.0%	13	60	1	0	0	0	0	0	1	0	0	1	1	0
02-50-12-018	Unib	0.0%	100.0%	0.0%	0.0%	14	90	0	0	0	0	0	0	1	0	0	0	1	0
	Solano	42.5%	0.0%	0.0%	72.0%	5.1	21.3	3	0	0	0	4	4	0	0	0	1	1	0
02-50-13-001	Aggub	0.0%	0.0%	0.0%	95.0%	5	20	1	0	0	0	1	1	0	0	0	0	0	0
02-50-13-002	Bangaan	70.0%	0.0%	0.0%	87.0%	0	20	1	0	0	0	1	1	0	0	0	1	0	0
02-50-13-004	Bascaran	100.0%	0.0%	0.0%	100.0%	4	10	0	0	0	0	1	1	0	0	0	0	1	0
02-50-13-021	Communal	0.0%	0.0%	0.0%	6.0%	12	35	1	0	0	0	1	1	0	0	0	0	0	0
	Villaverd	24.7%	45.6%	27.7%	13.6%	5.2	16.6	1	0	0	0	4	4	0	0	0	2	1	4
02-50-14-003	Cabuluan	5.0%	50.0%	45.0%	0.0%	9	15	0	0	0	0	1	1	0	0	0	0	0	1
02-50-14-004	Nagbitin	13.4%	47.1%	39.4%	45.0%	5	20	0	0	0	0	1	1	0	0	0	1	0	1
02-50-14-005	Ocapon	15.0%	85.0%	0.0%	5.0%	7	30	0	0	0	0	1	1	0	0	0	0	0	0

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (13/24)

Code	Province/ Municipality/ Barangay	Rate of Water Supply Level I (%)	Rate of Water Supply Level II (%)	Rate of Water Supply Level III (%)	Rate of Electricity (%)	Distance to Poblacion (km)	Travel Time to Poblacion (minute)	Existence of Telecom. Facility (1: exist, 0: none)	Existence of Hospital (1: exist, 1: none)	Existence of Clinic (1: exist, 2: none)	Existence of Community Hospital (1: exist, 3: none)	Existence of Rural Health Sta. (1: exist, 4: none)	Existence of Any Medical Facility (1: exist, 5: none)	Ancestral Land (1: exist, 6: none)	Boundary Issue (1: exist, 7: none)	Kaingin Issue (1: exist, 8: none)	Existence of PO (1: exist, 9: none)	Reforestation Project (1: exist, 10: none)	Forest Management Area (1: exist, 11: none)
02-50-14-007	Sawmill	0.0%	46.0%	54.0%	9.0%	4	15	0	0	0	0	0	0	0	0	0	1	0	1
02-50-14-009	Bintawan Notre	90.0%	0.0%	0.0%	9.0%	2	3	1	0	0	0	1	1	0	0	0	0	0	1
	Alfonso Castaneda	16.0%	46.0%	14.0%	66.0%	58.2	185.4	3	0	0	0	5	5	0	1	0	0	0	2
02-50-15-002	Galintuja	0.0%	100.0%	0.0%	100.0%	3	80	1	0	0	0	1	1	0	0	0	0	0	0
02-50-15-003	Cauayan	50.0%	0.0%	0.0%	0.0%	130	420	0	0	0	0	1	1	0	1	0	0	0	0
02-50-15-004	Lipuga	0.0%	100.0%	0.0%	100.0%	120	360	1	0	0	0	1	1	0	0	0	0	0	0
02-50-15-005	Lublub (Pop.)	30.0%	0.0%	0.0%	80.0%	0	60	1	0	0	0	1	1	0	0	0	0	0	1
02-50-15-006	Pelaway	0.0%	30.0%	70.0%	50.0%	38	7	0	0	0	0	1	1	0	0	0	0	0	1
	QUIRINO	46.6%	33.3%	5.2%	37.6%	17.3	62.5	9	0	13	0	27	40	11	5	2	34	25	41
	Aglipay	53.5%	25.0%	3.6%	36.4%	13.2	41.8	0	0	2	0	5	7	0	1	1	11	7	13
02-57-01-001	Dagupan	80.0%	20.0%	0.0%	100.0%	5	30	0	0	0	0	1	1	0	0	0	1	1	1
02-57-01-002	Dumabel	48.5%	0.0%	0.0%	10.0%	5	20	0	0	0	0	0	0	0	1	0	1	0	1
02-57-01-003	Dungo (Osme.a)	20.0%	0.0%	0.0%	60.0%	15	35	0	0	0	0	1	1	0	0	0	0	0	0
02-57-01-006	Palacion	90.0%	0.0%	0.0%	85.0%	2	15	0	0	0	0	1	1	0	0	0	0	0	1
02-57-01-013	San Leonardo (Cabarroguis)	100.0%	0.0%	0.0%	95.0%	1	10	0	0	1	0	0	1	0	0	0	1	0	1
02-57-01-014	San Ramon	80.0%	0.0%	0.0%	30.0%	11	20	0	0	0	0	0	0	0	0	0	1	0	1
02-57-01-015	Victoria	20.0%	30.0%	50.0%	70.0%	8	20	0	0	0	0	1	1	0	0	1	1	1	1
02-57-01-018	Alicia	10.0%	90.0%	0.0%	0.0%	36	5	0	0	0	0	0	0	0	0	0	1	0	1
02-57-01-019	Cabugao	90.0%	10.0%	0.0%	30.0%	7	30	0	0	0	0	0	0	0	0	0	0	1	0
02-57-01-020	Diodol	0.0%	10.0%	0.0%	0.0%	11	20	0	0	0	0	0	0	0	0	0	1	1	1
02-57-01-021	Nagabagan	100.0%	0.0%	0.0%	0.0%	37	90	0	0	0	0	0	0	0	0	0	0	1	1
02-57-01-023	San Benigno	0.0%	100.0%	0.0%	0.0%	31	240	0	0	1	0	0	1	0	0	0	1	1	1
02-57-01-024	San Manuel	10.0%	90.0%	0.0%	30.0%	15	40	0	0	0	0	1	1	0	0	0	1	1	1
02-57-01-025	Villa Ventura	100.0%	0.0%	0.0%	0.0%	4	10	0	0	0	0	0	0	0	0	0	1	1	1
	Cabarrogu	44.0%	48.0%	0.0%	51.0%	17.0	72.0	0	0	0	0	5	5	1	0	0	0	1	4
02-57-02-003	Calaocan	90.0%	10.0%	0.0%	70.0%	16	60	0	0	0	0	1	1	0	0	0	0	0	1
02-57-02-005	Dibibi	20.0%	80.0%	0.0%	50.0%	30	30	0	0	0	0	1	1	0	0	0	0	0	1
02-57-02-006	Eden	30.0%	30.0%	0.0%	60.0%	9	30	0	0	0	0	1	1	1	0	0	0	0	1
02-57-02-014	Dingasan	20.0%	80.0%	0.0%	0.0%	15	180	0	0	0	0	1	1	0	0	0	0	0	1
02-57-02-015	Tucod	60.0%	40.0%	0.0%	75.0%	15	60	0	0	0	0	1	1	0	0	0	0	1	0
	Diffun	29.4%	42.7%	5.6%	30.4%	18.6	80.0	1	0	5	0	0	5	0	3	0	5	6	6
02-57-03-004	Baguio Village	0.0%	100.0%	0.0%	70.0%	27	60	0	0	1	0	0	1	0	0	0	0	1	1
02-57-03-008	Campamento	0.0%	0.0%	0.0%	33.0%	18	60	0	0	1	0	0	1	0	0	0	0	1	1
02-57-03-010	Don Mariano Perez. S	0.0%	0.0%	50.0%	2.0%	26	240	0	0	0	0	0	0	0	0	0	1	1	1
02-57-03-012	Dumanisi	100.0%	0.0%	0.0%	60.0%	9	30	0	0	0	0	0	0	0	0	0	1	1	0
02-57-03-016	Ifgao Village	0.0%	100.0%	0.0%	40.0%	25	60	0	0	1	0	0	1	0	1	0	1	1	1
02-57-03-021	Magsaysay	10.0%	90.0%	0.0%	23.0%	12	60	1	0	1	0	0	1	0	1	0	1	0	0
02-57-03-022	Makate	100.0%	0.0%	0.0%	16.0%	18	90	0	0	0	0	0	0	0	0	0	1	1	1
02-57-03-024	Rafael Palma (Don Sergio Osme)	45.0%	4.0%	0.0%	30.0%	16	30	0	0	1	0	0	1	0	1	0	0	0	1
02-57-03-032	Gregorio Pimentel	10.0%	90.0%	0.0%	0.0%	16	90	0	0	0	0	0	0	0	0	0	0	0	0
	Madella	45.3%	33.1%	14.1%	46.5%	11.6	43.6	4	0	3	0	9	12	3	0	1	8	6	12
02-57-04-004	Divisoria Sur (Bisangal)	50.0%	50.0%	0.0%	100.0%	8	20	1	0	0	0	1	1	1	0	0	0	0	1
02-57-04-007	Cabua-an	0.0%	100.0%	0.0%	0.0%	5	30	0	0	0	0	1	1	0	0	0	0	1	1
02-57-04-008	Cocfaviille	60.0%	40.0%	0.0%	20.0%	9	25	1	0	0	0	1	1	0	0	0	1	0	1
02-57-04-010	Dipintin	0.0%	75.0%	25.0%	90.0%	9	30	0	0	1	0	0	1	0	0	0	0	0	1
02-57-04-011	Divisoria Notre	80.0%	0.0%	0.0%	20.0%	10	30	0	0	0	0	1	1	0	0	0	1	1	1
02-57-04-012	Dumabato Notre	5.0%	95.0%	0.0%	0.0%	3	15	0	0	1	0	0	1	0	0	0	0	0	0
02-57-04-015	Manglad	100.0%	0.0%	0.0%	100.0%	2	5	1	0	0	0	0	0	0	0	0	1	1	1
02-57-04-021	San Dionisio I	90.0%	10.0%	0.0%	100.0%	32	2	0	0	0	0	1	1	0	0	0	0	0	1
02-57-04-023	San Martin	40.0%	60.0%	0.0%	80.0%	30	1	0	0	0	0	0	0	0	0	0	0	0	0
02-57-04-024	San Pedro	0.0%	0.0%	100.0%	95.0%	12	180	0	0	0	0	1	1	1	0	0	1	0	1
02-57-04-026	Santo Ni O	100.0%	0.0%	0.0%	25.0%	3	15	0	0	1	0	0	1	0	0	0	0	0	1
02-57-04-027	Santo Tomas	100.0%	0.0%	0.0%	14.0%	10	30	0	0	0	0	1	1	0	0	1	0	1	0
02-57-04-028	Villa Gracia	100.0%	0.0%	0.0%	0.0%	12	180	1	0	0	0	1	1	1	0	0	1	0	1
02-57-04-032	Ysmael	0.0%	100.0%	0.0%	100.0%	22	60	0	0	0	0	1	1	0	0	0	1	0	0
02-57-04-034	Villa Agullana	0.0%	0.0%	0.0%	0.0%	8	30	0	0	0	0	0	0	0	0	0	1	1	1
02-57-04-037	Villa Jose V Ylanan	0.0%	0.0%	100.0%	0.0%	13	45	0	0	0	0	0	0	0	0	0	1	1	1

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (14/24)

Code	Province/ Municipality/ Barangay	Rate of Water Supply Level I (%)	Rate of Water Supply Level II (%)	Rate of Water Supply Level III (%)	Rate of Electricity (%)	Distance to Poblacion (km)	Travel Time to Poblacion (minute)	Existence of Telecom. Facility (1: exist, 0: none)	Existence of Hospital (1: exist, 1: none)	Existence of Clinic (1: exist, 2: none)	Existence of Community Hospital (1: exist, 3: none)	Existence of Rural Health Sta. (1: exist, 4: none)	Existence of Any Medical Facility (1: exist, 5: none)	Ancestral Land (1: exist, 6: none)	Boundary Issue (1: exist, 7: none)	Kaingin Issue (1: exist, 8: none)	Existence of PO (1: exist, 9: none)	Reforestation Project (1: exist, 10: none)	Forest Management Area (1: exist, 11: none)
	Nagtipuna	60.8%	17.6%	2.7%	23.9%	26.3	75.0	4	0	3	0	8	11	7	1	0	10	5	6
02-57-06-001	Anak	14.0%	59.0%	0.0%	6.0%	19	45	0	0	0	0	1	1	0	0	0	1	0	1
02-57-06-002	Dipantan	80.0%	20.0%	0.0%	63.0%	11	30	1	0	0	0	1	1	0	0	0	1	1	1
02-57-06-003	Dissimungal	88.5%	24.3%	0.0%	0.0%	25	60	1	0	0	0	1	1	1	0	0	1	1	1
02-57-06-004	Guino (Giayan)	76.8%	13.4%	9.9%	0.0%	25	80	0	0	0	0	0	0	1	0	0	0	0	0
02-57-06-005	La Conwap (Guingin)	88.0%	12.0%	0.0%	0.0%	58	0	0	0	0	0	1	1	0	0	0	0	0	0
02-57-06-006	Landingan	60.0%	40.0%	0.0%	40.0%	13	0	0	1	0	0	1	1	1	0	0	1	1	0
02-57-06-007	Mataddi	100.0%	0.0%	0.0%	0.0%	65	240	0	0	0	0	1	1	0	0	0	1	0	0
02-57-06-008	Matmad	100.0%	0.0%	0.0%	0.0%	90	360	0	0	0	0	0	0	1	0	0	1	0	0
02-57-06-010	Ponggo	100.0%	0.0%	0.0%	75.0%	2	5	0	0	0	0	1	1	0	0	0	0	0	0
02-57-06-011	San Dionisio II	72.0%	35.0%	30.0%	80.0%	6	15	0	0	0	0	1	1	0	0	0	0	0	0
02-57-06-012	San Pugo	0.0%	10.0%	0.0%	0.0%	22	80	0	0	0	0	0	0	1	0	0	1	0	1
02-57-06-013	San Ramos	52.1%	30.0%	0.0%	47.0%	5	60	0	0	0	0	0	0	1	0	0	1	0	0
02-57-06-014	Sangbay	0.0%	0.0%	0.0%	17.0%	14	60	1	0	1	0	0	1	0	0	0	1	1	1
02-57-06-015	Wasid	80.0%	20.0%	0.0%	30.0%	30	60	0	0	0	0	1	1	1	0	0	0	0	0
02-57-06-016	Asaklat	0.0%	1.0%	0.0%	0.0%	10	30	1	0	1	0	0	1	0	1	0	1	1	1
	IFUGAO	26.2%	41.0%	10.3%	28.4%	11.3	96.6	7	7	30	25	25	76	35	9	126	76	91	52
	Banaue	16.7%	42.1%	4.1%	27.4%	12.7	70.7	2	0	2	0	0	2	0	0	17	10	13	0
14-27-01-001	Amganad	22.8%	32.1%	2.9%	51.0%	5	13	0	0	0	0	0	0	0	0	1	1	1	0
14-27-01-002	Anaba	13.6%	65.9%	0.0%	8.0%	23	120	0	0	0	0	0	0	0	0	1	0	0	0
14-27-01-003	Bangaan	20.0%	20.0%	0.0%	20.0%	20	120	0	0	0	0	0	0	0	0	1	0	1	0
14-27-01-004	Batad	34.4%	9.5%	0.0%	0.0%	24	150	0	0	0	0	0	0	0	0	1	0	1	0
14-27-01-005	Bocos	3.2%	57.1%	5.5%	28.0%	0	5	0	0	0	0	0	0	0	0	1	1	1	0
14-27-01-007	Banao	2.1%	47.3%	0.0%	0.0%	29	300	0	0	0	0	0	0	0	0	1	0	1	0
14-27-01-009	Cambulo	4.9%	63.1%	0.0%	0.0%	22	0	0	0	0	0	22	0	0	0	1	1	0	0
14-27-01-010	Ducligan	14.4%	51.6%	17.0%	17.0%	26	150	0	0	0	0	0	0	0	0	1	1	1	0
14-27-01-011	Gohang	40.1%	14.6%	0.0%	37.0%	5	20	0	0	0	0	0	0	0	0	1	1	1	0
14-27-01-013	Kinakin	2.4%	46.6%	0.0%	18.0%	16	90	0	0	0	0	0	0	0	0	1	0	1	0
14-27-01-016	Poblacion	1.4%	43.2%	10.6%	90.0%	0	0	1	0	1	0	0	1	0	0	1	1	1	0
14-27-01-017	Poitán	5.8%	63.9%	11.0%	16.0%	7	30	0	0	0	0	0	0	0	0	1	1	1	0
14-27-01-018	San Fernando	9.0%	41.8%	0.0%	0.0%	6	25	0	0	0	0	0	0	0	0	1	0	0	0
14-27-01-021	Balawis	25.7%	34.3%	0.0%	21.0%	7	30	0	0	0	0	0	0	0	0	1	0	1	0
14-27-01-022	Ohaj	31.6%	45.8%	2.6%	0.0%	11	45	0	0	0	0	0	0	0	0	1	1	1	0
14-27-01-023	Tam-an	28.8%	37.4%	22.7%	95.0%	0	5	1	0	1	0	0	1	0	0	1	1	0	0
14-27-01-024	View Point	4.4%	50.9%	1.3%	70.0%	7	20	0	0	0	0	0	0	0	0	1	1	1	0
14-27-01-025	Pula	36.4%	32.9%	0.0%	0.0%	20	150	0	0	0	0	0	0	0	0	1	0	1	0
	Hungduan	5.1%	57.6%	0.0%	22.4%	8.6	128.3	0	1	0	0	0	1	9	0	9	6	9	0
14-27-02-001	Abatan	9.2%	64.6%	0.0%	20.0%	5	60	0	0	0	0	0	0	1	0	1	1	1	0
14-27-02-004	Bangbang	0.7%	92.7%	0.0%	21.0%	4	120	0	0	0	0	0	0	1	0	1	1	1	0
14-27-02-010	Maggok	6.0%	76.7%	0.0%	0.0%	7	150	0	0	0	0	0	0	1	0	1	1	1	0
14-27-02-011	Poblacion	5.3%	30.5%	0.0%	40.0%	0	0	0	0	0	0	0	0	1	0	1	1	1	0
14-27-02-018	Bokiawan	1.6%	63.4%	0.0%	48.0%	15	45	0	0	0	0	0	0	1	0	1	1	1	0
14-27-02-019	Hapao	17.9%	43.8%	0.0%	63.0%	9	180	0	1	0	0	0	1	1	0	1	1	1	0
14-27-02-020	Lubo-ong	4.8%	41.7%	0.0%	0.0%	19	300	0	0	0	0	0	0	1	0	1	0	1	0
14-27-02-021	Nungulunan	0.6%	46.0%	0.0%	0.0%	9	180	0	0	0	0	0	0	1	0	1	0	1	0
14-27-02-022	Ba-ang	0.0%	59.4%	0.0%	10.0%	9	120	0	0	0	0	0	0	1	0	1	0	1	0
	Kiangan	23.1%	43.8%	25.1%	36.4%	7.9	103.9	1	0	5	0	0	5	14	2	13	5	4	6
14-27-03-001	Ambabag	31.1%	26.7%	40.7%	64.0%	1	5	0	0	0	0	0	0	1	0	1	0	0	0
14-27-03-004	Baguinge	11.9%	74.9%	12.1%	45.0%	4	10	0	0	1	0	0	1	1	0	1	0	1	1
14-27-03-005	Bokiwan	31.7%	66.3%	0.0%	0.0%	10	360	0	0	0	0	0	0	1	0	1	0	0	0
14-27-03-008	Dalligan	32.4%	33.8%	0.0%	0.0%	25	480	0	0	0	0	0	0	1	0	1	1	1	1
14-27-03-009	Duit	48.9%	54.9%	0.0%	36.0%	3	20	0	0	1	0	0	1	1	0	1	0	1	1
14-27-03-011	Hucab	20.2%	78.3%	0.0%	26.0%	15	30	0	0	0	0	0	0	1	0	1	0	0	0
14-27-03-012	Julongan	24.5%	27.7%	45.7%	0.0%	6	30	0	0	0	0	0	0	1	1	1	1	0	0
14-27-03-013	Lingay	7.1%	15.2%	16.8%	0.0%	20	420	0	0	0	0	0	0	1	0	1	0	0	1
14-27-03-014	Mungayang	20.0%	74.3%	0.0%	29.0%	6	35	0	0	0	0	0	0	1	0	1	0	0	1
14-27-03-015	Nagacadan	17.6%	81.8%	0.0%	35.0%	4	20	0	0	0	0	0	0	1	0	1	0	0	1

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (15/24)

Code	Province/ Municipality/ Barangay	Rate of Water Supply Level I (%)	Rate of Water Supply Level II (%)	Rate of Water Supply Level III (%)	Rate of Electricity (%)	Distance to Poblacion (km)	Travel Time to Poblacion (minute)	Existence of Telecom. Facility (1: exist, 0: none)	Existence of Hospital (1: exist, 1: none)	Existence of Clinic (1: exist, 2: none)	Existence of Community Hospital (1: exist, 3: none)	Existence of Rural Health Sta. (1: exist, 4: none)	Existence of Any Medical Facility (1: exist, 5: none)	Ancestral Land (1: exist, 6: none)	Boundary Issue (1: exist, 7: none)	Kaingin Issue (1: exist, 8: none)	Existence of PO (1: exist, 9: none)	Reforestation Project (1: exist, 10: none)	Forest Management Area (1: exist, 11: none)
14-27-03-017	Pindongan	12.1%	10.9%	74.7%	81.0%	1	5	0	0	0	0	0	0	0	1	1	1	0	0
14-27-03-018	Poblacion	11.0%	8.6%	78.6%	100.0%	0	0	1	0	1	0	0	1	1	0	0	1	1	0
14-27-03-020	Tuplac	3.5%	25.4%	69.1%	67.0%	1	5	0	0	0	0	0	0	1	1	1	0	0	0
14-27-03-021	Bolog	51.1%	34.3%	13.3%	26.0%	16	35	0	0	1	0	0	1	1	0	1	1	0	0
	Lagawe	30.4%	62.7%	7.0%	40.4%	12.4	142.4	2	2	3	0	1	5	0	0	17	7	8	7
14-27-04-001	Abinuan	61.5%	38.5%	0.0%	0.0%	12	240	0	0	0	0	0	1	0	0	1	0	0	0
14-27-04-003	Banga	7.4%	92.6%	0.0%	47.0%	17	255	0	0	0	0	0	0	0	0	1	0	1	1
14-27-04-005	Boliwong	38.9%	61.1%	0.0%	71.0%	4	30	0	0	1	0	0	1	0	0	1	1	1	1
14-27-04-006	Burnay	51.9%	48.2%	0.0%	71.0%	4	45	0	0	0	0	0	0	0	0	1	1	1	0
14-27-04-008	Buyabuyan	35.2%	64.8%	0.0%	0.0%	14	195	0	0	0	0	0	0	0	0	1	0	0	0
14-27-04-009	Caba	38.1%	61.9%	0.0%	73.0%	9	40	0	1	0	0	0	1	0	0	1	1	1	1
14-27-04-010	Cudog	31.6%	33.6%	34.8%	81.0%	6	18	1	1	0	0	0	1	0	0	1	1	1	0
14-27-04-011	Dulao	53.7%	46.4%	0.0%	23.0%	24	360	0	0	1	0	1	1	0	0	1	0	0	0
14-27-04-013	Jucbong	13.5%	86.5%	0.0%	0.0%	10	180	0	0	0	0	0	0	0	0	1	0	0	1
14-27-04-014	Luta	0.0%	100.0%	0.0%	100.0%	4	120	0	0	0	0	0	0	0	0	1	0	1	1
14-27-04-016	Montabiong	18.9%	81.1%	0.0%	0.0%	9	150	0	0	0	0	0	0	0	0	1	0	0	0
14-27-04-018	Ollicon	13.8%	86.3%	0.0%	0.0%	32	240	0	0	0	0	0	0	0	0	1	0	1	1
14-27-04-020	Poblacion South	25.5%	26.0%	48.5%	100.0%	1	7	1	0	0	0	0	0	0	0	1	1	0	0
14-27-04-021	Ponghal	48.0%	52.0%	0.0%	0.0%	12	180	0	0	0	0	0	0	0	0	1	1	0	0
14-27-04-022	Pullaan	7.7%	92.3%	0.0%	0.0%	14	240	0	0	0	0	0	0	0	0	1	0	0	0
14-27-04-023	Tunggod	38.0%	27.1%	34.9%	98.0%	0	30	0	0	0	0	0	0	0	0	1	1	0	0
14-27-04-024	Tupaya	33.0%	67.0%	0.0%	23.0%	41	90	0	0	1	0	0	1	0	0	1	0	1	1
	Lamut	16.7%	3.9%	1.2%	43.9%	10.8	30.7	0	1	1	0	0	2	0	0	6	5	12	12
14-27-05-002	Ambasa	1.0%	7.0%	1.0%	8.0%	14	40	0	0	0	0	0	0	0	0	0	1	1	1
14-27-05-004	Hapid	19.0%	4.0%	0.8%	79.0%	12	45	0	0	1	0	0	1	0	0	1	0	1	1
14-27-05-006	Lucban	38.0%	0.0%	0.0%	94.0%	10	30	0	0	0	0	0	0	0	0	1	0	1	1
14-27-05-007	Mabatobato(Lamut)	45.0%	0.0%	0.0%	44.0%	6	8	0	0	0	0	0	0	0	0	0	0	1	1
14-27-05-008	Magulon	0.0%	14.2%	0.5%	10.0%	13	40	0	0	0	0	0	0	0	0	0	0	1	1
14-27-05-009	Nayon	22.0%	7.0%	10.0%	64.0%	11	30	0	0	0	0	0	0	0	0	1	1	1	1
14-27-05-010	Panopdopan	26.0%	0.0%	0.0%	69.0%	11	30	0	1	0	0	0	1	0	0	0	1	1	1
14-27-05-011	Payawan	24.0%	0.0%	1.4%	19.0%	7	15	0	0	0	0	0	0	0	0	1	1	1	1
14-27-05-016	Bimpal	8.0%	4.0%	0.4%	64.0%	15	40	0	0	0	0	0	0	0	0	0	1	1	1
14-27-05-017	Holowon	0.0%	6.2%	0.2%	10.0%	13	40	0	0	0	0	0	0	0	0	1	0	1	1
14-27-05-019	Sanafag	15.0%	0.0%	0.0%	46.0%	6	10	0	0	0	0	0	0	0	0	0	0	1	1
14-27-05-020	Umilag	2.0%	4.0%	0.0%	20.0%	12	40	0	0	0	0	0	0	0	0	1	0	1	1
	Mayoyao	33.4%	31.4%	14.6%	14.1%	11.6	128.2	1	2	7	25	0	25	0	5	25	17	25	25
14-27-06-001	Aduyongan	31.0%	39.0%	0.0%	0.0%	20	150	0	0	1	1	0	1	0	0	1	1	1	1
14-27-06-002	Alimit	28.0%	0.0%	22.0%	0.0%	21	210	0	0	0	1	0	1	0	1	0	1	0	1
14-27-06-003	Ayangan	30.0%	66.0%	0.0%	0.0%	26	180	0	0	0	1	0	1	0	0	1	1	1	1
14-27-06-004	Balangbang	20.0%	42.0%	0.0%	22.0%	6	90	0	0	0	1	0	1	0	1	1	1	1	1
14-27-06-005	Banao	23.0%	34.0%	0.0%	0.0%	20	150	0	0	0	1	0	1	0	1	1	1	1	1
14-27-06-009	Buninan	18.0%	62.0%	0.0%	0.0%	8	150	0	0	0	1	0	1	0	1	1	1	1	1
14-27-06-010	Chaya	90.0%	37.0%	33.0%	35.0%	7	30	0	0	0	1	0	1	0	0	1	1	1	1
14-27-06-011	Chumang	30.0%	23.0%	31.0%	36.0%	5	60	0	0	1	1	0	1	0	0	1	1	1	1
14-27-06-014	Guinhon	21.0%	56.0%	15.0%	3.0%	9	90	0	0	0	1	0	1	0	0	1	1	1	1
14-27-06-015	Inwaloy	83.0%	27.0%	0.0%	0.0%	8	120	0	0	1	1	0	1	0	0	1	1	1	1
14-27-06-018	Langayan	35.0%	3.0%	29.0%	0.0%	6	90	0	0	0	1	0	1	0	1	1	1	1	1
14-27-06-019	Liwo	16.0%	17.0%	28.0%	0.0%	12	120	0	0	0	1	0	1	0	0	1	1	1	1
14-27-06-020	Maga	32.0%	24.0%	0.0%	0.0%	11	210	0	0	0	1	0	1	0	0	1	0	1	1
14-27-06-021	Magulon	22.0%	48.0%	0.0%	0.0%	12	240	0	0	0	1	0	1	0	0	1	0	1	1
14-27-06-022	Mapawoy	22.0%	22.0%	25.0%	5.0%	1	40	0	0	1	1	0	1	0	0	1	1	1	1
14-27-06-023	Mayoyao Proper	24.0%	0.0%	70.0%	31.0%	5	90	0	0	0	1	0	1	0	0	1	0	1	1
14-27-06-024	Mongol	24.0%	0.0%	40.0%	0.0%	13	150	0	0	0	1	0	1	0	0	1	1	1	1
14-27-06-025	Nalbu	35.0%	54.0%	0.0%	0.0%	14	60	0	0	0	1	0	1	0	0	1	0	1	1
14-27-06-026	Nattum	55.0%	0.0%	0.0%	0.0%	28	360	0	0	0	1	0	1	0	0	1	0	1	1
14-27-06-027	Palaad	24.0%	24.0%	27.0%	0.0%	15	100	0	0	1	1	0	1	0	0	1	0	1	1
14-27-06-028	Poblacion	21.0%	34.0%	26.0%	100.0%	1	60	1	1	1	1	0	1	0	0	1	1	1	1

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (16/24)

Code	Province/ Municipality/ Barangay	Rate of Water Supply Level I (%)	Rate of Water Supply Level II (%)	Rate of Water Supply Level III (%)	Rate of Electricity (%)	Distance to Poblacion (km)	Travel Time to Poblacion (minute)	Existence of Telecom. Facility (1: exist, 0: none)	Existence of Hospital (1: exist, 1: none)	Existence of Clinic (1: exist, 2: none)	Existence of Community Hospital (1: exist, 3: none)	Existence of Rural Health Sta. (1: exist, 4: none)	Existence of Any Medical Facility (1: exist, 5: none)	Ancestral Land (1: exist, 6: none)	Boundary Issue (1: exist, 7: none)	Kaingin Issue (1: exist, 8: none)	Existence of PO (1: exist, 9: none)	Reforestation Project (1: exist, 10: none)	Forest Management Area (1: exist, 11: none)
14-27-06-030	Talboc	27.0%	66.0%	0.0%	0.0%	17	150	0	0	0	1	0	1	0	0	1	1	1	1
14-27-06-033	Tulaed	36.0%	42.0%	0.0%	22.0%	15	150	0	0	1	1	0	1	0	0	1	0	1	1
14-27-06-035	Bato-Alatbang	51.0%	50.0%	1.0%	99.0%	1	5	0	1	0	1	0	1	0	0	1	1	1	1
14-27-06-036	Epeng	36.0%	15.0%	19.0%	0.0%	10	150	0	0	0	1	0	1	0	0	1	1	1	1
14-27-07-018	Alfonso Lista (Potia) Santo Domingo(Cabicalan)	49.0%	51.0%	0.0%	48.0%	21	20	0	0	0	0	0	0	0	0	1	0	1	1
	Aguinaldo	5.1%	1.8%	49.3%	3.0%	15.8	95.0	1	0	1	0	6	7	0	0	8	2	3	0
14-27-08-002	Bunhian	4.3%	12.5%	40.3%	0.0%	3	10	0	0	0	0	1	1	0	0	1	1	1	0
14-27-08-006	Galongon	1.5%	0.0%	44.0%	16.0%	0	0	1	0	0	0	1	1	0	0	1	1	1	0
14-27-08-007	Halag	1.1%	0.0%	81.7%	8.0%	40	210	0	0	0	0	1	1	0	0	1	0	0	0
14-27-08-008	Itab	0.0%	0.7%	16.7%	0.0%	23	180	0	0	0	0	1	1	0	0	1	0	0	0
14-27-08-009	Jacmal	20.0%	0.0%	79.2%	0.0%	9	20	0	0	0	0	1	1	0	0	1	0	0	0
14-27-08-010	Majlong	4.7%	1.3%	18.5%	0.0%	37	300	0	0	0	0	1	1	0	0	1	0	0	0
14-27-08-013	Ta-ang	0.0%	0.0%	72.7%	0.0%	6	15	0	0	1	0	0	1	0	0	1	0	1	0
14-27-08-014	Talite	9.2%	0.0%	41.0%	0.0%	8	25	0	0	0	0	0	0	0	0	1	0	0	0
	Hingyon	39.5%	47.5%	0.0%	24.4%	3.6	49.6	0	0	1	0	8	9	0	0	11	7	3	0
14-27-09-001	Anao	57.0%	37.0%	0.0%	0.0%	3	40	0	0	0	0	1	1	0	0	1	0	0	0
14-27-09-002	Bangtinson	48.0%	42.0%	0.0%	0.0%	3	40	0	0	0	0	1	1	0	0	1	0	1	0
14-27-09-003	Bitu	36.0%	22.0%	0.0%	1.0%	0	5	0	0	0	0	0	0	0	0	1	1	0	0
14-27-09-004	Cababuyan	34.0%	53.0%	0.0%	1.0%	6	60	0	0	0	0	0	0	0	0	1	1	0	0
14-27-09-005	Mompolia	52.0%	45.0%	0.0%	23.0%	3	30	0	0	0	0	0	0	0	0	1	0	1	0
14-27-09-006	Namulditan	28.0%	72.0%	0.0%	55.0%	3	30	0	0	0	0	1	1	0	0	1	0	1	0
14-27-09-007	O-ong	10.0%	15.0%	0.0%	32.0%	6	120	0	0	0	0	1	1	0	0	1	0	0	0
14-27-09-008	Piwong	68.0%	84.0%	0.0%	70.0%	3	30	0	0	0	0	1	1	0	0	1	1	0	0
14-27-09-009	Poblacion (Hingyon)	56.0%	34.0%	0.0%	46.0%	1	20	0	0	1	0	0	1	0	0	1	1	0	0
14-27-09-010	Ubuag	24.0%	39.0%	0.0%	0.0%	6	120	0	0	0	0	1	1	0	0	1	1	0	0
14-27-09-011	Umalbong	29.0%	66.0%	0.0%	23.0%	4	40	0	0	0	0	1	1	0	0	1	1	0	0
14-27-09-012	Northern Cababuyan	32.0%	61.0%	0.0%	42.0%	7	60	0	0	0	0	1	1	0	0	0	1	0	0
	Tinoc	41.9%	43.3%	7.8%	6.5%	11.3	167.9	0	1	1	0	10	11	12	2	10	11	12	0
14-27-10-001	Ahin	30.0%	84.0%	0.0%	0.0%	16	240	0	0	1	0	0	1	1	1	1	0	1	0
14-27-10-002	Ap-apid	48.0%	32.0%	0.0%	0.0%	3	40	0	0	0	0	1	1	1	0	1	1	1	0
14-27-10-003	Binabluyan	45.0%	33.0%	0.0%	0.0%	16	240	0	0	0	0	1	1	1	0	0	1	1	0
14-27-10-004	Danggo	37.0%	55.0%	0.0%	0.0%	24	360	0	0	0	0	1	1	1	0	0	1	1	0
14-27-10-005	Eheb	26.0%	47.0%	0.0%	0.0%	4	60	0	0	0	0	1	1	1	0	1	1	1	0
14-27-10-006	Gumhang	30.0%	63.0%	0.0%	0.0%	8	120	0	0	0	0	0	0	1	0	1	1	1	0
14-27-10-007	Impugong	42.0%	24.0%	0.0%	0.0%	3	40	0	0	0	0	1	1	1	1	1	1	1	0
14-27-10-008	Luhong	72.0%	31.0%	0.0%	0.0%	12	180	0	0	0	0	1	1	1	0	1	1	1	0
14-27-10-009	Tinoc	38.0%	39.0%	93.0%	40.0%	0	0	0	1	0	0	1	1	1	0	1	1	1	0
14-27-10-010	Tukucan	36.0%	30.0%	0.0%	0.0%	12	180	0	0	0	0	1	1	1	0	1	1	1	0
14-27-10-011	Tulludan	26.0%	54.0%	0.0%	0.0%	20	300	0	0	0	0	1	1	1	0	1	1	1	0
14-27-10-012	Wangwang	73.0%	28.0%	0.0%	38.0%	17	255	0	0	0	0	1	1	1	1	0	1	1	0
	Asipulo	27.7%	66.3%	4.6%	45.6%	8.8	125.9	0	0	9	0	0	9	0	0	9	6	1	1
14-27-11-001	Amduntog	16.0%	68.0%	16.0%	85.0%	3	8	0	0	1	0	0	1	0	0	1	1	0	1
14-27-11-002	Antipolo	22.0%	56.0%	20.0%	75.0%	2	20	0	0	1	0	0	1	0	0	1	1	1	0
14-27-11-003	Camandag	10.0%	90.0%	0.0%	0.0%	22	420	0	0	1	0	0	1	0	0	1	1	0	0
14-27-11-004	Cawayan	78.0%	21.0%	0.0%	0.0%	15	210	0	0	1	0	0	1	0	0	1	1	0	0
14-27-11-005	Hallap	12.0%	75.0%	3.0%	85.0%	5	25	0	0	1	0	0	1	0	0	1	1	0	0
14-27-11-006	Namal	76.0%	24.0%	0.0%	0.0%	18	240	0	0	1	0	0	1	0	0	1	0	0	0
14-27-11-007	Nungawa	8.0%	92.0%	0.0%	80.0%	6	90	0	0	1	0	0	1	0	0	1	0	0	0
14-27-11-008	Panubtuban	16.0%	82.0%	2.0%	85.0%	3	30	0	0	1	0	0	1	0	0	1	1	0	0
14-27-11-009	Pula	11.0%	89.0%	0.0%	0.0%	6	90	0	0	1	0	0	1	0	0	1	0	0	0
	Min	0.0%	0.0%	0.0%	0.0%	10	0	97	7	83	27	174	277	70	25	140	180	201	175
	Max	100.0%	100.0%	100.0%	100.0%	0	600	0	0	0	0	0	1	0	0	0	0	0	0
	Average	35.9%	35.3%	10.3%	35.0%	14	88	0	0	0	0	0	0	0	0	0	0	0	0
	Total																		

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (17/24)

Code	Province/ Municipality/ Barangay	CBFMA (1: exist, 12: none)	Irrigated Rice Area a (ha)	Rainfed Rice Area b (ha)	Upland Rice Area c (ha)	Total Rice Area <a+b+c> (ha)	Corn Area d (ha)	Vegetables Area e (ha)	Pineapple Area f (ha)	Banana Area g (ha)	Coffee Area h (ha)	Coconut Area i (ha)	Total Non- rice Crop Area <d+e+fg+h+i> (ha)	Total Crop Area <a+.....+i> (ha)
ISABELA		1	204.8	739.1	509.2	1,453.1	3,954.9	105.6	5.4	1,253.2	32.4	69.6	5,421.1	6,874.2
	Angadanan	0	0.0	30.0	14.0	44.0	59.0	1.0	0.0	2.0	0.0	0.0	62.0	106.0
02-31-02-010	Bunnay	0	0.0	30.0	14.0	44.0	59.0	1.0	0.0	2.0	0.0	0.0	62.0	106.0
	Gordon	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
02-31-09-005	Dallao	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
02-31-09-018	Taliktik	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Echague	0	0.0	308.0	62.0	370.0	1,450.8	80.0	0.0	144.1	0.0	3.4	1,678.3	2,048.3
02-31-12-004	Aromin	0	0.0	0.0	30.0	30.0	148.5	17.3	0.0	29.5	0.0	0.7	196.0	226.0
02-31-12-005	Babaran	0	0.0	3.0	7.0	10.0	500.0	10.4	0.0	7.0	0.0	0.0	517.4	527.4
02-31-12-007	Benguet	0	0.0	0.0	5.0	5.0	30.0	17.1	0.0	5.0	0.0	1.0	53.1	58.1
02-31-12-025	Mabbayad	0	0.0	5.0	5.0	10.0	270.0	9.2	0.0	10.0	0.0	0.2	289.4	299.4
02-31-12-027	Madadamian	0	0.0	0.0	5.0	5.0	90.0	23.0	0.0	90.0	0.0	0.5	203.5	208.5
02-31-12-046	San Felipe	0	0.0	300.0	10.0	310.0	412.3	3.0	0.0	2.6	0.0	1.0	418.9	728.9
	Jones	0	39.0	42.5	196.5	278.0	1,015.5	22.0	4.4	645.6	24.5	29.7	1,741.6	2,019.6
02-31-15-014	Dicamay II	0	0.0	8.0	2.0	10.0	159.0	3.0	0.0	56.1	0.1	4.5	222.7	232.7
02-31-15-017	Divinan	0	0.0	5.0	10.0	15.0	176.0	10.0	0.2	14.8	0.5	10.0	211.5	226.5
02-31-15-018	Dumawing	0	0.0	14.0	50.0	64.0	129.5	0.0	0.1	337.6	3.0	0.2	470.3	534.3
02-31-15-021	Linamanan	0	0.0	15.0	64.0	79.0	170.9	0.0	2.0	21.9	2.7	5.5	203.0	282.0
02-31-15-031	Papan Weste	0	0.0	0.0	10.0	10.0	59.0	5.0	0.0	35.0	0.1	1.6	100.7	110.7
02-31-15-033	Pongongan	0	7.0	0.0	15.0	22.0	169.4	0.0	2.1	109.6	2.0	2.3	285.4	307.4
02-31-15-038	San Sebastian	0	5.0	0.0	10.0	15.0	74.4	0.0	0.0	7.0	16.0	2.4	99.8	114.8
02-31-15-040	Santa Isabel	0	27.0	0.5	35.5	63.0	77.3	4.0	0.0	63.6	0.0	3.2	148.2	211.2
	Ramon	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
02-31-24-021	General Aquinaldo	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	San Agustin	1	155.8	348.6	226.7	731.1	1,370.6	0.0	0.0	461.5	5.9	35.5	1,873.6	2,604.6
02-31-27-001	Bautista	1	0.0	5.0	104.3	109.3	265.0	0.0	0.0	194.6	0.0	0.8	460.4	569.7
02-31-27-003	Dabubu Grande	0	17.0	33.5	50.5	101.0	177.5	0.0	0.0	125.3	0.2	3.3	306.2	407.2
02-31-27-007	Mapalad	0	25.0	164.0	10.3	199.3	213.0	0.0	0.0	8.3	1.8	0.6	223.6	422.8
02-31-27-012	Palacian	0	62.2	0.0	1.3	63.5	190.1	0.0	0.0	38.6	0.2	12.0	240.9	304.4
02-31-27-013	Panang	0	0.0	50.8	11.7	62.4	131.5	0.0	0.0	65.6	0.6	16.0	213.8	276.2
02-31-27-017	Salay	0	51.6	3.1	4.0	58.6	187.0	0.0	0.0	24.2	0.7	0.0	211.9	270.5
02-31-27-019	Santo Nino	0	0.0	92.3	44.8	137.0	206.5	0.0	0.0	5.0	2.5	2.9	216.8	353.8
	San Guillermo	0	10.0	10.0	10.0	30.0	59.0	2.6	1.0	0.0	2.0	1.0	65.6	95.6
02-31-28-017	San Francisco Sur	0	10.0	10.0	10.0	30.0	59.0	2.6	1.0	0.0	2.0	1.0	65.6	95.6
NUEVA VIZCAYA		31	15,613.9	1,852.6	1,863.4	19,329.9	6,155.5	4,366.0	1,972.0	1,754.5	2,369.0	1,303.9	17,920.9	37,250.8
	Ambaguio	1	162.5	5.0	370.4	537.9	21.6	121.6	5.0	66.4	483.8	1.9	700.3	1,238.2
02-50-01-001	Ammueg	0	19.0	0.0	30.0	49.0	2.5	5.2	0.5	16.0	48.0	0.4	72.6	121.6
02-50-01-004	Camandag	0	41.5	0.0	20.4	61.9	3.0	5.1	0.3	6.0	15.0	0.4	29.8	91.6
02-50-01-005	Labang	0	23.0	0.0	76.0	99.0	4.0	17.1	1.0	4.7	63.0	0.0	89.7	188.7
02-50-01-006	Napo	0	0.0	5.0	21.0	26.0	2.0	12.3	0.0	1.0	6.0	0.1	21.4	47.4
02-50-01-007	Poblacion	0	5.0	0.0	20.0	25.0	2.5	16.8	0.3	2.7	28.5	0.0	50.8	75.8
02-50-01-008	Salingsingan	0	34.0	0.0	83.0	117.0	0.6	13.8	1.0	5.0	23.3	0.1	43.8	160.8
02-50-01-009	Tiblac	1	5.0	0.0	20.0	25.0	4.0	35.3	1.0	28.0	50.0	0.8	119.1	144.1
02-50-01-010	Dulli	0	35.0	0.0	100.0	135.0	3.0	16.1	1.0	3.0	250.0	0.1	273.1	408.1
	Aritao	10	2,232.0	112.0	0.0	2,344.0	11.0	170.5	0.5	13.8	9.5	13.7	219.0	2,563.0
02-50-02-002	Beti	1	251.0	0.0	0.0	251.0	0.0	9.0	0.0	0.3	0.1	0.2	9.6	260.6
02-50-02-003	Bone North	1	182.0	5.0	0.0	187.0	5.0	12.0	0.1	1.5	0.1	8.0	26.7	213.7
02-50-02-004	Bone South	1	277.0	0.0	0.0	277.0	0.0	5.0	0.0	1.5	0.2	0.4	7.1	284.1
02-50-02-005	Calititan	1	165.0	0.0	0.0	165.0	0.0	9.1	0.0	0.7	0.1	0.6	10.4	175.4
02-50-02-006	Comon	1	330.0	0.0	0.0	330.0	0.0	33.0	0.1	0.7	0.4	2.0	36.2	366.2
02-50-02-008	Darapidap	0	225.0	10.0	0.0	235.0	1.0	4.6	0.0	1.4	0.8	0.4	8.2	243.2
02-50-02-009	Kirang	1	125.0	30.0	0.0	155.0	0.0	6.8	0.0	2.4	0.1	0.2	9.5	164.5
02-50-02-012	Santa Clara	1	133.0	0.0	0.0	133.0	0.0	9.1	0.0	0.6	0.4	0.2	10.3	143.3
02-50-02-014	Tucanon	0	155.0	48.0	0.0	203.0	0.0	4.5	0.0	0.2	0.2	0.8	5.7	208.7
02-50-02-016	Anayo	0	84.0	0.0	0.0	84.0	0.0	10.5	0.0	0.5	0.4	0.2	11.6	95.6
02-50-02-017	Baan	1	45.0	0.0	0.0	45.0	5.0	4.5	0.0	0.6	0.4	0.2	10.8	55.8
02-50-02-018	Balite	0	30.0	0.0	0.0	30.0	0.0	7.6	0.0	0.7	0.5	0.0	8.8	38.8

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (18/24)

Code	Province/ Municipality/ Barangay	CBFMA (1: exist, 12: none)	Irrigated Rice Area a (ha)	Rainfed Rice Area b (ha)	Upland Rice Area c (ha)	Total Rice Area <a+b+c> (ha)	Corn Area d (ha)	Vegetables Area e (ha)	Pineapple Area f (ha)	Banana Area g (ha)	Coffee Area h (ha)	Coconut Area i (ha)	Total Non- rice Crop Area <d+e+fg+h+i> (ha)	Total Crop Area <a+.....i> (ha)
02-50-02-019	Canabuan	0	29.0	0.0	0.0	29.0	0.0	10.0	0.0	0.4	1.3	0.2	11.9	40.9
02-50-02-020	Canarem	0	62.0	0.0	0.0	62.0	0.0	12.1	0.0	0.7	0.8	0.2	13.7	75.7
02-50-02-021	Latar-Nocnoc-San Fra	1	76.0	19.0	0.0	95.0	0.0	7.5	0.1	0.4	0.4	0.1	8.5	103.5
02-50-02-022	Ocao-Capinaan	0	15.0	0.0	0.0	15.0	0.0	13.1	0.0	0.8	1.8	0.0	15.7	30.7
02-50-02-023	Yaway	1	48.0	0.0	0.0	48.0	0.0	12.1	0.1	0.4	1.5	0.2	14.3	62.3
	Bagabag	1	1,357.5	100.0	0.0	1,457.5	802.9	99.5	209.2	12.5	13.8	17.6	1,155.5	2,612.9
02-50-03-002	Baretbet	0	116.0	50.0	0.0	166.0	121.0	9.8	178.5	8.6	12.8	4.0	334.7	500.7
02-50-03-003	Careb	0	322.7	0.0	0.0	322.7	80.0	9.0	0.0	0.4	0.4	0.8	90.6	413.3
02-50-03-012	Santa Lucia	0	210.0	0.0	0.0	210.0	260.0	8.2	0.0	0.5	0.1	0.8	269.6	479.6
02-50-03-015	Villa Coloma	0	558.8	0.0	0.0	558.8	86.9	25.4	0.0	1.4	0.3	2.4	116.4	675.2
02-50-03-017	Villaros	0	10.0	0.0	0.0	10.0	200.0	40.1	30.6	0.5	0.1	0.0	271.4	281.4
02-50-03-018	Tuao South	1	140.0	50.0	0.0	190.0	55.0	7.0	0.0	1.0	0.2	9.6	72.8	262.8
	Bambang	0	2,276.0	301.3	7.3	2,584.6	212.3	162.1	0.7	51.3	16.1	95.3	537.7	3,122.3
02-50-04-001	Abian	0	77.0	19.0	0.0	96.0	30.0	17.5	0.3	11.2	10.0	3.2	72.2	168.2
02-50-04-002	Abinganan	0	4.0	80.0	0.0	84.0	28.0	0.1	0.3	0.8	0.1	1.0	30.2	114.2
02-50-04-008	Barat	0	185.0	5.0	0.0	190.0	1.0	9.2	0.0	1.2	0.4	12.0	23.8	213.8
02-50-04-011	Dullao	0	35.0	80.0	0.0	115.0	5.0	5.3	0.0	1.4	1.8	4.0	17.4	132.4
02-50-04-013	Indiana	0	135.0	1.0	0.0	136.0	15.0	6.1	0.0	0.2	0.0	0.6	22.0	158.0
02-50-04-014	Mabuslo	0	310.0	0.3	0.3	310.6	24.0	11.0	0.0	4.1	0.5	4.0	43.6	354.2
02-50-04-016	Manamtam	0	87.0	0.0	4.0	91.0	17.0	6.5	0.0	3.2	1.1	8.0	35.9	126.9
02-50-04-017	Mauan	0	135.0	3.0	0.0	138.0	11.0	19.8	0.0	1.3	0.9	2.4	35.4	173.4
02-50-04-018	Salinas	0	385.0	40.0	0.0	425.0	8.0	8.7	38.0	0.9	0.8	40.0	58.4	483.4
02-50-04-021	San Antonio South	0	34.0	38.0	0.0	72.0	10.0	16.2	0.0	0.9	0.3	3.2	30.6	102.6
02-50-04-022	San Fernando	0	179.0	25.0	0.0	204.0	2.0	12.9	0.0	20.5	0.0	6.0	41.4	245.4
02-50-04-024	Santo Domingo (Taban	0	260.0	0.0	0.0	260.0	0.0	13.3	0.0	0.2	0.0	4.8	18.4	278.4
02-50-04-025	Pallas	0	10.0	0.0	3.0	13.0	11.0	16.8	0.0	1.1	0.3	0.7	30.0	43.0
02-50-04-026	Magsaysay Hills	0	0.0	0.0	0.0	0.0	0.3	10.2	0.0	3.9	0.0	3.8	18.2	18.2
02-50-04-027	Santo Domingo West	0	440.0	10.0	0.0	450.0	50.0	8.5	0.0	0.4	0.0	1.6	60.4	510.4
	Bayombong	1	801.0	245.0	95.0	1,141.0	117.0	162.7	2.1	79.5	52.6	34.4	448.2	1,589.2
02-50-05-004	Buenavista (Vista Hi	1	104.0	15.0	25.0	144.0	7.0	31.3	0.0	4.5	0.0	10.0	52.9	196.9
02-50-05-005	Busilac	0	70.0	15.0	25.0	110.0	10.0	15.3	0.0	5.0	0.0	1.2	31.4	141.4
02-50-05-009	Magapuy	0	200.0	15.0	5.0	220.0	8.0	11.2	0.0	6.8	1.2	0.4	27.7	247.7
02-50-05-010	Magsaysay	0	12.0	65.0	10.0	87.0	10.0	9.4	0.0	4.1	1.2	10.0	34.7	121.7
02-50-05-011	Masoc	0	176.0	30.0	0.0	206.0	5.0	21.3	0.0	12.7	0.0	1.0	40.1	246.1
02-50-05-012	Paitan	0	87.0	15.0	0.0	102.0	10.0	25.1	0.0	18.4	1.2	5.2	59.9	161.9
02-50-05-019	Bansing	0	92.0	0.0	0.0	92.0	27.0	23.1	2.0	9.0	11.9	1.6	74.6	166.6
02-50-05-020	Cabuaan	0	50.0	30.0	30.0	110.0	20.0	14.6	0.0	6.1	14.1	3.3	58.1	168.1
02-50-05-022	Ipil-Cuneg	0	10.0	60.0	0.0	70.0	20.0	11.4	0.0	12.9	23.0	1.7	69.0	139.0
	Diadi	2	222.1	108.2	16.3	346.5	1,233.3	1,077.1	0.8	168.6	15.9	8.2	2,503.8	2,850.3
02-50-06-001	Arwas	0	34.0	18.3	0.0	52.2	262.7	356.1	0.0	2.3	0.1	1.6	622.8	675.0
02-50-06-004	Decabacan	0	54.6	1.9	0.0	56.5	73.3	24.0	0.6	19.1	1.3	0.8	119.1	175.6
02-50-06-006	Escoting	1	53.9	9.0	0.0	62.9	51.7	38.9	0.0	1.5	0.1	0.8	92.9	155.8
02-50-06-007	Nagsabaran	0	12.5	0.0	0.0	12.5	94.8	20.8	0.1	21.8	2.4	4.0	143.7	156.2
02-50-06-009	Pinya	0	25.9	7.5	0.0	33.4	160.9	76.6	0.0	4.7	0.3	0.8	243.3	276.7
02-50-06-011	Ampakling	0	2.4	3.0	16.3	21.6	73.5	10.8	0.0	7.7	5.9	0.2	98.1	119.7
02-50-06-012	Butao	1	14.7	27.5	0.0	42.2	500.0	500.0	0.0	75.0	0.0	0.0	1,075.0	1,117.2
02-50-06-013	Langca	0	20.3	25.3	0.0	45.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.5
02-50-06-014	Lurad	0	0.0	15.8	0.0	15.8	16.5	50.0	0.0	36.4	5.9	0.0	108.8	124.6
02-50-06-015	Rosario	0	4.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
	Dupax Del Norte	1	1,484.0	128.0	20.0	1,632.0	202.0	509.2	0.1	343.7	0.0	9.6	1,064.7	2,696.7
02-50-07-002	Belance	0	129.0	14.0	0.0	143.0	7.0	42.1	0.0	7.6	0.0	0.0	56.6	199.6
02-50-07-003	Bulala	0	100.0	0.0	0.0	100.0	0.0	33.7	0.0	4.1	0.0	0.2	38.0	138.0
02-50-07-009	Inaban	0	130.0	50.0	0.0	180.0	15.0	22.8	0.0	2.5	0.0	6.0	46.2	226.2
02-50-07-012	Mabasa	1	350.0	7.0	0.0	357.0	0.0	32.3	0.0	14.4	0.0	0.0	46.7	403.7
02-50-07-013	Malasin (Pob.)	0	180.0	10.0	0.0	190.0	40.0	40.3	0.0	4.8	0.0	0.0	85.1	275.1
02-50-07-015	Munguia	0	150.0	25.0	0.0	175.0	60.0	20.8	0.0	60.5	0.0	2.6	143.9	318.9
02-50-07-016	Oyao	0	45.0	0.0	0.0	45.0	0.0	107.2	0.0	45.5	0.0	0.0	152.7	197.7

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (19/24)

Code	Province/ Municipality/ Barangay	CBFMA (1: exist, 12: none)	Irrigated Rice Area a (ha)	Rainfed Rice Area b (ha)	Upland Rice Area c (ha)	Total Rice Area <a+b+c> (ha)	Corn Area d (ha)	Vegetables Area e (ha)	Pineapple Area f (ha)	Banana Area g (ha)	Coffee Area h (ha)	Coconut Area i (ha)	Total Non- rice Crop Area <d+e+f+g+h+i> (ha)	Total Crop Area <a+.....+i> (ha)
02-50-07-018	New Gumiad	0	30.0	0.0	0.0	30.0	0.0	7.6	0.0	1.2	0.0	0.1	8.9	38.9
02-50-07-019	Yabbi	0	40.0	0.0	5.0	45.0	0.0	38.7	0.0	61.1	0.0	0.3	100.1	145.1
02-50-07-020	Binnuangan	0	45.0	0.0	0.0	45.0	0.0	60.6	0.0	45.4	0.0	0.0	105.9	150.9
02-50-07-021	Bitnong	0	125.0	0.0	0.0	125.0	60.0	24.1	0.0	50.8	0.0	0.6	135.5	260.5
02-50-07-022	Macabenga	0	40.0	12.0	15.0	67.0	5.0	49.2	0.0	0.4	0.0	0.0	54.6	121.6
02-50-07-023	Parai	0	120.0	10.0	0.0	130.0	15.0	29.9	0.0	45.5	0.0	0.0	90.4	220.4
	Dupax Del Sur	0	939.5	39.5	12.0	991.0	29.0	452.6	1.3	18.5	131.6	231.0	863.9	1,854.9
02-50-08-001	Abaca	0	22.0	0.0	3.0	25.0	0.0	10.1	0.0	0.7	0.1	0.6	11.4	36.4
02-50-08-003	Banila	0	99.0	0.0	0.0	99.0	0.0	33.1	0.0	4.2	1.9	0.0	39.2	138.2
02-50-08-004	Carolotan	0	88.0	0.0	0.0	88.0	5.0	12.1	0.1	0.2	2.4	0.8	20.6	108.6
02-50-08-008	Ganao (Lingad)	0	63.0	0.0	5.0	68.0	0.0	41.4	0.0	1.2	0.2	0.4	43.2	111.2
02-50-08-011	Mangayang	0	190.0	20.0	0.0	210.0	20.0	132.2	1.0	0.4	114.0	1.6	269.1	479.1
02-50-08-012	Palabotan	0	55.0	0.0	0.0	55.0	0.0	3.5	0.0	0.5	0.1	1.4	5.5	60.5
02-50-08-013	Biruk	0	46.0	0.0	0.0	46.0	4.0	19.4	0.0	0.5	0.9	0.0	24.8	70.8
02-50-08-014	Bagumbayan	0	71.0	0.0	0.0	71.0	0.0	1.2	0.0	0.3	0.0	204.0	205.5	276.5
02-50-08-015	Balsain	0	28.5	7.5	0.0	36.0	0.0	0.1	0.0	0.2	0.1	0.6	1.0	37.0
02-50-08-016	Canabay	0	62.0	0.0	0.0	62.0	0.0	26.6	0.1	0.6	1.8	0.0	29.1	91.1
02-50-08-017	Domang	0	5.0	2.0	0.0	7.0	0.0	0.1	0.0	0.5	1.4	1.4	3.3	10.3
02-50-08-018	Dopaj	0	65.0	0.0	0.0	65.0	0.0	11.9	0.0	2.6	0.1	20.0	34.6	99.6
02-50-08-019	Kimbutan	0	26.0	0.0	0.0	26.0	0.0	64.9	0.1	1.7	0.7	0.0	67.4	93.4
02-50-08-020	Kinabuan	0	26.0	0.0	4.0	30.0	0.0	52.7	0.0	1.7	0.1	0.1	54.5	84.5
02-50-08-021	Sanguit	0	73.0	10.0	0.0	83.0	0.0	25.1	0.0	3.2	7.9	0.0	36.2	119.2
02-50-08-023	Talbek	0	20.0	0.0	0.0	20.0	0.0	18.4	0.0	0.2	0.0	0.0	18.6	38.6
	Kasibu	2	1,996.4	107.2	136.0	2,239.6	582.1	746.1	1,733.3	150.8	379.3	688.4	4,280.0	6,519.5
02-50-09-001	Antutot	0	57.5	0.0	2.0	59.5	4.0	46.2	0.1	16.5	46.0	0.2	112.9	172.4
02-50-09-002	Alimit	0	35.0	0.0	40.0	75.0	8.0	8.5	0.0	1.9	0.3	10.0	28.7	103.7
02-50-09-003	Poblacion (Alloy)	0	22.8	0.0	0.0	22.8	41.0	18.6	0.5	3.0	2.3	0.8	66.1	88.8
02-50-09-004	Bilet	0	19.0	17.0	15.0	51.0	15.0	1.9	0.0	1.0	9.4	0.0	27.2	78.2
02-50-09-005	Binogawan	0	86.1	0.0	0.0	86.1	5.0	9.8	0.1	2.2	50.0	0.2	67.3	153.4
02-50-09-006	Bua	0	68.0	0.0	0.0	68.0	6.3	38.9	0.0	1.1	2.8	0.2	49.1	117.1
02-50-09-007	Biyoy	0	100.0	0.0	0.0	100.0	15.0	5.0	1.4	5.0	24.0	10.0	60.4	160.4
02-50-09-008	Capisaan	0	35.0	0.0	0.0	35.0	20.0	13.6	0.0	1.5	5.1	60.0	100.1	135.1
02-50-09-009	Cordon	0	149.7	0.0	0.0	149.7	17.2	39.9	0.2	6.5	15.3	1.0	80.1	229.8
02-50-09-010	Didipio	0	66.0	0.0	0.0	66.0	9.0	5.3	0.0	3.3	5.0	0.2	22.8	88.8
02-50-09-011	Dine	0	10.0	0.0	0.0	10.0	10.0	17.5	1.0	17.1	1.1	0.0	46.7	56.7
02-50-09-012	Kakiduguen	0	50.0	0.0	5.0	55.0	6.0	20.2	500.0	8.5	10.5	15.0	560.2	615.2
02-50-09-014	Lupa	0	15.0	5.0	0.0	20.0	17.2	22.3	0.0	1.5	0.5	0.4	41.8	61.8
02-50-09-015	Macalong	0	130.1	0.0	0.0	130.1	5.0	70.8	300.0	7.0	37.3	188.0	608.0	738.1
02-50-09-016	Malabing	0	15.0	10.8	0.0	25.8	10.5	8.3	0.0	0.7	12.5	0.6	32.5	58.2
02-50-09-017	Muta	0	100.0	0.0	0.0	100.0	26.0	39.1	1.1	2.1	0.1	0.3	68.7	168.7
02-50-09-018	Pao	0	132.0	0.0	0.0	132.0	5.0	24.0	500.0	4.0	18.8	20.0	571.8	703.8
02-50-09-019	Papaya	0	50.0	0.0	3.0	53.0	25.0	9.9	200.0	1.3	5.1	10.0	251.2	304.2
02-50-09-020	Pudi	0	65.3	0.0	0.0	65.3	35.0	44.6	0.0	3.0	28.2	0.8	111.6	176.9
02-50-09-021	Tokod	0	15.0	13.0	12.0	40.0	5.0	1.8	0.0	12.0	0.0	0.0	18.8	58.8
02-50-09-022	Seguem	0	86.8	13.0	5.0	104.8	7.0	49.8	0.1	3.0	2.1	0.1	62.1	166.9
02-50-09-023	Tadji	1	25.0	0.0	0.0	25.0	7.0	4.3	0.1	23.0	11.8	0.2	46.3	71.3
02-50-09-024	Wangal	0	55.3	0.0	0.0	55.3	30.0	12.5	0.0	2.3	10.0	0.4	55.1	110.4
02-50-09-025	Watwat	0	98.5	0.0	0.0	98.5	63.3	46.5	0.1	3.0	10.0	0.2	123.0	221.5
02-50-09-026	Camamasi	0	55.0	0.0	35.0	90.0	10.5	3.5	0.0	0.8	1.0	5.0	20.8	110.8
02-50-09-027	Catarawan	0	18.0	12.0	16.0	46.0	14.0	4.8	0.1	0.5	14.0	0.1	33.5	79.5
02-50-09-028	Nantawacan	1	104.7	0.0	0.0	104.7	50.7	27.3	1.0	4.5	36.0	0.8	120.3	225.0
02-50-09-029	Alloy	0	120.0	0.0	3.0	123.0	10.0	29.1	27.5	3.5	5.3	64.0	139.4	262.4
02-50-09-030	Kongkong	0	128.6	0.0	0.0	128.6	74.5	69.6	200.0	5.4	10.0	300.0	659.4	788.0
02-50-09-031	Pacquet (Illongot Re)	0	83.2	36.4	0.0	119.6	30.0	53.2	0.0	5.9	5.1	0.0	94.2	213.8
	Kayapa	1	755.9	7.0	886.5	1,649.4	492.6	216.3	1.0	11.2	36.2	2.5	759.9	2,409.2
02-50-10-001	Acacia	0	30.0	0.0	243.9	273.9	5.0	2.2	0.0	0.1	8.2	0.1	15.7	289.6
02-50-10-002	Amilong Labeng	0	12.0	0.0	0.9	12.9	0.0	17.0	0.0	0.0	0.0	0.0	17.0	30.0

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (20/24)

Code	Province/ Municipality/ Barangay	CBFMA (1: exist, 12: none)	Irrigated Rice Area a (ha)	Rainfed Rice Area b (ha)	Upland Rice Area c (ha)	Total Rice Area <a+b+c> (ha)	Corn Area d (ha)	Vegetables Area e (ha)	Pineapple Area f (ha)	Banana Area g (ha)	Coffee Area h (ha)	Coconut Area i (ha)	Total Non- rice Crop Area <d+e+f+g+h+i> (ha)	Total Crop Area <a+.....+i> (ha)
02-50-10-004	Baan	1	189.1	0.0	0.0	189.1	357.3	38.4	0.0	2.5	0.1	0.4	398.8	587.9
02-50-10-005	Babadi	0	10.7	0.0	4.1	14.7	0.0	2.4	0.0	0.3	0.6	0.0	3.3	18.0
02-50-10-006	Balangabang	0	21.0	0.0	0.0	21.0	0.0	12.0	0.0	0.1	0.6	0.0	12.7	33.7
02-50-10-007	Banao	0	25.6	0.0	5.1	30.7	0.0	0.1	0.0	0.2	0.1	0.0	0.4	31.1
02-50-10-008	Binalian	0	51.1	5.0	161.4	217.4	0.0	23.3	0.0	0.2	0.1	0.0	23.6	241.0
02-50-10-010	Cabalatan-Alang	0	1.7	0.0	8.2	9.9	0.0	0.0	0.0	0.1	1.0	0.0	1.0	10.9
02-50-10-011	Cabanglasan	0	18.8	0.0	294.4	313.2	0.0	9.0	0.0	3.6	0.6	0.1	13.3	326.5
02-50-10-012	Kayapa-Proper East	0	36.0	0.0	0.0	36.0	0.0	5.1	0.0	0.2	0.3	0.0	5.6	41.6
02-50-10-014	Mapayao	0	31.4	0.0	15.6	47.0	5.0	32.6	0.0	1.1	1.7	0.0	40.4	87.4
02-50-10-015	Nansiakan	0	34.3	0.0	9.7	43.9	0.0	11.5	0.0	0.0	15.3	0.0	26.9	70.8
02-50-10-017	Pangawan	0	15.0	0.0	0.0	15.0	0.0	6.8	0.0	0.9	3.5	0.0	11.2	26.2
02-50-10-018	Pinayag	0	19.5	2.0	25.2	46.6	0.0	2.3	0.0	0.5	2.3	0.8	5.8	52.5
02-50-10-019	Pingkian	0	58.8	0.0	107.7	166.5	4.0	6.3	0.0	0.2	0.3	0.2	11.0	177.5
02-50-10-020	San Fabian	0	125.6	0.0	1.0	126.6	120.8	6.2	0.0	0.4	0.3	0.4	128.0	254.6
02-50-10-024	Balete	0	0.9	0.0	0.5	1.4	0.0	20.0	0.9	0.3	0.4	0.0	21.5	22.9
02-50-10-025	Buyasyas	0	7.7	0.0	5.0	12.7	0.5	2.7	0.0	0.1	0.6	0.1	4.0	16.7
02-50-10-026	Cabuyao	0	11.8	0.0	3.0	14.8	0.0	1.1	0.0	0.1	0.1	0.0	1.2	16.0
02-50-10-027	Castillo Village	0	18.0	0.0	0.0	18.0	0.0	1.5	0.0	0.0	0.0	0.0	1.5	19.5
02-50-10-028	Latbang	0	27.9	0.0	0.9	28.8	0.0	1.0	0.0	0.1	0.0	0.0	1.1	29.9
02-50-10-030	Tidang Village	0	9.0	0.0	0.0	9.0	0.0	15.0	0.0	0.3	0.1	0.4	15.9	24.9
	Quezon	5	1,008.0	96.5	50.5	1,155.0	1,471.5	98.7	15.3	387.1	611.6	76.7	2,660.9	3,815.9
02-50-11-001	Aurora	1	110.0	10.0	0.0	120.0	50.0	2.9	0.0	5.7	3.1	0.8	62.5	182.5
02-50-11-002	Baresbes	0	17.0	35.0	0.0	52.0	83.0	2.3	0.5	4.5	0.4	1.0	91.7	143.7
02-50-11-003	Buliwao	0	131.0	20.0	0.0	151.0	151.0	6.2	0.3	36.0	0.3	4.0	197.8	348.8
02-50-11-004	Bonifacio	0	14.0	0.0	5.5	19.5	108.0	20.3	0.2	40.8	0.0	1.2	170.4	189.9
02-50-11-005	Calaocan	1	80.0	10.0	25.0	115.0	200.0	3.0	1.0	40.3	37.3	8.0	289.6	404.6
02-50-11-006	Caliat (Pop.)	0	143.0	1.5	0.0	144.5	90.0	2.5	5.3	13.0	9.4	44.8	164.9	309.4
02-50-11-007	Darubba	0	35.0	8.0	0.0	43.0	180.5	6.4	2.0	13.7	39.3	1.6	243.5	286.5
02-50-11-008	Maddiangat	0	149.0	0.0	0.0	149.0	40.0	7.9	1.0	10.6	0.6	4.8	64.9	213.9
02-50-11-009	Nalubbunan	1	90.0	2.0	0.0	92.0	130.0	2.9	0.0	11.1	5.1	8.0	157.2	249.2
02-50-11-010	Runruno	1	124.0	0.0	0.0	124.0	200.0	6.1	5.0	88.3	220.9	1.6	521.9	645.9
02-50-11-011	Massin	0	65.0	0.0	10.0	75.0	139.0	11.8	0.1	52.9	0.6	0.0	204.3	279.3
02-50-11-012	Dagupan	1	50.0	10.0	10.0	70.0	100.0	26.5	0.0	70.2	294.7	0.9	492.2	562.2
	Sta. Fe	5	776.0	13.0	47.5	836.5	19.3	302.0	2.3	15.8	27.8	8.9	376.1	1,212.6
02-50-12-002	Bacneng	0	10.0	0.0	7.0	17.0	1.0	35.2	0.1	0.5	0.8	0.8	38.4	55.4
02-50-12-003	Bailing	1	109.0	0.0	0.0	109.0	2.0	26.2	0.0	3.1	13.3	4.0	48.7	157.7
02-50-12-004	Bantinan	1	193.0	3.0	2.0	198.0	1.5	53.7	2.0	2.6	2.9	0.7	63.5	261.5
02-50-12-005	Baracbac	0	20.0	0.0	10.0	30.0	0.3	24.6	0.0	1.2	0.3	0.1	26.5	56.5
02-50-12-006	Buyasyas	0	10.0	0.0	1.0	11.0	7.0	15.3	0.0	0.6	0.2	0.5	23.7	34.7
02-50-12-008	Imugan	1	6.0	6.0	0.0	12.0	0.0	15.3	0.0	0.4	0.4	0.8	16.9	28.9
02-50-12-010	Sinapaoan	1	72.0	0.0	1.5	73.5	0.0	5.9	7.0	0.6	2.7	0.4	9.6	83.1
02-50-12-011	Tactac	0	17.0	1.0	5.0	23.0	0.0	5.0	0.0	0.5	0.7	0.1	6.2	29.2
02-50-12-012	Villa Flores	0	100.0	0.0	0.0	100.0	0.0	24.7	0.1	1.5	4.9	1.2	32.4	132.4
02-50-12-013	Atbu	0	30.0	0.0	5.0	35.0	0.5	1.9	0.0	0.2	0.1	0.0	2.6	37.6
02-50-12-014	Balete	1	26.0	0.0	3.0	29.0	0.0	67.1	0.0	2.8	0.0	0.0	69.9	98.9
02-50-12-015	Canabuan	0	164.0	0.0	0.0	164.0	1.0	7.8	0.0	1.3	1.2	0.3	11.6	175.6
02-50-12-016	Malico	0	0.0	0.0	10.0	10.0	2.0	6.5	0.0	0.1	0.1	0.0	8.7	18.7
02-50-12-018	Unib	0	19.0	3.0	3.0	25.0	4.0	12.8	0.0	0.4	0.3	0.1	17.4	42.4
	Solano	0	688.0	67.0	0.0	755.0	50.2	18.9	0.1	6.6	32.9	16.5	125.1	880.1
02-50-13-001	Aggub	0	338.0	10.0	0.0	348.0	0.0	0.3	0.0	3.8	3.5	12.5	20.1	368.1
02-50-13-002	Bangaan	0	86.0	44.0	0.0	130.0	0.2	14.7	0.0	1.9	11.8	2.4	30.9	160.9
02-50-13-004	Bascaran	0	239.0	3.0	0.0	242.0	0.0	3.0	0.0	0.5	0.0	0.8	4.3	246.3
02-50-13-021	Communal	0	25.0	10.0	0.0	35.0	50.0	0.8	0.1	0.5	17.6	0.8	69.8	104.8
	Villaverd	1	622.0	412.0	0.0	1,034.0	911.0	159.5	0.2	409.3	556.3	92.9	2,129.1	3,163.1
02-50-14-003	Cabuluan	0	25.0	45.0	0.0	70.0	150.0	100.0	0.0	72.7	235.0	0.4	558.2	628.2
02-50-14-004	Nagbitin	0	182.0	125.0	0.0	307.0	286.0	21.0	0.1	180.4	232.9	1.7	722.0	1029.0
02-50-14-005	Ocapon	0	40.0	22.0	0.0	62.0	150.0	13.0	0.0	78.7	47.6	2.4	291.8	353.8

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (21/24)

Code	Province/ Municipality/ Barangay	CBFMA (1: exist, 12: none)	Irrigated Rice Area a (ha)	Rainfed Rice Area b (ha)	Upland Rice Area c (ha)	Total Rice Area <a+b+c> (ha)	Corn Area d (ha)	Vegetables Area e (ha)	Pineapple Area f (ha)	Banana Area g (ha)	Coffee Area h (ha)	Coconut Area i (ha)	Total Non- rice Crop Area <d+e+f+g+h+i> (ha)	Total Crop Area <a+.....+i> (ha)
02-50-14-007	Sawmill	0	75.0	120.0	0.0	195.0	150.0	9.5	0.0	65.5	39.6	7.2	271.8	466.8
02-50-14-009	Bintawan Notre	1	300.0	100.0	0.0	400.0	175.0	16.0	0.0	12.0	1.2	81.2	285.4	685.4
	Alfonso Castaneda	1	293.0	111.0	222.0	626.0	0.0	69.3	0.1	19.6	1.5	6.3	96.7	722.7
02-50-15-002	Galintuja	0	139.0	0.0	60.0	199.0	0.0	32.4	0.0	11.8	0.1	2.1	46.4	245.4
02-50-15-003	Cauayan	0	3.0	1.0	0.0	4.0	0.0	0.1	0.0	0.7	0.3	0.1	1.2	5.2
02-50-15-004	Lipuga	0	4.0	2.0	45.0	51.0	0.0	0.0	0.0	0.3	0.1	0.9	1.3	52.3
02-50-15-005	Lublub (Pob.)	1	144.0	100.0	60.0	304.0	0.0	17.9	0.0	5.4	0.0	3.2	26.4	330.4
02-50-15-006	Pelaway	0	3.0	8.0	57.0	68.0	0.0	19.0	0.0	1.4	1.0	0.0	21.5	89.5
	QUIRINO	26	1,270.1	725.0	1,047.5	3,042.6	5,681.5	1,197.7	16.5	8,071.4	378.2	258.7	15,603.9	18,646.5
	Aglipay	10	347.5	210.8	338.0	896.3	1,470.2	208.5	9.1	1,278.3	117.5	44.8	3,128.5	4,024.7
02-57-01-001	Dagupan	0	15.0	150.0	0.0	165.0	240.0	12.5	0.2	0.0	1.2	4.0	257.8	422.8
02-57-01-002	Dumabel	1	3.0	1.5	0.0	4.5	136.0	6.2	0.0	30.8	0.6	0.2	173.8	178.3
02-57-01-003	Dungo (Osme.a)	0	15.0	0.0	15.0	30.0	1.0	6.8	0.0	26.7	0.1	0.8	35.3	65.3
02-57-01-006	Palacion	1	12.0	20.0	5.0	37.0	206.0	28.5	1.9	53.0	11.8	7.5	308.6	345.6
02-57-01-013	San Leonardo (Cabarroguis)	1	21.0	0.0	0.0	21.0	198.0	14.0	0.1	34.0	0.5	3.2	249.7	270.7
02-57-01-014	San Ramon	1	32.0	3.0	0.5	35.5	200.0	2.6	0.1	55.0	0.2	0.7	258.6	294.1
02-57-01-015	Victoria	1	46.0	15.0	15.0	76.0	102.0	16.5	1.0	75.0	7.0	2.8	204.3	280.3
02-57-01-018	Alicia	1	80.0	0.0	200.0	280.0	0.2	15.5	2.0	34.5	45.0	8.0	105.2	385.2
02-57-01-019	Cabugao	1	19.5	3.8	2.5	25.8	100.0	3.0	0.3	31.5	2.0	4.0	140.8	166.6
02-57-01-020	Diodol	0	7.0	12.0	0.0	19.0	34.0	15.5	0.4	74.5	2.6	4.0	131.0	150.0
02-57-01-021	Nagabgaben	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
02-57-01-023	San Benigno	1	25.0	0.5	50.0	75.5	41.0	45.6	1.0	248.0	37.0	1.7	374.3	449.8
02-57-01-024	San Manuel	1	45.0	0.0	50.0	95.0	60.0	16.3	1.3	535.0	3.0	4.0	619.5	714.5
02-57-01-025	Villa Ventura	0	27.0	5.0	0.0	32.0	152.0	25.6	1.0	80.4	6.5	4.0	269.5	301.5
	Cabarrogu	1	216.6	0.0	0.0	216.6	482.5	11.6	1.7	2,213.3	4.5	43.5	2,757.1	2,973.7
02-57-02-003	Calaocan	0	40.0	0.0	0.0	40.0	52.0	2.5	0.0	101.5	0.9	0.4	157.4	197.4
02-57-02-005	Dibibi	1	82.0	0.0	0.0	82.0	241.5	9.1	1.5	641.8	1.9	40.0	935.8	1017.8
02-57-02-006	Eden	0	7.6	0.0	0.0	7.6	79.0	0.0	0.0	170.0	0.4	1.6	251.0	258.5
02-57-02-014	Dingasan	0	60.0	0.0	0.0	60.0	80.0	0.0	0.1	700.0	0.7	1.2	781.9	841.9
02-57-02-015	Tucod	0	27.0	0.0	0.0	27.0	30.0	0.0	0.0	600.0	0.7	0.3	631.1	658.1
	Diffun	4	240.0	16.0	124.0	380.0	876.0	305.1	0.0	1,120.0	145.5	34.8	2,481.5	2,861.5
02-57-03-004	Baguio Village	1	5.0	7.0	20.0	32.0	0.0	85.2	0.0	133.0	0.2	10.4	228.8	260.8
02-57-03-008	Campamento	0	40.0	2.0	25.0	67.0	255.0	56.0	0.0	172.0	51.1	1.0	535.1	602.1
02-57-03-010	Don Mariano Perez. S	1	20.0	0.0	0.0	20.0	31.0	51.4	0.0	129.0	50.0	16.0	277.4	297.4
02-57-03-012	Dumanisi	0	88.0	5.0	60.0	153.0	203.0	18.9	0.0	56.8	0.4	1.2	280.3	433.3
02-57-03-016	Ilgao Village	1	46.0	0.0	5.0	51.0	30.0	42.0	0.0	139.2	40.0	0.1	251.2	302.2
02-57-03-021	Magsaysay	0	0.0	2.0	4.0	6.0	90.0	19.7	0.0	113.0	1.0	4.0	227.7	233.7
02-57-03-022	Makate	0	9.0	0.0	10.0	19.0	35.0	11.2	0.0	90.0	1.2	0.8	138.2	157.2
02-57-03-024	Rafael Palma (Don Sergio Osme)	1	12.0	0.0	0.0	12.0	177.0	9.3	0.0	157.0	1.1	0.8	345.2	357.2
02-57-03-032	Gregorio Pimentel	0	20.0	0.0	0.0	20.0	55.0	11.6	0.0	130.0	0.5	0.6	197.7	217.7
	Madella	5	321.0	376.0	283.5	980.5	1,716.0	67.5	4.9	1,779.8	67.0	121.3	3,756.5	4,737.0
02-57-04-004	Divisoria Sur (Bisangal)	0	0.0	8.0	0.0	8.0	90.0	3.0	0.0	22.5	1.2	4.0	120.6	128.6
02-57-04-007	Cabua-an	0	10.0	4.0	276.0	290.0	150.0	33.0	0.0	372.0	10.0	0.0	565.0	855.0
02-57-04-008	Cocfocaville	0	0.0	14.0	0.5	14.5	200.0	6.0	0.5	30.0	1.4	16.0	253.9	268.4
02-57-04-010	Dipintin	0	65.0	160.0	0.0	225.0	342.0	6.8	0.0	31.4	10.0	32.0	422.1	647.1
02-57-04-011	Divisoria Notre	0	0.0	30.0	0.0	30.0	59.0	5.5	0.0	30.0	0.0	2.0	96.5	126.5
02-57-04-012	Dumabato Notre	0	120.0	25.0	0.0	145.0	20.0	0.0	0.1	2.6	0.1	4.0	26.9	171.9
02-57-04-015	Manglad	1	0.0	30.0	0.0	30.0	105.0	2.0	0.0	175.1	0.3	0.8	283.2	313.2
02-57-04-021	San Dionsio I	1	0.0	48.0	0.0	48.0	94.0	2.0	0.0	90.0	0.2	50.0	236.2	284.2
02-57-04-023	San Martin	0	25.0	0.0	0.0	25.0	44.0	3.5	0.0	324.1	10.0	1.6	383.2	408.2
02-57-04-024	San Pedro	1	0.0	0.0	0.0	0.0	122.0	1.5	0.4	0.0	2.8	0.5	127.2	127.2
02-57-04-026	Santo Ni O	1	2.0	0.0	0.0	2.0	80.0	0.5	0.1	59.9	1.8	9.3	151.6	153.6
02-57-04-027	Santo Tomas	0	0.0	20.0	0.0	20.0	202.0	1.0	2.3	50.0	4.1	0.4	259.8	279.8
02-57-04-028	Villa Gracia	1	69.0	0.0	0.0	69.0	150.0	0.9	0.2	350.0	7.2	0.2	508.4	577.4
02-57-04-032	Ysmael	0	0.0	30.0	0.0	30.0	40.0	0.0	0.8	77.2	3.5	0.0	121.5	151.5
02-57-04-034	Villa Agullana	0	0.0	7.0	7.0	14.0	12.0	1.8	0.0	85.8	13.1	0.4	113.1	127.1
02-57-04-037	Villa Jose V Ylanan	0	30.0	0.0	0.0	30.0	6.0	0.0	0.5	79.3	1.2	0.2	87.2	117.2

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (22/24)

Code	Province/ Municipality/ Barangay	CBFMA (1: exist, 12: none)	Irrigated Rice Area a (ha)	Rainfed Rice Area b (ha)	Upland Rice Area c (ha)	Total Rice Area <a+b+c> (ha)	Corn Area d (ha)	Vegetables Area e (ha)	Pineapple Area f (ha)	Banana Area g (ha)	Coffee Area h (ha)	Coconut Area i (ha)	Total Non- rice Crop Area <d+e+f+g+h+i> (ha)	Total Crop Area <a+.....+i> (ha)
	Nagtipuna	6	145.0	122.3	302.0	569.3	1,136.8	605.0	0.8	1,679.9	43.6	14.3	3,480.4	4,049.7
02-57-06-001	Anak	1	5.0	50.0	30.0	85.0	40.0	31.1	0.0	151.0	5.6	8.0	235.7	320.7
02-57-06-002	Dipantan	1	2.0	0.0	8.0	10.0	150.0	1.0	0.0	3.3	0.0	0.1	154.5	164.5
02-57-06-003	Dissimungal	1	0.0	0.0	30.0	30.0	15.0	15.1	0.1	39.4	0.5	0.4	70.4	100.4
02-57-06-004	Guino (Giayan)	0	66.0	0.0	24.0	90.0	0.0	36.6	0.0	2.1	4.7	0.5	43.9	133.9
02-57-06-005	La Conwap (Guingin)	0	10.0	0.0	12.0	22.0	0.0	15.0	0.0	0.3	0.1	0.1	15.5	37.5
02-57-06-006	Landingan	0	0.0	0.0	120.0	120.0	55.0	170.1	0.0	30.0	1.8	0.2	257.0	377.0
02-57-06-007	Mataddi	0	10.0	0.0	15.0	25.0	0.0	48.0	0.0	21.3	1.3	0.2	70.8	95.8
02-57-06-008	Matmad	0	1.0	0.0	2.0	3.0	0.0	31.3	0.3	20.5	0.3	0.0	52.3	55.3
02-57-06-010	Ponggo	0	1.0	0.3	3.0	4.3	450.0	7.2	0.1	25.0	3.0	1.8	487.1	491.4
02-57-06-011	San Dionisio II	0	0.0	0.0	5.0	5.0	205.0	43.1	0.1	37.6	10.0	0.3	296.1	301.1
02-57-06-012	San Pugo	1	5.0	70.0	0.0	75.0	3.0	72.0	0.0	2.8	0.9	0.2	78.9	153.9
02-57-06-013	San Ramos	0	0.0	0.0	20.0	20.0	100.0	89.5	0.0	42.8	11.8	0.2	244.3	264.3
02-57-06-014	Sangbay	1	25.0	2.0	0.0	27.0	60.8	5.9	0.3	280.0	1.0	2.0	349.9	376.9
02-57-06-015	Wasid	0	0.0	0.0	30.0	30.0	55.0	32.8	0.0	13.8	2.4	0.2	104.2	134.2
02-57-06-016	Asaklat	1	20.0	0.0	3.0	23.0	3.0	6.4	0.0	1,010.0	0.5	0.1	1,019.9	1,042.9
	IFUGAO	45	7,324.6	2,459.0	294.0	10,077.6	1,493.0	870.9	32.3	711.3	567.8	181.1	3,856.4	13,934.0
	Banaue	1	1,005.0	0.0	35.0	1,040.0	0.0	0.0	0.2	8.3	7.9	1.2	17.6	1,057.6
14-27-01-001	Amganad	0	84.0	0.0	0.0	84.0	0.0	0.0	0.1	0.6	0.6	0.2	1.4	85.4
14-27-01-002	Anaba	0	55.0	0.0	5.0	60.0	0.0	0.0	0.0	0.6	0.4	0.2	1.2	61.2
14-27-01-003	Bangaan	0	70.0	0.0	0.0	70.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	70.4
14-27-01-004	Batad	0	75.0	0.0	0.0	75.0	0.0	0.0	0.0	0.4	0.2	0.3	0.9	75.9
14-27-01-005	Bocos	0	75.0	0.0	0.0	75.0	0.0	0.0	0.0	0.3	0.2	0.0	0.5	75.5
14-27-01-007	Banao	1	37.0	0.0	20.0	57.0	0.0	0.0	0.0	0.4	0.7	0.4	1.6	58.6
14-27-01-009	Cambulo	0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.5	0.2	0.0	0.7	50.7
14-27-01-010	Ducligan	0	70.0	0.0	10.0	80.0	0.0	0.0	0.0	0.6	1.9	0.0	2.5	82.5
14-27-01-011	Gohang	0	35.0	0.0	0.0	35.0	0.0	0.0	0.0	0.6	1.0	0.0	1.6	36.6
14-27-01-013	Kinakin	0	70.0	0.0	0.0	70.0	0.0	0.0	0.0	0.5	0.5	0.0	1.0	71.0
14-27-01-016	Poblacion	0	55.0	0.0	0.0	55.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	55.2
14-27-01-017	Poitán	0	41.0	0.0	0.0	41.0	0.0	0.0	0.0	0.3	0.2	0.0	0.5	41.5
14-27-01-018	San Fernando	0	32.0	0.0	0.0	32.0	0.0	0.0	0.0	0.5	0.3	0.0	0.8	32.8
14-27-01-021	Balawis	0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.4	0.1	0.3	0.7	50.7
14-27-01-022	Ohaj	0	36.0	0.0	0.0	36.0	0.0	0.0	0.0	0.5	0.6	0.0	1.1	37.1
14-27-01-023	Tam-an	0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.5	0.4	0.0	1.0	51.0
14-27-01-024	View Point	0	80.0	0.0	0.0	80.0	0.0	0.0	0.0	0.5	0.3	0.0	0.8	80.8
14-27-01-025	Pula	0	40.0	0.0	0.0	40.0	0.0	0.0	0.0	0.5	0.3	0.0	0.7	40.7
	Hungduan	0	992.0	0.0	0.0	992.0	7.8	2.1	0.2	4.9	13.0	0.0	27.9	1,019.9
14-27-02-001	Abatan	0	115.0	0.0	0.0	115.0	1.0	0.0	0.0	0.4	2.0	0.0	3.5	118.5
14-27-02-004	Bangbang	0	65.0	0.0	0.0	65.0	1.0	0.3	0.0	0.4	2.0	0.0	3.6	68.6
14-27-02-010	Maggok	0	142.0	0.0	0.0	142.0	0.5	0.3	0.0	0.3	4.5	0.0	5.7	147.7
14-27-02-011	Poblacion	0	155.0	0.0	0.0	155.0	1.0	0.2	0.0	1.3	0.2	0.0	2.7	157.7
14-27-02-018	Bokiawan	0	145.0	0.0	0.0	145.0	2.0	0.3	0.0	0.9	0.2	0.0	3.4	148.4
14-27-02-019	Hapao	0	125.0	0.0	0.0	125.0	1.0	0.4	0.0	0.2	0.8	0.0	2.5	127.5
14-27-02-020	Lubo-ong	0	90.0	0.0	0.0	90.0	0.3	0.3	0.0	0.5	3.0	0.0	4.2	94.2
14-27-02-021	Nungulunan	0	95.0	0.0	0.0	95.0	0.0	0.2	0.0	0.2	0.2	0.0	0.5	95.5
14-27-02-022	Ba-ang	0	60.0	0.0	0.0	60.0	1.0	0.2	0.0	0.6	0.2	0.0	1.9	61.9
	Kiangán	3	720.0	170.0	6.0	896.0	25.5	0.0	18.2	139.8	93.8	16.3	293.6	1,189.6
14-27-03-001	Ambabag	1	55.0	5.0	0.0	60.0	0.0	0.0	2.0	18.0	10.7	0.3	31.0	91.0
14-27-03-004	Baguinge	1	109.0	7.0	0.0	116.0	0.0	0.0	0.1	12.0	30.0	0.5	42.6	158.6
14-27-03-005	Bokiwan	0	50.0	3.0	0.0	53.0	0.0	0.0	2.0	7.3	4.4	3.0	16.7	69.7
14-27-03-008	Dalligan	1	40.0	3.0	0.0	43.0	0.0	0.0	0.0	13.3	2.4	1.5	17.1	60.1
14-27-03-009	Duit	0	70.0	40.0	0.0	110.0	1.0	0.0	2.0	6.0	3.0	0.5	12.5	122.5
14-27-03-011	Hucab	0	31.0	0.0	5.0	36.0	10.0	0.0	1.0	4.5	20.0	1.0	36.5	72.5
14-27-03-012	Julongan	0	50.0	13.0	0.0	63.0	0.0	0.0	3.0	17.0	3.0	1.0	24.0	87.0
14-27-03-013	Lingay	1	30.0	4.0	0.0	34.0	0.0	0.0	3.5	14.5	1.5	1.0	20.5	54.5
14-27-03-014	Mungayang	0	65.0	35.0	1.0	101.0	4.0	0.0	2.0	5.0	3.0	0.5	14.5	115.5
14-27-03-015	Nagacadan	0	50.0	20.0	0.0	70.0	0.0	0.0	1.0	10.0	5.3	1.5	17.8	87.8

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (23/24)

Code	Province/ Municipality/ Barangay	CBFMA (1: exist, 12: none)	Irrigated Rice Area a (ha)	Rainfed Rice Area b (ha)	Upland Rice Area c (ha)	Total Rice Area <a+b+c> (ha)	Corn Area d (ha)	Vegetables Area e (ha)	Pineapple Area f (ha)	Banana Area g (ha)	Coffee Area h (ha)	Coconut Area i (ha)	Total Non- rice Crop Area <d+e+f+g+h+i> (ha)	Total Crop Area <a+.....+i> (ha)
14-27-03-017	Pindongan	0	70.0	0.0	0.0	70.0	0.0	0.0	0.3	5.0	5.0	1.0	11.3	81.3
14-27-03-018	Poblacion	0	30.0	0.0	0.0	30.0	0.0	0.0	0.3	2.8	3.1	1.5	7.7	37.7
14-27-03-020	Tuplac	0	30.0	30.0	0.0	60.0	0.5	0.0	0.0	3.5	2.0	2.0	8.0	68.0
14-27-03-021	Bolog	0	40.0	10.0	0.0	50.0	10.0	0.0	1.0	21.0	0.5	1.0	33.5	83.5
	Lagawe	5	923.0	102.0	135.0	1,160.0	346.0	87.8	1.6	46.6	172.2	13.8	668.0	1,828.0
14-27-04-001	Abinuan	0	20.0	5.0	0.0	25.0	10.0	1.0	0.1	2.0	18.0	0.0	31.1	56.1
14-27-04-003	Banga	1	38.0	0.0	4.0	42.0	30.0	22.0	0.0	3.0	1.5	0.0	56.5	98.5
14-27-04-005	Boliwong	0	100.0	25.0	5.0	130.0	5.0	5.5	0.1	3.0	16.0	1.0	30.6	160.6
14-27-04-006	Burnay	0	60.0	5.0	0.0	65.0	4.0	1.0	0.0	2.0	5.0	2.5	14.5	79.5
14-27-04-008	Buyabuyan	0	50.0	0.0	15.0	65.0	0.0	11.1	0.1	6.0	5.5	0.5	23.1	88.1
14-27-04-009	Caba	1	179.0	20.0	3.0	202.0	9.0	1.0	0.0	2.5	17.0	0.3	29.8	231.8
14-27-04-010	Cudog	0	75.0	0.0	3.0	78.0	1.0	3.3	0.1	3.7	10.0	1.0	19.1	97.1
14-27-04-011	Dulao	0	28.0	10.0	5.0	43.0	120.0	3.8	0.5	1.4	0.2	0.3	126.2	169.2
14-27-04-013	Jucbong	0	48.0	0.0	26.0	74.0	4.0	9.0	0.1	2.0	15.0	0.2	30.3	104.3
14-27-04-014	Luta	1	20.0	0.0	10.0	30.0	4.0	4.7	0.1	4.0	10.0	0.3	23.1	53.1
14-27-04-016	Montabiong	0	35.0	0.0	15.0	50.0	2.0	2.0	0.1	5.0	16.0	0.5	25.6	75.6
14-27-04-018	Ollicon	1	90.0	25.0	3.0	118.0	31.0	3.0	0.0	2.0	5.0	0.2	41.2	159.2
14-27-04-020	Poblacion South	0	80.0	9.0	0.0	89.0	0.0	0.8	0.0	1.0	5.0	6.3	13.1	102.1
14-27-04-021	Ponghal	0	7.0	0.0	20.0	27.0	3.0	7.5	0.1	4.0	6.0	0.3	20.9	47.9
14-27-04-022	Pullaan	0	7.0	0.0	20.0	27.0	4.0	8.5	0.1	2.0	30.0	0.1	44.7	71.7
14-27-04-023	Tunggod	0	52.0	3.0	0.0	55.0	2.0	0.5	0.0	1.0	10.0	0.5	14.0	69.0
14-27-04-024	Tupaya	1	34.0	0.0	6.0	40.0	117.0	3.1	0.0	2.0	2.0	0.0	124.1	164.1
	Lamut	11	869.0	410.0	37.0	1,316.0	510.0	82.9	9.5	139.3	48.9	145.2	935.8	2,251.8
14-27-05-002	Ambasa	1	27.0	15.0	0.0	42.0	15.0	5.0	0.2	20.0	1.0	1.0	42.2	84.2
14-27-05-004	Hapid	1	254.0	30.0	0.0	284.0	180.0	3.5	0.2	8.3	0.4	2.0	194.4	478.4
14-27-05-006	Lucban	0	42.0	10.0	0.0	52.0	20.0	4.8	0.0	6.0	3.0	0.7	34.5	86.5
14-27-05-007	Mabatobato(Lamut)	1	55.0	115.0	0.0	170.0	90.0	2.7	0.0	4.5	0.5	0.8	98.5	268.5
14-27-05-008	Magulon	1	38.0	15.0	7.0	60.0	30.0	9.1	0.2	17.0	13.0	0.7	70.0	130.0
14-27-05-009	Nayon	1	20.0	20.0	5.0	45.0	15.0	16.0	0.2	14.5	10.0	135.0	190.7	235.7
14-27-05-010	Panopdopan	1	240.0	5.0	0.0	245.0	10.0	0.0	2.0	5.0	0.5	0.5	18.0	263.0
14-27-05-011	Payawan	1	33.0	20.0	15.0	68.0	10.0	3.0	0.2	10.0	0.5	1.0	24.7	92.7
14-27-05-016	Bimpal	1	10.0	20.0	5.0	35.0	10.0	9.0	0.3	13.0	5.0	1.3	38.5	73.5
14-27-05-017	Holowon	1	20.0	15.0	0.0	35.0	15.0	5.0	0.3	22.0	10.0	1.0	53.3	88.3
14-27-05-019	Sanafe	1	90.0	140.0	5.0	235.0	105.0	4.8	6.0	2.8	0.0	0.1	118.7	353.7
14-27-05-020	Umilag	1	40.0	5.0	0.0	45.0	10.0	20.0	0.1	16.3	5.0	1.3	52.6	97.6
	Mayoyao	25	962.0	882.0	15.0	1,859.0	253.0	190.0	0.3	32.7	4.5	0.8	481.3	2,340.3
14-27-06-001	Aduyongan	1	15.0	15.0	5.0	35.0	12.0	5.8	0.0	0.6	0.2	0.0	18.6	53.6
14-27-06-002	Alimit	1	30.0	30.0	0.0	60.0	20.0	4.8	0.0	2.0	0.2	0.1	27.1	87.1
14-27-06-003	Ayangan	1	25.0	25.0	0.0	50.0	1.5	8.8	0.0	0.3	0.0	0.2	10.8	60.8
14-27-06-004	Balangbang	1	40.0	40.0	0.0	80.0	22.0	5.8	0.0	0.8	0.1	0.2	28.9	108.9
14-27-06-005	Banao	1	30.0	0.0	0.0	30.0	10.0	2.8	0.0	0.8	0.0	0.0	13.6	43.6
14-27-06-009	Buninan	1	60.0	60.0	0.0	120.0	0.0	5.8	0.0	0.9	0.1	0.0	6.8	126.8
14-27-06-010	Chaya	1	105.0	105.0	0.0	210.0	0.0	8.8	0.0	5.0	0.8	0.0	14.6	224.6
14-27-06-011	Chumang	1	90.0	90.0	0.0	180.0	5.0	4.8	0.0	3.0	0.4	0.0	13.2	193.2
14-27-06-014	Guinihon	1	35.0	35.0	0.0	70.0	20.0	6.8	0.0	1.0	0.0	0.0	27.8	97.8
14-27-06-015	Inwaloy	1	30.0	30.0	0.0	60.0	5.0	15.8	0.0	1.5	0.2	0.0	22.5	82.5
14-27-06-018	Langayan	1	12.0	12.0	0.0	24.0	10.0	8.8	0.0	1.0	0.3	0.0	20.1	44.1
14-27-06-019	Liwo	1	25.0	40.0	0.0	65.0	20.0	7.8	0.1	1.1	0.3	0.0	29.3	94.3
14-27-06-020	Maga	1	40.0	40.0	0.0	80.0	8.0	5.8	0.0	0.9	0.5	0.0	15.2	95.2
14-27-06-021	Magulon	1	35.0	35.0	0.0	70.0	15.0	3.8	0.0	1.5	0.3	0.0	20.6	90.6
14-27-06-022	Mapawoy	1	45.0	45.0	0.0	90.0	2.0	26.8	0.0	1.5	0.0	0.0	30.3	120.3
14-27-06-023	Mayoyao Proper	1	55.0	55.0	0.0	110.0	8.0	2.8	0.0	5.0	0.3	0.0	16.1	126.1
14-27-06-024	Mongol	1	60.0	60.0	0.0	120.0	0.0	8.8	0.0	0.3	0.0	0.0	9.1	129.1
14-27-06-025	Nalbu	1	20.0	0.0	5.0	25.0	1.5	5.8	0.0	1.0	0.3	0.0	8.6	33.6
14-27-06-026	Nattum	1	25.0	25.0	0.0	50.0	20.0	6.8	0.0	0.5	0.0	0.2	27.5	77.5
14-27-06-027	Palaad	1	20.0	20.0	0.0	40.0	10.0	5.8	0.0	0.5	0.3	0.0	16.6	56.6
14-27-06-028	Poblacion	1	40.0	40.0	0.0	80.0	20.0	8.8	0.0	0.5	0.2	0.2	29.7	109.7

Table 3.2.1 (2) Major Data Sheet by the Barangay Profile Survey (24/24)

Code	Province/ Municipality/ Barangay	CBFMA (1: exist, 12: none)	Irrigated Rice Area a (ha)	Rainfed Rice Area b (ha)	Upland Rice Area c (ha)	Total Rice Area <a+b+c> (ha)	Corn Area d (ha)	Vegetables Area e (ha)	Pineapple Area f (ha)	Banana Area g (ha)	Coffee Area h (ha)	Coconut Area i (ha)	Total Non- rice Crop Area <d+e+f+g+h+i> (ha)	Total Crop Area <a+.....+i> (ha)
14-27-06-030	Talbot	1	15.0	15.0	5.0	35.0	13.0	4.8	0.0	2.0	0.1	0.0	19.9	54.9
14-27-06-033	Tulaed	1	25.0	25.0	0.0	50.0	20.0	9.8	0.0	0.5	0.1	0.0	30.4	80.4
14-27-06-035	Bato-Alatbang	1	45.0	0.0	0.0	45.0	0.0	5.8	0.0	0.0	0.0	0.0	5.8	50.8
14-27-06-036	Epeng	1	40.0	40.0	0.0	80.0	10.0	7.8	0.0	0.5	0.2	0.0	18.5	98.5
	Alfonso Lista (Potia)	0	9.9	55.0	5.0	69.9	240.0	15.0	0.0	2.0	0.0	0.3	257.3	327.2
14-27-07-018	Santo Domingo(Cabicalan)	0	9.9	55.0	5.0	69.9	240.0	15.0	0.0	2.0	0.0	0.3	257.3	327.2
	Aguinaldo	0	405.0	22.0	61.0	488.0	70.0	40.5	0.2	83.0	9.5	2.0	205.2	693.2
14-27-08-002	Bunhian	0	30.0	20.0	15.0	65.0	3.0	36.0	0.0	4.0	2.0	0.0	45.0	110.0
14-27-08-006	Galongon	0	180.0	0.0	10.0	190.0	10.0	0.0	0.0	2.0	2.5	0.0	14.5	204.5
14-27-08-007	Halag	0	5.0	0.0	2.0	7.0	25.0	0.0	0.1	0.0	0.5	0.0	25.6	32.6
14-27-08-008	Itab	0	10.0	2.0	15.0	27.0	15.0	0.0	0.0	12.0	0.0	2.0	29.0	56.0
14-27-08-009	Jacmal	0	65.0	0.0	2.0	67.0	0.0	0.0	0.0	20.0	2.0	0.0	22.0	89.0
14-27-08-010	Majlong	0	65.0	0.0	2.0	67.0	0.0	0.0	0.0	16.0	2.5	0.0	18.5	85.5
14-27-08-013	Ta-ang	0	20.0	0.0	10.0	30.0	17.0	0.0	0.0	25.0	0.0	0.0	42.0	72.0
14-27-08-014	Talite	0	30.0	0.0	5.0	35.0	0.0	4.5	0.0	4.0	0.0	0.0	8.5	43.5
	Hingyon	0	290.0	252.0	0.0	542.0	0.0	0.0	0.1	9.1	15.8	0.6	25.5	567.5
14-27-09-001	Anao	0	21.0	22.0	0.0	43.0	0.0	0.0	0.0	1.1	3.3	0.0	4.4	47.4
14-27-09-002	Bangtino	0	16.0	18.0	0.0	34.0	0.0	0.0	0.0	0.7	0.7	0.0	1.4	35.4
14-27-09-003	Bitu	0	19.0	22.0	0.0	41.0	0.0	0.0	0.0	0.7	0.7	0.2	1.5	42.5
14-27-09-004	Cababuyan	0	15.0	14.0	0.0	29.0	0.0	0.0	0.0	0.4	0.3	0.0	0.7	29.7
14-27-09-005	Mompolia	0	34.0	22.0	0.0	56.0	0.0	0.0	0.0	0.6	0.8	0.2	1.5	57.5
14-27-09-006	Namulditan	0	31.0	23.0	0.0	54.0	0.0	0.0	0.0	1.0	0.3	0.0	1.3	55.3
14-27-09-007	O-ong	0	16.0	21.0	0.0	37.0	0.0	0.0	0.0	0.3	0.5	0.0	0.8	37.8
14-27-09-008	Piwong	0	24.0	21.0	0.0	45.0	0.0	0.0	0.0	1.0	0.3	0.0	1.3	46.3
14-27-09-009	Poblacion (Hingyon)	0	32.0	25.0	0.0	57.0	0.0	0.0	0.0	1.3	3.5	0.0	4.8	61.8
14-27-09-010	Ubuag	0	15.0	18.0	0.0	33.0	0.0	0.0	0.0	0.5	1.4	0.0	1.9	34.9
14-27-09-011	Umalbong	0	22.0	28.0	0.0	50.0	0.0	0.0	0.0	1.1	3.1	0.0	4.1	54.1
14-27-09-012	Northern Cababuyan	0	45.0	18.0	0.0	63.0	0.0	0.0	0.0	0.6	1.1	0.3	1.9	64.9
	Tinoc	0	426.0	26.0	0.0	452.0	6.2	312.0	0.4	14.8	38.8	0.0	372.1	824.1
14-27-10-001	Ahin	0	30.0	0.0	0.0	30.0	0.5	0.0	0.0	1.4	2.5	0.0	4.4	34.4
14-27-10-002	Ap-apid	0	25.0	0.0	0.0	25.0	0.3	5.3	0.1	1.2	2.3	0.0	9.0	34.0
14-27-10-003	Binablayan	0	60.0	2.0	0.0	62.0	1.5	0.7	0.2	1.6	6.1	0.0	10.1	72.1
14-27-10-004	Danggo	0	27.0	3.0	0.0	30.0	0.0	0.0	0.0	1.1	4.0	0.0	5.2	35.2
14-27-10-005	Eheb	0	29.0	1.0	0.0	30.0	0.7	9.0	0.0	0.8	3.9	0.0	14.4	44.4
14-27-10-006	Gumhang	0	30.0	0.0	0.0	30.0	0.5	0.0	0.0	0.9	3.9	0.0	5.3	35.3
14-27-10-007	Impugong	0	35.0	5.0	0.0	40.0	0.0	68.8	0.0	4.0	2.3	0.0	75.0	115.0
14-27-10-008	Luhong	0	48.0	2.0	0.0	50.0	0.5	0.0	0.0	0.9	3.8	0.0	5.2	55.2
14-27-10-009	Tinoc	0	50.0	5.0	0.0	55.0	0.5	21.7	0.0	1.1	3.8	0.0	27.0	82.0
14-27-10-010	Tukucan	0	35.0	5.0	0.0	40.0	0.5	206.6	0.0	0.8	0.1	0.0	208.0	248.0
14-27-10-011	Tulludan	0	25.0	0.0	0.0	25.0	0.5	0.0	0.0	0.3	2.5	0.0	3.3	28.3
14-27-10-012	Wangwang	0	32.0	3.0	0.0	35.0	0.8	0.0	0.0	0.7	3.8	0.0	5.2	40.2
	Asipulo	0	722.7	540.0	0.0	1262.7	34.5	140.7	1.5	231.0	163.5	1.0	572.1	1834.9
14-27-11-001	Amduntog	0	103.6	75.8	0.0	179.4	1.0	45.0	0.1	0.0	18.0	0.0	64.1	243.5
14-27-11-002	Antipolo	0	148.7	39.7	0.0	188.3	1.0	26.0	1.0	10.0	5.0	0.0	43.0	231.3
14-27-11-003	Camandag	0	25.1	10.8	0.0	35.8	10.0	10.0	0.2	78.0	10.0	0.0	108.2	144.0
14-27-11-004	Cawayan	0	169.6	181.7	0.0	351.3	8.0	8.0	0.0	27.0	4.0	0.0	47.0	398.3
14-27-11-005	Hallap	0	61.1	94.4	0.0	155.5	1.0	8.0	0.2	15.0	5.0	0.0	29.2	184.6
14-27-11-006	Namal	0	48.0	15.0	0.0	63.0	1.0	0.0	0.0	7.0	3.0	0.0	11.0	74.0
14-27-11-007	Nungawa	0	34.0	0.0	0.0	34.0	1.0	12.0	0.0	1.0	4.0	0.0	18.0	52.0
14-27-11-008	Panubtuban	0	42.0	41.0	0.0	83.0	9.5	19.7	0.1	18.0	42.0	1.0	90.3	173.3
14-27-11-009	Pula	0	90.7	81.7	0.0	172.5	2.0	12.0	0.0	75.0	72.5	0.0	161.5	334.0
	Min	103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	Max	0	558.8	300.0	294.4	500.0	500.0	500.0	1,010.0	294.7	300.0			
	Average	0	59.8	14.2	9.1	42.4	16.0	5.0	28.9	8.2	4.4			
	Total													

Table 3.4.1(1) Socio-economic Data on Sub-watersheds (Summary) (1/2)

No.	Sub-watershed Code	Area of Sub-watershed (a)	Area of Barangay in Sub-watershed (c)	Occupancy Ratio of Sub-watershed (e)=(c)/(a)	Population		Household Number		Pop.Density in Sub-watershed (person/ha) (k)=(h)/(c)	Poverty Rate in Sub-watershed (m)=(l)*(f)	Agri-sector Population Rate in Sub-watershed (o)=(n)*(f)	Literacy Rate in Sub-watershed (q)=(p)*(f)	Experience of Reforestation Project in Sub-watershed 1:yes 0:no (s)=(r)*(f)
					Total Barangay (g)	In Sub-watershed (h)=(g)*(f)	Total Barangay (i)	In Sub-watershed (j)=(i)*(f)					
1	A1-a	7,138.6	3,871	54.2%	6,672	4,324	1,412	916	1.12	43.9%	76.3%	68.8%	0.19
2	A1-b	4,827.3	3,886	80.5%	5,194	1,458	962	272	0.38	30.4%	60.0%	72.9%	0.26
3	A1-c	6,370.8	9,853	154.7%	5,127	2,677	941	492	0.27	50.5%	89.0%	80.6%	0.49
4	A2-a	5,857.7	5,363	91.5%	2,816	1,941	496	342	0.36	58.0%	90.6%	74.5%	0.00
5	A2-b	6,100.0	5,920	97.1%	2,638	1,058	476	190	0.18	35.1%	66.4%	63.6%	0.46
6	A2-c	4,782.3	4,707	98.4%	5,909	4,448	1,137	859	0.95	42.4%	83.7%	65.4%	0.15
7	A2-d	6,138.1	7,534	122.7%	7,217	4,388	1,393	840	0.58	39.2%	70.9%	56.6%	0.38
8	A2-e	5,608.9	9,300	165.8%	3,568	2,327	688	449	0.25	31.7%	94.5%	82.0%	0.83
9	A2-f	5,910.2	5,577	94.4%	3,012	2,291	562	429	0.41	54.7%	69.1%	60.8%	0.37
10	A3-a	4,218.0	3,460	82.0%	1,566	1,241	300	240	0.36	14.8%	82.1%	95.0%	1.00
11	A3-b	5,906.9	2,978	50.4%	2,749	1,292	489	228	0.43	40.0%	91.3%	71.1%	0.55
12	A3-c	5,370.3	3,909	72.8%	2,390	1,415	428	252	0.36	68.1%	89.1%	68.7%	0.00
13	A3-d	6,719.4	6,289	93.6%	2,923	2,122	522	379	0.34	80.8%	88.8%	68.9%	0.00
14	A3-e	5,989.0	3,106	51.9%	4,900	721	952	127	0.23	56.7%	66.3%	56.8%	0.00
15	A3-f	6,109.0	5,768	94.4%	2,109	1,219	372	215	0.21	60.0%	76.2%	55.6%	0.00
16	A3-g	4,130.4	5,510	133.4%	2,096	1,009	391	178	0.18	42.6%	78.5%	57.0%	0.00
17	A4-a	10,585.9	1,624	15.3%	2,428	1,482	494	301	0.91	33.7%	50.9%	68.7%	0.25
18	A4-b	13,010.2	7,945	61.1%	4,748	4,126	968	842	0.52	34.5%	76.6%	80.7%	0.22
19	C1-b	5,877.1	659	11.2%	598	568	126	120	0.86	3.0%	87.7%	34.0%	0.00
20	C1-c	7,787.1	1,245	16.0%	1,850	869	374	177	0.70	13.4%	88.4%	31.3%	0.42
21	C1-d	6,832.8	1,391	20.4%	1,205	471	232	92	0.34	11.0%	85.6%	41.3%	0.76
22	C1-e	6,620.0	2,325	35.1%	641	316	131	65	0.14	33.5%	74.9%	26.3%	0.20
23	C2-a	5,976.4	1,579	26.4%	2,435	1,705	477	330	1.08	9.1%	80.8%	36.3%	0.00
24	C2-b	4,964.8	214	4.3%	920	248	189	51	1.16	4.0%	68.1%	57.8%	0.00
25	C2-c	7,117.5	359	5.0%	1,456	376	307	80	1.05	10.2%	73.8%	47.5%	0.00
26	C2-d	5,222.7	1,365	26.1%	1,150	404	227	81	0.30	11.1%	90.9%	41.7%	0.14
27	C3-a	5,678.5	1,499	26.4%	1,559	1,396	317	282	0.93	33.5%	91.3%	31.3%	0.36
28	C3-b	8,332.3	3,469	41.6%	3,953	3,055	797	603	0.88	16.1%	84.3%	34.5%	0.00
29	C3-c	5,424.7	1,953	36.0%	922	406	171	75	0.21	42.0%	93.7%	32.0%	1.00
30	C3-e	5,221.0	645	12.4%	980	706	196	141	1.09	2.0%	93.4%	24.9%	0.00
31	C4-a	2,881.5	1,017	35.3%	2,140	1,219	453	256	1.20	15.0%	90.1%	35.7%	0.00
32	C4-b	3,946.0	694	17.6%	1,941	752	405	156	1.08	17.1%	79.6%	60.9%	0.00
33	C4-c	5,022.5	889	17.7%	1,668	715	323	139	0.80	11.5%	75.7%	84.3%	0.00
34	C5-a	6,043.6	3,043	50.4%	4,682	3,021	922	590	0.99	27.0%	78.1%	58.8%	0.12
35	C5-b	4,024.1	1,082	26.9%	2,423	1,769	477	347	1.64	41.8%	74.1%	78.6%	0.36
36	C5-c	8,744.4	5,687	65.0%	8,166	5,034	1,681	1,041	0.89	36.6%	65.4%	69.0%	0.73
37	C5-d	6,063.7	5,125	84.5%	1,152	507	223	98	0.10	50.0%	55.6%	40.0%	1.00
38	C5-e	7,833.1	4,662	59.5%	1,152	461	223	89	0.10	50.0%	55.6%	40.0%	1.00
39	C6-a	8,901.0	8,226	92.4%	1,086	945	248	216	0.11	5.0%	95.0%	70.0%	0.00
40	C6-b	5,490.5	5,436	99.0%	1,789	829	356	163	0.15	20.0%	78.7%	73.4%	0.77
41	C6-c	6,653.6	5,635	84.7%	680	299	133	59	0.05	10.0%	31.8%	70.0%	0.00
42	C6-d	4,507.3	4,473	99.2%	1,113	203	210	38	0.05	7.9%	41.8%	57.4%	0.00
43	C6-e	7,049.7	6,859	97.3%	1,160	522	234	105	0.08	20.0%	230.4%	70.0%	1.00
44	C7-a	8,154.1	7,911	97.0%	900	189	160	34	0.02	23.1%	79.3%	65.2%	0.00
45	C7-b	5,584.6	9,117	163.3%	738	183	129	32	0.02	26.0%	74.9%	56.0%	0.00
46	C7-c	10,177.4	11,211	110.2%	1,002	266	174	47	0.02	30.0%	78.1%	65.8%	0.00
47	C8-a	7,703.8	6,389	82.9%	806	244	137	42	0.04	25.0%	67.6%	70.1%	0.00
48	C8-b	7,072.9	5,732	81.0%	2,799	1,004	515	186	0.18	26.2%	57.3%	34.9%	0.00
49	C8-c	5,139.6	4,202	81.8%	840	227	148	40	0.05	36.1%	60.0%	46.0%	0.00
50	C8-d	7,630.7	6,576	86.2%	926	637	170	121	0.10	31.5%	68.8%	50.7%	0.80
51	C8-e	5,607.5	5,615	100.1%	2,142	606	381	107	0.11	43.2%	55.5%	45.6%	0.66
52	C8-f	5,349.3	5,096	95.3%	651	573	112	99	0.11	5.0%	63.2%	70.0%	1.00
53	C8-g	5,507.4	6,296	114.3%	4,572	2,065	800	360	0.33	45.1%	58.7%	34.5%	0.51
54	C8-h	8,289.6	7,366	88.9%	1,696	1,579	286	266	0.21	7.1%	75.1%	70.0%	0.30
55	C8-i	4,824.2	4,790	99.3%	5,605	4,135	1,021	756	0.86	20.3%	68.6%	63.8%	0.17
56	C9-c	5,828.5	6,851	117.5%	1,058	776	210	154	0.11	27.7%	79.6%	72.9%	0.00
57	C9-d	6,237.1	9,473	151.9%	3,198	1,504	559	259	0.16	38.8%	59.3%	59.1%	0.30
58	C9-e	3,693.0	4,774	129.3%	1,042	356	190	65	0.07	48.5%	58.3%	51.5%	0.00
59	C9-f	4,573.9	4,574	100.0%	940	115	171	21	0.03	32.1%	77.1%	60.0%	0.00
60	C9-g	5,227.2	5,171	98.9%	940	197	171	36	0.04	35.4%	71.8%	60.0%	0.00
61	C10-a	9,385.9	4,807	51.2%	2,942	2,229	570	440	0.46	46.1%	68.5%	71.6%	0.35
62	C10-b	6,419.5	852	13.3%	3,822	2,554	826	547	3.00	30.3%	72.8%	83.2%	0.32
63	C10-c	5,282.2	4,622	87.5%	5,464	2,928	1,144	609	0.63	34.0%	72.5%	85.6%	0.51
64	C10-d	5,373.7	4,511	84.0%	3,322	1,962	690	412	0.43	26.8%	78.2%	49.7%	0.66
65	C10-e	8,247.7	7,959	96.5%	4,181	1,765	843	360	0.22	8.2%	62.6%	78.8%	0.00
66	C10-f	4,655.8	3,706	79.6%	433	134	77	24	0.04	10.0%	77.2%	75.0%	0.00

Table 3.4.1(1) Socio-economic Data on Sub-watersheds (Summary) (2/2)

No.	Sub-watershed Code	Area of Sub-watershed	Area of Barangay in Sub-watershed	Occupancy Ratio of Sub-watershed	Population		Household Number		Pop.Density in Sub-watershed (person/ha)	Poverty Rate in Sub-watershed	Agri-sector Population Rate in Sub-watershed	Literacy Rate in Sub-watershed	Experience of Reforestation Project in Sub-watershed 1=yes 0=no
					Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed					
67	C11-a	14,254.9	10,338	72.5%	8,202	6,796	1,664	1,384	0.66	34.2%	85.0%	66.6%	0.73
68	M1-a	6,645.5	5,685	85.5%	1,882	1,355	436	314	0.24	72.1%	98.7%	62.0%	0.00
69	M1-b	4,788.3	4,369	91.2%	895	197	166	37	0.05	72.1%	96.5%	66.4%	0.00
70	M1-c	5,244.1	5,059	96.5%	895	233	166	43	0.05	72.1%	96.5%	66.4%	0.00
71	M1-d	12,205.9	10,452	85.6%	11,169	8,489	2,298	1,754	0.81	72.1%	86.3%	58.3%	0.71
72	M1-e	6,258.3	5,955	95.2%	5,238	3,645	1,056	748	0.61	72.1%	86.9%	62.1%	1.00
73	M1-f	7,314.5	6,732	92.0%	5,697	3,473	1,156	721	0.52	72.1%	87.9%	55.5%	0.37
74	M1-g	6,790.8	6,715	98.9%	15,185	10,920	2,926	2,087	1.63	72.1%	62.0%	59.1%	0.76
75	M1-h	7,599.9	7,357	96.8%	4,881	3,487	923	658	0.47	72.1%	89.1%	53.6%	1.00
76	M1-i	7,900.4	7,206	91.2%	2,275	1,662	476	357	0.23	72.1%	88.6%	66.6%	0.35
77	M1-j	7,488.9	7,470	99.8%	1,884	1,403	371	279	0.19	72.1%	75.4%	69.3%	0.67
78	M2-a	8,021.8	5,654	70.5%	4,689	4,031	933	802	0.71	72.1%	82.9%	55.6%	1.00
79	M2-b	6,787.8	7,029	103.6%	8,764	7,084	1,631	1,310	1.01	72.1%	79.6%	52.0%	0.69
80	M2-c	5,630.6	5,295	94.0%	3,191	1,694	596	318	0.32	72.1%	81.6%	68.0%	0.46
81	M2-d	8,038.9	7,718	96.0%	15,288	11,999	3,136	2,478	1.55	72.1%	77.0%	64.3%	0.37
82	M2-e	6,699.2	7,111	106.1%	10,848	6,207	2,086	1,211	0.87	66.8%	72.9%	51.5%	0.80
83	M2-f	4,331.9	3,812	88.0%	4,329	2,919	797	522	0.77	68.4%	58.7%	56.9%	0.90
84	M2-g	5,648.5	5,480	97.0%	4,714	2,939	876	547	0.54	70.3%	54.4%	48.6%	1.00
85	M2-h	7,304.0	6,621	90.7%	2,590	1,261	435	213	0.19	63.5%	93.4%	51.7%	1.00
86	M2-i	7,613.4	6,859	90.1%	4,847	3,059	855	540	0.45	70.2%	96.1%	50.9%	1.00
87	M2-j	9,064.2	9,754	107.6%	8,518	4,688	1,534	841	0.48	66.2%	77.5%	47.4%	0.71
88	M2-k	9,487.6	10,194	107.4%	14,833	12,300	2,740	2,263	1.21	68.8%	85.1%	59.5%	0.27
89	M2-l	7,862.6	7,607	96.8%	5,507	3,700	965	646	0.49	62.9%	90.2%	71.3%	0.10
90	M3-a	21,347.1	9,446	44.2%	26,845	20,971	5,609	4,430	2.22	26.6%	42.3%	75.0%	0.29
91	M3-b	12,024.2	7,597	63.2%	12,460	9,083	2,453	1,795	1.20	28.2%	72.0%	76.3%	0.38
92	M3-c	4,569.3	3,765	82.4%	7,968	6,922	1,747	1,516	1.84	38.7%	61.9%	62.1%	0.74
93	M4-a	5,782.1	4,447	76.9%	4,036	2,278	837	478	0.51	25.2%	78.2%	59.3%	0.25
94	M4-b	7,454.5	6,917	92.8%	6,736	4,075	1,217	738	0.59	67.6%	83.1%	76.1%	0.46
95	M4-c	5,521.2	4,186	75.8%	4,555	3,118	785	530	0.74	65.0%	94.5%	73.0%	0.00
96	M4-d1	6,809.5	6,352	93.3%	5,139	3,315	877	566	0.52	65.9%	93.7%	51.9%	1.00
97	M4-d2	7,401.6	9,749	131.7%	1,811	987	315	175	0.10	58.5%	86.6%	54.8%	1.00
98	M4-e	10,178.9	9,220	90.6%	6,771	5,546	1,294	1,075	0.60	60.0%	82.3%	68.0%	0.23
99	M4-f	7,220.0	5,816	80.6%	1,329	775	226	133	0.13	13.0%	69.8%	44.5%	0.00
100	M4-g	10,731.8	10,671	99.4%	6,224	3,992	1,085	691	0.37	52.5%	81.8%	63.6%	0.12
101	M5-a	7,502.5	6,461	86.1%	8,574	6,452	1,666	1,238	1.00	39.4%	37.4%	79.1%	0.71
102	M5-b	3,422.2	5,349	156.3%	4,138	1,523	844	309	0.28	49.0%	54.7%	80.6%	1.00
103	M5-c	6,681.7	7,667	114.7%	7,189	3,955	1,355	743	0.52	19.2%	81.9%	61.2%	0.95
104	M5-d	7,688.9	6,594	85.8%	3,204	1,970	558	347	0.30	43.5%	75.7%	44.0%	0.47
105	M5-e	3,089.5	4,000	129.5%	2,026	498	383	94	0.12	43.9%	68.3%	55.0%	0.67
106	M5-f	4,050.3	6,093	150.4%	1,807	845	401	190	0.14	45.2%	66.3%	78.7%	1.00
107	M5-g	3,046.2	7,107	233.3%	2,241	911	409	167	0.13	40.7%	69.8%	70.1%	1.00
108	M6-a	3,604.4	4,164	115.5%	9,620	5,214	1,887	1,031	1.25	37.9%	69.0%	81.0%	0.32
109	M6-b	4,666.9	7,115	0.0%	9,403	3,965	1,861	776	0.56	43.8%	51.4%	84.2%	0.59
110	M6-c	6,833.1	7,187	105.2%	8,189	6,632	1,585	1,282	0.92	39.8%	78.1%	84.6%	0.45
111	M6-d	8,296.2	13,063	157.5%	7,421	4,706	1,454	920	0.36	48.3%	45.1%	82.2%	0.37
112	M6-e	4,690.4	3,950	84.2%	6,789	5,272	1,343	1,042	1.33	57.6%	41.4%	86.3%	0.67
113	M6-f	5,269.4	4,679	88.8%	1,966	1,513	427	325	0.32	47.1%	53.5%	75.2%	0.64
114	M6-g	5,758.1	6,624	115.0%	4,536	2,375	948	486	0.36	30.4%	60.3%	56.2%	0.77
115	M6-h	3,697.0	2,723	73.7%	9,516	7,693	1,932	1,544	2.82	17.8%	53.7%	83.8%	0.32
116	M7-a	6,246.1	5,581	89.3%	4,523	3,519	951	744	0.63	10.9%	62.9%	60.6%	0.14
117	M7-b	5,366.9	4,325	80.6%	8,433	4,905	1,809	1,045	1.13	30.9%	61.4%	71.6%	0.41
118	M7-c	6,183.5	4,640	75.0%	9,499	5,230	2,103	1,158	1.13	14.4%	43.1%	80.8%	0.34
119	M7-d	7,065.4	8,352	118.2%	6,567	4,359	1,271	860	0.52	21.2%	52.1%	57.6%	0.73
120	M7-e	6,253.9	9,715	155.3%	9,801	4,503	1,987	902	0.46	33.3%	76.4%	68.9%	0.57
121	M8-a	6,033.2	5,043	83.6%	2,773	2,038	564	416	0.40	7.7%	74.3%	88.6%	0.00
122	M8-b	4,447.7	4,565	102.6%	3,219	2,333	620	445	0.51	27.3%	78.5%	75.3%	0.85
123	M8-c	6,898.6	7,102	103.0%	4,848	3,153	1,018	664	0.44	19.1%	56.7%	84.1%	0.72
124	M8-d	4,861.8	4,971	102.2%	5,269	2,938	1,113	626	0.59	29.2%	46.4%	88.8%	0.24
125	M8-e	8,035.5	7,646	95.2%	10,844	5,151	2,269	1,104	0.67	32.9%	69.5%	88.6%	0.75
126	M8-f	8,653.6	9,397	108.6%	9,250	6,492	1,921	1,363	0.69	40.1%	69.3%	81.1%	0.00
127	M8-g	7,894.5	11,290	143.0%	5,529	2,691	1,057	519	0.24	46.1%	72.9%	61.4%	0.58
128	M8-h	3,658.0	4,751	129.9%	4,383	1,594	864	320	0.34	45.2%	77.2%	79.9%	0.68

844,871.9 722,521 566,654 359,600 111,166 70,820 0.50

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (1/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed (a)	Total Area of Barangay (b)	Area of Barangay in Sub-watershed (c)	Occupancy Ratio of Barangay (d)=(c)/(b)	Occupancy Ratio of Sub-watershed (e)=(c)/(a)	Occupancy Ratio of Targeted Barangay (f)=(c)/(Total(c))	Population		Household Number		Pop.Density in Sub-watershed (person/ha) (k)=(h)/(c)	Poverty		Agri-sector Popiration Rate		Literacy		Experience of Reforestation Project	
													Total Barangay (g)	In Sub-watershed (h)=(g)*(f)	Total Barangay (i)	In Sub-watershed (j)=(i)*(f)		Total Barangay (l)	Weighted in Sub-watershed (m)=(l)*(f)	Total Barangay (n)	Weighted in Sub-watershed (o)=(n)*(f)	Total Barangay (p)	Weighted in Sub-watershed (q)=(p)*(f)	Total Barangay 1-yes Ono (r)	Weighted in Sub-watershed (s)=(r)*(f)
1	A1-a	1	02-31-15-017	ISABELA	Jones	Divinan		369	369	100%	5.2%	9.5%	592	592	129	129		20.0%	1.9%	93.5%	8.9%	36.0%	3.4%	0	0.00
		2	02-57-02-006	QUIRINO	Cabarrogu	Eden		630	557	88%	7.8%	14.4%	946	832	200	176		60.0%	8.6%	95.8%	13.8%	80.0%	11.5%	0	0.00
		3	02-57-01-013	QUIRINO	Aglipay	San Leonardo (Cabarroguis)		905	751	83%	10.5%	19.4%	1,562	1,296	325	270		40.0%	7.8%	22.5%	4.4%	70.0%	13.6%	0	0.00
		4	02-57-01-019	QUIRINO	Aglipay	Cabugao		573	437	76%	6.1%	11.3%	413	314	93	71		60.0%	6.8%	81.5%	9.2%	80.0%	9.0%	0	0.00
		5	02-31-15-021	ISABELA	Jones	Linamanan		666	490	74%	6.9%	12.7%	522	386	113	84		72.5%	9.2%	90.0%	11.4%	32.8%	4.2%	0	0.00
		6	02-57-01-025	QUIRINO	Aglipay	Villa Ventura		599	378	63%	5.3%	9.8%	503	317	100	63		30.0%	2.9%	79.4%	7.7%	90.0%	8.8%	1	0.10
		7	02-57-01-001	QUIRINO	Aglipay	Dagupan		1,181	368	31%	5.2%	9.5%	905	281	202	63		2.0%	0.2%	96.9%	9.2%	90.0%	8.6%	1	0.10
		8	02-31-15-033	ISABELA	Jones	Pongpongan		670	185	28%	2.6%	4.8%	457	128	85	24		10.0%	0.5%	86.7%	4.1%	40.0%	1.9%	0	0.00
		9	02-57-01-002	QUIRINO	Aglipay	Dumabel		1,482	336	23%	4.7%	8.7%	772	178	165	38		70.0%	6.1%	87.3%	7.6%	90.0%	7.8%	0	0.00
Sub-total							7,138.6	3,871		54.2%	100.0%	6,672	4,324	1,412	916	1.12		43.9%		76.3%		68.8%		0	0.19
2	A1-b	1	02-57-02-003	QUIRINO	Cabarrogu	Calaacan		878	833	95%	17.3%	21.4%	600	570	113	107		12.0%	2.6%	94.6%	20.3%	70.0%	15.0%	0	0.00
		2	02-57-02-005	QUIRINO	Cabarrogu	Dibibi		3,260	708	22%	14.7%	18.2%	2,434	535	455	100		10.0%	1.8%	69.7%	12.7%	90.0%	16.4%	0	0.00
		3	02-50-09-023	NUEVA VIZCAYA	Kasibu	Tadji		7,618	1,326	17%	27.5%	34.1%	702	122	122	22		30.0%	10.2%	79.2%	27.0%	60.0%	20.5%	0	0.00
		4	02-57-02-015	QUIRINO	Cabarrogu	Tucod		1,019	1,019	16%	21.1%	26.2%	1,458	230	268	42		60.0%	15.7%	0.0%	0.0%	80.0%	21.0%	1	0.26
Sub-total							4,827.3	3,886		80.5%	100.0%	5,194	1,458	962	272	0.38		30.4%		60.0%		72.9%		0	0.26
3	A1-c	1	02-50-09-021	NUEVA VIZCAYA	Kasibu	Tokod		3,977	3,435	86%	53.9%	34.9%	566	487	103	89		50.0%	17.4%	88.1%	30.7%	80.0%	27.9%	0	0.00
		2	02-57-02-015	QUIRINO	Cabarrogu	Tucod		6,446	4,848	75%	76.1%	49.2%	1,458	1,094	268	201		60.0%	29.5%	94.9%	46.7%	80.0%	39.4%	1	0.49
		3	02-57-02-005	QUIRINO	Cabarrogu	Dibibi		3,260	1,256	39%	19.7%	12.7%	2,434	949	455	177		10.0%	1.3%	69.7%	8.9%	90.0%	11.5%	0	0.00
		4	02-50-09-005	NUEVA VIZCAYA	Kasibu	Binogawan		1,444	314	22%	4.9%	3.2%	669	147	115	25		70.0%	2.2%	85.1%	2.7%	60.0%	1.9%	0	0.00
Sub-total							6,370.8	9,853		154.7%	100.0%	5,127	2,677	941	492	0.27		50.5%		89.0%		80.6%		0	0.49
4	A2-a	1	02-50-09-008	NUEVA VIZCAYA	Kasibu	Capisaan		1,659	1,653	100%	28.2%	30.8%	575	575	96	96		50.0%	15.4%	82.1%	25.3%	80.0%	24.7%	0	0.00
		2	02-50-09-024	NUEVA VIZCAYA	Kasibu	Wangal		1,417	1,153	81%	19.7%	21.5%	786	637	145	117		70.0%	15.0%	94.4%	20.3%	70.0%	15.0%	0	0.00
		3	02-50-09-016	NUEVA VIZCAYA	Kasibu	Malabing		1,778	1,394	78%	23.8%	26.0%	521	406	93	73		50.0%	13.0%	92.7%	24.1%	80.0%	20.8%	0	0.00
		4	02-50-09-004	NUEVA VIZCAYA	Kasibu	Bilet		1,412	801	57%	13.7%	14.9%	319	182	55	31		75.0%	11.2%	96.6%	14.4%	60.0%	9.0%	0	0.00
		5	02-50-09-027	NUEVA VIZCAYA	Kasibu	Catarawan		1,602	363	23%	6.2%	6.8%	615	141	107	25		50.0%	3.4%	96.6%	6.5%	75.0%	5.1%	0	0.00
Sub-total							5,857.7	5,363		91.5%	100.0%	2,816	1,941	496	342	0.36		58.0%		90.6%		74.5%		0	0.00
5	A2-b	1	02-50-09-005	NUEVA VIZCAYA	Kasibu	Binogawan		1,444	900	62%	14.8%	15.2%	669	415	115	71		70.0%	10.6%	85.1%	12.9%	60.0%	9.1%	0	0.00
		2	02-50-09-019	NUEVA VIZCAYA	Kasibu	Papaya		5,710	2,716	48%	44.5%	45.9%	746	358	142	68		25.0%	11.5%	47.5%	21.8%	65.0%	29.8%	1	0.46
		3	02-50-09-023	NUEVA VIZCAYA	Kasibu	Tadji		7,618	1,922	25%	31.5%	32.5%	702	176	126	32		30.0%	9.7%	79.2%	25.7%	60.0%	19.5%	0	0.00
		4	02-50-09-016	NUEVA VIZCAYA	Kasibu	Malabing		1,778	382	21%	6.3%	6.4%	521	109	93	20		50.0%	3.2%	92.7%	6.0%	80.0%	5.2%	0	0.00
Sub-total							6,100.0	5,920		97.1%	100.0%	2,638	1,058	476	190	0.18		35.1%		66.4%		63.6%		0	0.46
6	A2-c	1	02-50-09-003	NUEVA VIZCAYA	Kasibu	Poblacion (Alloy)		498	498	100%	10.4%	10.6%	1,504	1,504	295	295		40.0%	4.2%	92.1%	9.7%	60.0%	6.3%	0	0.00
		2	02-50-09-020	NUEVA VIZCAYA	Kasibu	Pudi		1,603	1,449	90%	30.3%	30.8%	1,176	1,058	218	196		20.0%	6.2%	93.4%	28.8%	60.0%	18.5%	0	0.00
		3	02-50-09-029	NUEVA VIZCAYA	Kasibu	Alloy		1,325	1,177	89%	24.6%	25.0%	799	711	162	144		60.0%	15.0%	71.7%	17.9%	75.0%	18.8%	0	0.00
		4	02-50-09-014	NUEVA VIZCAYA	Kasibu	Lupa		1,053	879	83%	18.4%	18.7%	818	679	159	129		60.0%	11.2%	85.1%	15.9%	70.0%	13.1%	0	0.00
		5	02-50-09-025	NUEVA VIZCAYA	Kasibu	Watwat		1,154	404	35%	8.5%	8.6%	1,087	380	203	71		30.0%	2.6%	71.1%	6.1%	65.0%	5.6%	1	0.09
		6	02-50-09-022	NUEVA VIZCAYA	Kasibu	Seguem		1,359	299	22%	6.3%	6.4%	525	116	103	23		50.0%	3.2%	83.5%	5.3%	50.0%	3.2%	1	0.06
Sub-total							4,782.3	4,707		98.4%	100.0%	5,909	4,448	1,137	859	0.95		42.4%		83.7%		65.4%		0	0.15
7	A2-d	1	02-50-09-030	NUEVA VIZCAYA	Kasibu	Kongkong		1,533	1,485	97%	24.2%	19.7%	1,827	1,772	347	347		20.0%	3.9%	60.7%	12.0%	80.0%	15.8%	0	0.00
		2	02-50-09-015	NUEVA VIZCAYA	Kasibu	Macalong		1,391	1,167	84%	19.0%	15.5%	1,184	995	225	189		50.0%	7.7%	64.1%	9.9%	70.0%	10.8%	0	0.00
		3	02-50-09-025	NUEVA VIZCAYA	Kasibu	Watwat		1,154	723	63%	11.8%	9.6%	1,087	685	203	128		30.0%	2.9%	71.1%	6.8%	65.0%	6.2%	1	0.10
		4	02-50-04-014	NUEVA VIZCAYA	Bambang	Mabuslo		6,807	2,128	31%	34.7%	28.2%	2,092	649	433	134		30.0%	8.5%	80.6%	22.8%	65.0%	18.4%	1	0.28
		5	02-50-09-009	NUEVA VIZCAYA	Kasibu	Cordon		7,239	2,030	28%	33.1%	27.0%	1,027	288	185	52		60.0%	16.2%	72.0%	19.4%	20.0%	5.4%	0	0.00
Sub-total							6,138.1	7,534		122.7%	100.0%	7,217	4,388	1,393	840	0.58		39.2%		70.9%		56.6%		0	0.38
8	A2-e	1	02-50-09-017	NUEVA VIZCAYA	Kasibu	Muta		3,726	3,318	89%	59.2%	35.7%	1,656	1,474	317	282		50.0%	17.8%	92.1%	32.9%	70.0%	25.0%	1	0.36
		2	02-50-07-003	NUEVA VIZCAYA	Dupax Del Norte	Bulala		5,668	4,085	72%	72.8%	43.9%	529	381	107	77		20.0%	8.8%	98.6%	43.3%	95.0%	41.7%	1	0.44
		3	02-50-09-006	NUEVA VIZCAYA	Kasibu	Bua		3,872	1,584	41%	28.2%	17.0%	858	352	161	66		20.0%	3.4%	91.1%	15.5%	80.0%	13.6%	0	0.00
		4	02-50-09-022	NUEVA VIZCAYA	Kasibu	Seguem		1,359	313	23%	5.6%	3.4%	525	121	103	24		50.0%	1.7%	83.5%	2.8%	50.0%	1.7%	1	0.03
Sub-total							5,608.9	9,300		165.8%	100.0%	3,568	2,327	688	449	0.25		31.7%		94.5%		82.0%		0	0.83
9	A2-f	1	02-50-09-031	NUEVA VIZCAYA	Kasibu	Pacquet (Illogot Re		1,339	1,314	98%	22.2%	23.6%	870	853	167	164		70.0%	16.5%	54.7%	12.9%	60.0%	14.1%	1	0.24
		2	02-50-09-011	NUEVA VIZCAYA	Kasibu	Dine		3,242	2,720	84%	46.0%	48.8%	1,002	842	185	155		50.0%	24.4%	64.1%	31.2%	60.0%	29.3%	0	0.00
		3	02-50-09-022	NUEVA VIZCAYA	Kasibu	Seguem		1,359	748	55%	12.6%	13.4%	525	289	103	57		50.0%	6.7%	83.5%	11.2%				

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (2/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed	Total Area of Barangay	Area of Barangay in Sub-watershed	Occupancy Ratio of Barangay	Occupancy Ratio of Sub-watershed	Occupancy Ratio of Targeted Barangay	Population		Household Number		Pop.Density in Sub-watershed (person/ha)	Poverty		Agri-sector Population Rate		Literacy		Experience of Reforestation Project	
													Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed		Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay 1-yes Ono	Weighted in Sub-watershed
15	A3-f	3	02-57-06-011	QUIRINO	Nagtipuna	San Dionisio II	5,698	223	0%	3.7%	8.9%	3,068	0	633	0	0.23	5.0%	0.4%	76.6%	6.8%	90.0%	8.0%	0	0.00	
		Sub-total						5,889.0	3,106		51.9%	101.3%	4,900	721	952	127		56.7%		66.3%		56.8%		0	0.00
		1	02-50-09-012	NUEVA VIZCAYA	Kasibu	Kakiduguen	4,121	3,256	79%	53.3%	56.5%	667	527	119	94		60.0%	33.9%	87.7%	49.5%	60.0%	33.9%	0	0.00	
		2	02-50-09-007	NUEVA VIZCAYA	Kasibu	Biyoy		5,244	2,512	48%	41.1%	43.5%	1,442	692	253	121		60.0%	26.1%	61.4%	26.7%	50.0%	21.8%	0	0.00
Sub-total						6,109.0	5,768		94.4%	100.0%	2,109	1,219	372	215		60.0%	60.0%	76.2%	76.2%	50.0%	55.6%		0	0.00	
16	A3-g	1	02-50-09-018	NUEVA VIZCAYA	Kasibu	Pao	4,602	3,921	85%	94.9%	71.2%	1,038	882	181	154		50.0%	35.6%	76.6%	54.5%	50.0%	35.6%	0	0.00	
		2	02-50-07-019	NUEVA VIZCAYA	Dupax Del Norte	Yabbi	2,871	671	23%	16.2%	12.2%	549	126	105	24		10.0%	1.2%	99.1%	12.1%	80.0%	9.7%	0	0.00	
		3	02-57-06-007	QUIRINO	Nagtipuna	Mataddi	6,250	918	0%	22.2%	16.7%	509	0	105	0		35.0%	5.8%	71.6%	11.9%	70.0%	11.7%	0	0.00	
Sub-total						4,130.4	5,510		133.4%	100.0%	2,096	1,009	391	178		0.18		42.6%		78.5%		57.0%		0	0.00
17	A4-a	1	02-31-27-013	ISABELA	San Agustin	Panang	601	532	89%	5.0%	32.8%	684	609	138	123		20.0%	6.6%	89.9%	29.5%	42.0%	13.8%	0	0.00	
		2	02-57-04-011	QUIRINO	Madella	Divisoria Notre	526	401	76%	3.8%	24.7%	480	365	99	75		60.0%	14.8%	0.0%	0.0%	80.0%	19.7%	1	0.25	
		3	02-57-04-004	QUIRINO	Madella	Divisoria Sur (Bisangal)	615	249	41%	2.4%	15.4%	758	311	154	63		50.0%	7.7%	61.1%	9.4%	70.0%	10.8%	0	0.00	
		4	02-57-04-008	QUIRINO	Madella	Cocaville	1,117	441	39%	4.2%	27.2%	506	197	103	40		17.0%	4.6%	44.2%	12.0%	90.0%	24.5%	0	0.00	
Sub-total						10,585.9	1,624		15.3%	100.0%	2,428	1,482	494	301		0.91		33.7%		50.9%		68.7%		0	0.25
18	A4-b	1	02-57-01-014	QUIRINO	Aglipay	San Ramon	2,566	2,566	100%	19.7%	32.3%	648	648	127	127		50.0%	16.1%	73.8%	23.8%	90.0%	29.1%	0	0.00	
		2	02-57-01-015	QUIRINO	Aglipay	Victoria	1,292	1,250	97%	9.6%	15.7%	829	804	170	165		50.0%	7.9%	88.4%	13.9%	80.0%	12.6%	1	0.16	
		3	02-57-04-027	QUIRINO	Madella	Santo Tomas	524	503	96%	3.9%	6.3%	412	396	93	89		5.0%	0.3%	85.7%	5.4%	35.0%	2.2%	1	0.06	
		4	02-57-01-003	QUIRINO	Aglipay	Dungo (Osme.a)	2,252	1,951	87%	15.0%	24.5%	810	705	163	142		10.0%	2.5%	92.2%	22.6%	70.0%	17.2%	0	0.00	
		5	02-57-01-006	QUIRINO	Aglipay	Palacion	1,213	1,000	82%	7.7%	12.6%	1,543	1,265	312	256		50.0%	6.3%	56.3%	7.1%	95.0%	12.0%	0	0.00	
		6	02-57-04-008	QUIRINO	Madella	Cocaville	1,117	676	61%	5.2%	8.5%	506	309	103	63		17.0%	1.4%	44.2%	3.8%	90.0%	7.7%	0	0.00	
Sub-total						13,010.2	7,945		61.1%	100.0%	4,748	4,126	968	842		0.52		34.5%	0.0%	76.6%		80.7%		0	0.22
19	C1-b	1	02-31-02-010	ISABELA	Angadanan	Bunnay	691	659	95%	11.2%	100.0%	598	568	126	120		3.0%	3.0%	87.7%	87.7%	34.0%	34.0%	0	0.00	
Sub-total						5,877.1	659		11.2%	100.0%	598	568	126	120		0.86		3.0%		87.7%		34.0%		0	0.00
20	C1-c	1	02-31-15-038	ISABELA	Jones	San Sebastian	587	415	71%	5.3%	33.4%	536	381	118	84		17.0%	5.7%	80.1%	26.7%	36.4%	12.1%	0	0.00	
		2	02-31-12-027	ISABELA	Echague	Madadamian	883	517	59%	6.6%	41.6%	540	319	100	116		12.0%	5.0%	97.3%	40.4%	28.0%	11.6%	1	0.42	
		3	02-31-12-005	ISABELA	Echague	Babaran	1,420	312	22%	4.0%	25.1%	774	170	156	34		11.0%	2.8%	84.8%	21.3%	29.9%	7.5%	0	0.00	
Sub-total						7,787.1	1,245		16.0%	100.0%	1,850	869	374	177		0.70		13.4%		88.4%		31.3%		0	0.42
21	C1-d	1	02-31-12-025	ISABELA	Echague	Mabbayad	1,347	879	65%	12.9%	63.2%	433	281	87	57		7.0%	4.4%	85.2%	53.8%	40.0%	25.3%	1	0.63	
		2	02-31-12-007	ISABELA	Echague	Benquet	944	332	35%	4.9%	23.8%	232	81	45	16		21.0%	5.0%	80.5%	19.2%	52.0%	12.4%	0	0.00	
		3	02-31-12-027	ISABELA	Echague	Madadamian	883	180	20%	2.6%	12.9%	540	108	100	20		12.0%	1.6%	97.3%	12.6%	28.0%	3.6%	1	0.13	
		Sub-total						6,832.8	1,391		20.4%	100.0%	1,205	471	232	92		0.34		11.0%		85.6%		41.3%	
22	C1-e	1	02-31-28-017	ISABELA	San Guillermo	San Francisco Sur	2,303	1,868	81%	28.2%	80.3%	208	168	44	36		40.0%	32.1%	72.4%	58.1%	22.9%	18.4%	0	0.00	
		2	02-31-12-025	ISABELA	Echague	Mabbayad	1,347	457	34%	6.9%	19.7%	433	147	87	30		7.0%	1.4%	85.2%	16.7%	40.0%	7.9%	1	0.20	
Sub-total						6,620.0	2,325		35.1%	100.0%	641	316	131	65		0.14		33.5%		74.9%		26.3%		0	0.20
23	C2-a	1	02-31-12-004	ISABELA	Echague	Aromin	104	93	89%	1.5%	5.9%	741	659	132	117		8.0%	0.5%	86.2%	5.1%	23.1%	1.4%	0	0.00	
		2	02-31-12-005	ISABELA	Echague	Babaran	1,420	1,102	78%	18.4%	69.8%	774	604	156	122		11.0%	7.7%	84.8%	59.2%	29.9%	20.9%	0	0.00	
		3	02-31-12-046	ISABELA	Echague	San Felipe	794	384	48%	8.4%	24.3%	920	442	189	91		4.0%	1.0%	68.1%	16.6%	57.8%	14.1%	0	0.00	
Sub-total						5,976.4	1,579		26.4%	100.0%	2,435	1,705	477	330		1.08		9.1%		80.8%		36.3%		0	0.00
24	C2-b	1	02-31-12-046	ISABELA	Echague	San Felipe	794	214	27%	4.3%	100.0%	920	248	189	51		4.0%	4.0%	68.1%	68.1%	57.8%	57.8%	0	0.00	
Sub-total						4,964.8	214		4.3%	100.0%	920	248	189	51		1.16		4.0%		68.1%		57.8%		0	0.00
25	C2-c	1	02-31-15-038	ISABELA	Jones	San Sebastian	587	171	29%	2.4%	47.7%	536	155	118	34		17.0%	8.1%	80.1%	38.2%	36.4%	17.3%	0	0.00	
		2	02-31-12-046	ISABELA	Echague	San Felipe	794	188	24%	2.6%	52.3%	920	221	189	45		4.0%	2.1%	68.1%	35.6%	57.8%	30.2%	0	0.00	
Sub-total						7,117.5	359		5.0%	100.0%	1,456	376	307	80		1.05		10.2%		73.8%		47.5%		0	0.00
26	C2-d	1	02-31-12-007	ISABELA	Echague	Benquet	944	612	65%	11.7%	44.9%	232	151	45	29		21.0%	9.4%	80.5%	36.1%	52.0%	23.3%	0	0.00	
		2	02-31-15-040	ISABELA	Jones	Santa Isabel	1,523	566	37%	10.8%	41.5%	378	140	82	30		0.0%	0.0%	100.0%	41.5%	35.0%	14.5%	0	0.00	
		3	02-31-12-027	ISABELA	Echague	Madadamian	883	186	21%	3.6%	13.6%	540	113	100	21		12.0%	1.6%	97.3%	13.3%	28.0%	3.8%	1	0.14	
Sub-total						5,222.7	1,365		26.1%	100.0%	1,150	404	227	81		0.30		11.1%		90.9%		41.7%		0	0.14
27	C3-a	1	02-31-15-014	ISABELA	Jones	Dicamay II	555	545	98%	9.6%	36.4%	1,181	1,157	235	230		92.0%	33.5%	76.1%	27.7%	24.9%	9.1%	1	0.36	
		2	02-31-15-040	ISABELA	Jones	Santa Isabel	1,523	953	63%	16.8%	63.6%	378	238	82	52		0.0%	0.0%	100.0%	63.6%	35.0%	22.3%	0	0.00	
Sub-total						5,678.5	1,499		26.4%	100.0%	1,559	1,396	317	282		0.93		33.5%		91.3%		31.3%		0	0.36
28	C3-b	1	02-31-15-031	ISABELA	Jones	Papan Weste	377	375	100%	4.5%	10.8%	308	308	62	62		30.4%	3.3%	83.3%	9.0%	40.0%	4.3%	0	0.00	
		2	02-31-27-007	ISABELA	San Agustin	Mapalad	1,825	1,826	100%	21.9%	52.6%	1,267	1,267	228	228		15.0%	7.9%	85.3%	44.9%	32.5%	17.1%	0	0.00	
		3	02-31-27-019	ISABELA	San Agustin	Santo Nino	998	952	95%	11.4%	27.4%	1,198	1,138	252	239		13.0%	3.6%	81.7%	22.4%	34.5%	9.5%	0	0.00	
		4	02-31-27-003	ISABELA	San Agustin	Dabubu Grande	1,111	317	29%	3.8%	8.1%	1,180	342	255	74		15.0%	1.4%	87.7%	8.0%	40.0%	3.7%	0	0.00	
Sub-total						8,332.3																			

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (3/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed	Total Area of Barangay	Area of Barangay in Sub-watershed	Occupancy Ratio of Barangay	Occupancy Ratio of Sub-watershed	Occupancy Ratio of Targeted Barangay	Population		Household Number		Pop.Density in Sub-watershed (person/ha)	Poverty		Agri-sector Population Rate		Literacy		Experience of Reforestation Project		
													Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed		Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay 1-yes Only	Weighted in Sub-watershed	
35	C5-b	6	02-57-04-011	QUIRINO	Madella	Divisoria Notre		526	125	24%	2.1%	4.1%	480	115	99	24	0.99	60.0%	2.5%	0.0%	0.0%	80.0%	3.3%	1	0.04	
		Sub-total						6,043.6	3,043	50.4%	100.0%	4,682	3,021	922	590			27.0%	78.1%	58.8%		0.12				
		1	02-57-04-028	QUIRINO	Madella	Villa Gracia		580	486	84%	12.1%	44.9%	993	834	191	160			2.0%	0.9%	66.5%	29.9%	75.0%	33.7%	0	0.00
		2	02-57-04-034	QUIRINO	Madella	Villa Aguilana		406	392	96%	9.7%	36.2%	550	531	108	104			100.0%	36.2%	82.2%	29.8%	85.0%	30.8%	1	0.36
		3	02-57-04-024	QUIRINO	Madella	San Pedro		445	204	46%	5.1%	18.9%	880	405	178	82			25.0%	4.7%	76.8%	14.5%	75.0%	14.1%	0	0.00
		Sub-total						4,024.1	1,082	26.9%	100.0%	2,423	1,769	477	347			41.8%	74.1%	78.6%		0.36				
36	C5-c	1	02-57-06-014	QUIRINO	Nagtipuna	Sangbay		1,070	1,065	100%	12.2%	18.7%	1,636	1,636	367	367	1.64	10.0%	1.9%	72.8%	13.6%	90.0%	16.9%	1	0.19	
		2	02-57-04-026	QUIRINO	Madella	Santo Ni O		630	625	99%	7.1%	11.0%	955	945	190	188			10.0%	1.1%	67.2%	7.4%	80.0%	8.8%	0	0.00
		3	02-57-04-032	QUIRINO	Madella	Ysmael		792	776	98%	8.9%	13.6%	594	582	114	112			70.0%	9.6%	71.8%	9.8%	90.0%	12.3%	0	0.00
		4	02-57-04-007	QUIRINO	Madella	Cabua-an		475	419	88%	4.8%	7.4%	730	642	148	130			16.0%	1.2%	49.7%	3.7%	80.0%	5.9%	1	0.07
		5	02-57-04-015	QUIRINO	Madella	Manglad		969	834	86%	9.5%	14.7%	572	492	107	92			40.0%	5.9%	75.6%	11.1%	70.0%	10.3%	1	0.15
		6	02-57-04-010	QUIRINO	Madella	Dipintin		733	158	22%	1.8%	2.8%	2,527	556	532	117			40.0%	1.1%	78.5%	2.2%	80.0%	2.2%	0	0.00
		7	02-57-06-003	QUIRINO	Nagtipuna	Dissimungal		11,601	1,810	16%	20.7%	31.8%	1,152	180	223	35			50.0%	15.9%	55.6%	17.7%	40.0%	12.7%	1	0.32
Sub-total						8,744.4	5,687	65.0%	100.0%	8,166	5,034	1,681	1,041			36.6%	65.4%	69.0%		0.73						
37	C5-d	1	02-57-06-003	QUIRINO	Nagtipuna	Dissimungal		11,601	5,125	44%	84.5%	100.0%	1,152	507	223	98	0.89	50.0%	50.0%	55.6%	55.6%	40.0%	40.0%	1	1.00	
Sub-total						6,063.7	5,125	84.5%	100.0%	1,152	507	223	98			50.0%	55.6%	40.0%		1.00						
38	C5-e	1	02-57-06-003	QUIRINO	Nagtipuna	Dissimungal		11,601	4,662	40%	59.5%	100.0%	1,152	461	223	89	0.10	50.0%	50.0%	55.6%	55.6%	40.0%	40.0%	1	1.00	
Sub-total						7,833.1	4,662	59.5%	100.0%	1,152	461	223	89			50.0%	55.6%	0.0%		40.0%		1.00				
39	C6-a	1	02-57-06-001	QUIRINO	Nagtipuna	Anak		9,501	8,226	87%	92.4%	100.0%	1,086	945	248	216	0.10	5.0%	5.0%	95.0%	95.0%	70.0%	70.0%	0	0.00	
Sub-total						8,901.0	8,226	92.4%	100.0%	1,086	945	248	216			5.0%	95.0%	70.0%		0.00						
40	C6-b	1	02-57-06-013	QUIRINO	Nagtipuna	San Ramos		1,495	1,232	82%	22.4%	22.7%	629	516	122	100			20.0%	4.5%	63.2%	14.3%	85.0%	19.3%	0	0.00
		2	02-57-06-006	QUIRINO	Nagtipuna	Landingan		15,295	4,205	27%	76.6%	77.3%	1,160	313	234	63	0.15	20.0%	15.5%	83.3%	64.4%	70.0%	54.1%	1	0.77	
Sub-total						5,490.5	5,436	99.0%	100.0%	1,789	829	356	163			20.0%	78.7%	73.4%		0.77						
41	C6-c	1	02-57-06-015	QUIRINO	Nagtipuna	Wasid		12,718	5,635	44%	84.7%	100.0%	680	299	133	59	0.05	10.0%	10.0%	31.8%	31.8%	70.0%	70.0%	0	0.00	
Sub-total						6,653.6	5,635	84.7%	100.0%	680	299	133	59			10.0%	31.8%	70.0%		0.00						
42	C6-d	1	02-57-06-012	QUIRINO	Nagtipuna	San Pugo		12,053	2,053	17%	45.5%	36.4%	433	74	77	13			10.0%	3.6%	77.2%	28.1%	75.0%	27.3%	0	0.00
		2	02-57-06-015	QUIRINO	Nagtipuna	Wasid		12,718	2,420	19%	53.7%	42.9%	680	129	133	25	0.05	10.0%	4.3%	31.8%	13.6%	70.0%	30.1%	0	0.00	
Sub-total						4,507.3	4,473	99.2%	79.4%	1,113	203	210	38			7.9%	41.8%	57.4%		0.00						
43	C6-e	1	02-57-06-006	QUIRINO	Nagtipuna	Landingan		15,295	6,859	45%	97.3%	100.0%	1,160	522	234	105	0.08	20.0%	20.0%	83.3%	83.3%	70.0%	70.0%	1	1.00	
Sub-total						7,049.7	6,859	97.3%	100.0%	1,160	522	234	105			20.0%	230.4%	70.0%		1.00						
44	C7-a	1	02-57-06-012	QUIRINO	Nagtipuna	San Pugo		12,053	2,738	23%	33.6%	34.6%	433	100	77	18			10.0%	3.5%	77.2%	26.7%	75.0%	26.0%	0	0.00
		2	02-57-06-008	QUIRINO	Nagtipuna	Matmad		26,998	5,173	19%	63.4%	65.4%	467	89	83	16	0.02	30.0%	19.6%	80.4%	52.6%	60.0%	39.2%	0	0.00	
Sub-total						8,154.1	7,911	97.0%	100.0%	900	189	160	34			23.1%	79.3%	65.2%		0.00						
45	C7-b	1	02-50-15-003	NUEVA VIZCAYA	Alfonso Castaneda	Cauayan		10,976	3,656	33%	65.5%	40.1%	271	89	46	15			20.0%	8.0%	66.7%	26.7%	50.0%	20.1%	0	0.00
		2	02-57-06-008	QUIRINO	Nagtipuna	Matmad		26,998	5,461	20%	97.8%	59.9%	467	93	83	17	0.02	30.0%	18.0%	80.4%	48.2%	60.0%	35.9%	0	0.00	
Sub-total						5,584.6	9,117	163.3%	100.0%	738	183	129	32			26.0%	74.9%	56.0%		0.00						
46	C7-c	1	02-57-06-008	QUIRINO	Nagtipuna	Matmad		26,998	9,031	33%	88.7%	80.6%	467	154	83	27	0.02	30.0%	24.2%	80.4%	64.8%	60.0%	48.3%	0	0.00	
		2	02-50-15-002	NUEVA VIZCAYA	Alfonso Castaneda	Galintuja		10,280	2,180	21%	21.4%	19.4%	535	112	91	19			30.0%	5.8%	68.5%	13.3%	90.0%	17.5%	0	0.00
Sub-total						10,177.4	11,211	110.2%	100.0%	1,002	266	174	47			30.0%	78.1%	65.8%		0.00						
47	C8-a	1	02-50-15-002	NUEVA VIZCAYA	Alfonso Castaneda	Galintuja		10,280	3,218	31%	41.8%	50.4%	535	166	91	28	0.04	30.0%	15.1%	68.5%	34.5%	90.0%	45.3%	0	0.00	
		2	02-50-15-003	NUEVA VIZCAYA	Alfonso Castaneda	Cauayan		10,976	3,172	29%	41.2%	49.6%	271	79	46	13			20.0%	9.9%	66.7%	33.1%	50.0%	24.8%	0	0.00
Sub-total						7,703.8	6,389	82.9%	100.0%	806	244	137	42			25.0%	67.6%	70.1%		0.00						
48	C8-b	1	02-50-15-005	NUEVA VIZCAYA	Alfonso Castaneda	Lublub (Pop.)		11,563	4,333	37%	61.3%	73.6%	2,538	939	474	175			25.0%	18.9%	54.8%	41.4%	30.0%	22.7%	0	0.00
		2	02-50-15-004	NUEVA VIZCAYA	Alfonso Castaneda	Lipuga		5,611	1,400	25%	19.8%	24.4%	261	65	41	10	0.18	30.0%	7.3%	64.9%	15.8%	50.0%	12.2%	0	0.00	
Sub-total						7,072.9	5,732	81.0%	100.0%	2,799	1,004	515	186			26.2%	57.3%	34.9%		0.00						
49	C8-c	1	02-50-15-006	NUEVA VIZCAYA	Alfonso Castaneda	Pelaway		5,722	1,688	29%	32.8%	40.2%	569	165	102	30			60.0%	24.1%	50.0%	20.1%	40.0%	16.1%	0	0.00
		2	02-50-15-003	NUEVA VIZCAYA	Alfonso Castaneda	Cauayan		10,976	2,514	23%	48.9%	59.8%	271	62	46	11	0.05	20.0%	12.0%	66.7%	39.9%	50.0%	29.9%	0	0.00	
Sub-total						5,139.6	4,202	81.8%	100.0%	840	227	148	40			36.1%	60.0%	46.0%		0.00						
50	C8-d	1	02-50-08-001	NUEVA VIZCAYA	Dupax Del Sur	Abaca		2,130	2,099	99%	27.5%	31.9%	385	381	72	71			50.0%	16.0%	61.9%	19.8%	90.0%	28.7%	1	0.32
		2	02-50-08-023	NUEVA VIZCAYA	Dupax Del Sur	Talbek		4,531	3,186	70%	41.8%	48.5%	280	196	57	40			20.0%	9.7%	75.0%	36.3%	25.0%	12.1%	1	0.48
		3	02-50-15-004	NUEVA VIZCAYA	Alfonso Castaneda	Lipuga		5,611	1,291	23%	16.9%	19.6%	261	60	41	9	0.00	30.0%	5.9%	64.9%	12.7%	50.0%	9.8%	0	0.00	
Sub-total						7,630.7	6,576	86.2%	100.0%	926	637	170	121			31.5%	68.8%	50.7%		0.80						
51	C8-e	1	02-50-07-018	NUEVA VIZCAYA	Dupax Del Norte	New Gumiad		5,291	1,882	36%	33.6%	33.5%	430	155	69	25			11.0%	3.7%	62.9%	21.1%	80.0%	26.8%	0	0.00
		2	02-50-08-023	NUEVA VIZCAYA	Dupax Del Sur	Talbek		4,531	1,279	28%	22.8%	22.8%	280	78	57	15			20.0%	4.6%	75.0%	17.1%	25.0%	5.7%	1	0.23
		3	02-50-07-020	NUEVA VIZCAYA	Dupax Del Norte	Binnuangan	</																			

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (4/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed	Total Area of Barangay	Area of Barangay in Sub-watershed	Occupancy Ratio of Barangay	Occupancy Ratio of Sub-watershed	Occupancy Ratio of Targeted Barangay	Population		Household Number		Pop.Density in Sub-watershed (person/ha)	Poverty		Agri-sector Popiration Rate		Literacy		Experience of Reforestation Project		
													Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed		Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay 1-yes Ono	Weighted in Sub-watershed	
57	C9-d	1	02-57-06-004	QUIRINO	Nagtipuna	Guino (Gaiyan)	2,027	1,719	85%	27.6%	18.1%	863	734	147	125			15.0%	2.7%	80.1%	14.5%	72.0%	13.1%	0	0.00	
		2	02-50-07-018	NUEVA VIZCAYA	Dupax Del Norte	New Gumiad	5,291	2,877	54%	46.1%	30.4%	430	232	69	37			11.0%	3.3%	62.9%	19.1%	80.0%	24.3%	0	0.00	
		3	02-50-07-020	NUEVA VIZCAYA	Dupax Del Norte	Binnuangan	9,475	2,883	30%	46.2%	30.4%	1,432	430	255	77			80.0%	24.3%	39.7%	12.1%	30.0%	9.1%	1	0.30	
		4	02-57-06-005	QUIRINO	Nagtipuna	La Conwap (Guingsin)	8,578	1,994	23%	32.0%	21.0%	473	109	88	20			40.0%	8.4%	64.5%	13.6%	60.0%	12.6%	0	0.00	
						6,237.1	9,473		151.9%	100.0%	3,198	1,504	559	259	0.16			38.8%		59.3%		59.1%		0	0.30	
58	C9-e	1	02-50-15-006	NUEVA VIZCAYA	Alfonso Castaneda	Pelawap	5,722	2,038	36%	55.2%	42.7%	569	205	102	37			60.0%	25.6%	50.0%	21.3%	40.0%	17.1%	0	0.00	
		2	02-57-06-005	QUIRINO	Nagtipuna	La Conwap (Guingsin)	8,578	2,736	32%	74.1%	57.3%	473	151	88	28			40.0%	22.9%	64.5%	37.0%	60.0%	34.4%	0	0.00	
							3,693.0	4,774		129.3%	100.0%	1,042	356	190	65	0.07			48.5%		58.3%		51.5%		0	0.00
59	C9-f	1	02-57-06-005	QUIRINO	Nagtipuna	La Conwap (Guingsin)	8,578	954	11%	20.9%	20.9%	473	53	88	10			40.0%	8.3%	64.5%	13.5%	60.0%	12.5%	0	0.00	
		2	02-57-06-008	QUIRINO	Nagtipuna	Matmad	26,998	3,620	13%	79.1%	79.1%	467	63	83	11			30.0%	23.7%	80.4%	63.6%	60.0%	47.5%	0	0.00	
							4,573.9	4,574		100.0%	100.0%	940	115	171	21	0.03			32.1%		77.1%		60.0%		0	0.00
60	C9-g	1	02-57-06-005	QUIRINO	Nagtipuna	La Conwap (Guingsin)	8,578	2,794	33%	53.5%	54.0%	473	156	88	29			40.0%	21.6%	64.5%	34.9%	60.0%	32.4%	0	0.00	
		2	02-57-06-008	QUIRINO	Nagtipuna	Matmad	26,998	2,377	9%	45.5%	46.0%	467	41	83	7			30.0%	13.8%	80.4%	37.0%	60.0%	27.6%	0	0.00	
							5,227.2	5,171	0%	98.9%	100.0%	940	197	171	36	0.04			35.4%		71.8%		60.0%		0	0.00
61	C10-a	1	02-57-04-012	QUIRINO	Madella	Dumabato Notre	1,550	1,550	100%	16.5%	32.2%	1,196	1,196	237	237			48.0%	15.5%	68.5%	22.1%	85.0%	27.4%	0	0.00	
		2	02-57-01-024	QUIRINO	Aglipay	San Manuel	1,999	1,691	85%	18.0%	35.2%	589	501	127	108			50.0%	17.6%	45.2%	15.9%	70.0%	24.6%	1	0.35	
		3	02-57-01-018	QUIRINO	Aglipay	Alicia	3,425	1,566	46%	16.7%	32.6%	1,157	532	206	95			40.0%	13.0%	93.6%	30.5%	60.0%	19.5%	0	0.00	
							9,385.9	4,807		51.2%	100.0%	2,942	2,229	570	440	0.46			46.1%		68.5%		71.6%		0	0.35
62	C10-b	1	02-57-04-010	QUIRINO	Madella	Dipintin	733	576	78%	9.0%	67.6%	2,527	1,971	532	415			40.0%	27.0%	78.5%	53.0%	80.0%	54.0%	0	0.00	
		2	02-57-06-002	QUIRINO	Nagtipuna	Dipantan	609	277	45%	4.3%	32.4%	1,295	583	294	132			10.0%	3.2%	60.9%	19.8%	90.0%	29.2%	1	0.32	
							6,419.5	852		13.3%	100.0%	3,822	2,554	826	547	3.00			30.3%		72.8%		83.2%		0	0.32
63	C10-c	1	02-57-06-016	QUIRINO	Nagtipuna	Asaklat	2,236	2,039	91%	38.6%	44.1%	1,101	1,002	217	197			70.0%	30.9%	69.9%	30.8%	80.0%	35.3%	1	0.44	
		2	02-57-06-002	QUIRINO	Nagtipuna	Dipantan	609	330	54%	6.2%	7.1%	1,295	699	294	159			10.0%	0.7%	60.9%	4.3%	90.0%	6.4%	1	0.07	
		3	02-57-06-011	QUIRINO	Nagtipuna	San Dionisio II	5,698	2,253	40%	42.7%	48.8%	3,068	1,227	633	253			5.0%	2.4%	76.6%	37.4%	90.0%	43.9%	0	0.00	
							5,282.2	4,622		87.5%	100.0%	5,464	2,928	1,144	609	0.63			34.0%		72.5%		85.6%		0	0.51
64	C10-d	1	02-57-06-010	QUIRINO	Nagtipuna	Ponggo	1,900	1,528	80%	28.4%	33.9%	2,162	1,730	456	385			40.0%	13.6%	68.3%	23.1%	10.0%	3.4%	0	0.00	
		2	02-57-06-006	QUIRINO	Nagtipuna	Landingan	15,295	2,983	20%	55.5%	66.1%	1,160	232	234	47			20.0%	13.2%	83.3%	55.0%	70.0%	46.3%	1	0.66	
							5,373.7	4,511		84.0%	100.0%	3,322	1,962	690	412	0.43			26.8%		78.2%		49.7%		0	0.66
65	C10-e	1	02-57-06-011	QUIRINO	Nagtipuna	San Dionisio II	5,698	2,845	50%	34.5%	35.7%	3,068	1,534	633	317			5.0%	1.8%	76.6%	27.4%	90.0%	32.2%	0	0.00	
		2	02-57-06-012	QUIRINO	Nagtipuna	San Pugo	12,053	2,596	22%	31.5%	32.6%	433	95	77	17			10.0%	3.3%	77.2%	25.2%	75.0%	24.5%	0	0.00	
		3	02-57-06-015	QUIRINO	Nagtipuna	Wasid	12,718	2,518	20%	30.5%	31.6%	680	136	133	27			10.0%	3.2%	31.8%	10.1%	70.0%	22.1%	0	0.00	
							8,247.7	7,959		96.5%	100.0%	4,181	1,765	843	360	0.22			8.2%		67.6%		78.8%		0	0.00
66	C10-f	1	02-57-06-012	QUIRINO	Nagtipuna	San Pugo	12,053	3,706	31%	79.6%	100.0%	433	134	77	24			10.0%	10.0%	77.2%	77.2%	75.0%	75.0%	0	0.00	
							4,655.8	3,706		79.6%	100.0%	433	134	77	24	0.04			10.0%		77.2%		75.0%		0	0.00
							10,338	7,256		72.5%	100.0%	8,202	6,796	1,664	1,384	0.66			34.2%		85.0%		66.6%		0	0.73
67	C11-a	1	02-57-03-004	QUIRINO	Diffun	Baguio Village	1,649	1,647	100%	11.6%	15.9%	641	641	135	135			15.0%	2.4%	72.2%	11.5%	85.0%	13.5%	1	0.16	
		2	02-57-03-021	QUIRINO	Diffun	Magsaysay	687	687	100%	4.8%	6.6%	644	644	136	136			10.0%	0.7%	83.0%	5.5%	90.0%	6.0%	0	0.00	
		3	02-57-03-024	QUIRINO	Diffun	Rafael Palma (Don Sergio Osme)	656	644	98%	4.5%	6.2%	648	635	117	115			60.0%	3.7%	94.0%	5.9%	30.0%	1.9%	0	0.00	
		4	02-57-03-022	QUIRINO	Diffun	Makate	1,286	1,234	96%	8.7%	11.9%	462	444	91	87			30.0%	3.6%	89.5%	10.7%	10.0%	1.2%	1	0.12	
		5	02-57-03-016	QUIRINO	Diffun	Ifrao Village	1,190	1,132	95%	7.9%	10.9%	1,087	1,033	235	231			80.0%	8.8%	95.0%	10.4%	10.0%	1.1%	1	0.11	
		6	02-57-03-008	QUIRINO	Diffun	Campamento	1,447	1,349	93%	9.5%	13.0%	1,361	1,266	271	252			30.0%	3.9%	85.3%	11.1%	99.0%	12.9%	1	0.13	
		7	02-57-03-010	QUIRINO	Diffun	Don Mariano Perez, S	1,102	999	91%	7.0%	9.7%	656	597	129	117			80.0%	7.7%	89.6%	6.7%	85.0%	8.2%	1	0.10	
		8	02-57-03-032	QUIRINO	Diffun	Gregorio Piemental	1,621	1,469	91%	10.3%	14.2%	628	571	125	114			5.0%	0.7%	91.0%	12.9%	80.0%	11.4%	0	0.00	
		9	02-57-03-012	QUIRINO	Diffun	Dumanisi	1,416	867	61%	6.1%	8.4%	1,305	796	285	174			30.0%	2.5%	91.4%	7.7%	97.0%	8.1%	1	0.08	
		10	02-50-11-012	NUEVA VIZCAYA	Quezon	Dagupan	1,417	310	22%	2.2%	3.0%	770	169	140	31			5.0%	0.1%	85.2%	2.6%	75.0%	2.2%	1	0.03	
					14,254.9	10,338		72.5%	100.0%	8,202	6,796	1,664	1,384	0.66			34.2%		85.0%		66.6%		0	0.73		
68	M1-a	1	14-27-08-007	IFUGAO	Aguinaldo	Halag	7,867	5,685	72%	85.5%	100.0%	1,882	1,355	436	314			72.1%	72.1%	98.7%	98.7%	62.0%	62.0%	0	0.00	
						6,645.5	5,685		85.5%	100.0%	1,882	1,355	436	314	0.24			72.1%		98.7%		62.0%		0	0.00	
69	M1-b	1	14-27-08-008	IFUGAO	Aguinaldo	Itab	19,585	4,389	22%	91.2%	100.0%	895	197	166	37			72.1%	72.1%	96.5%	96.5%	66.4%	66.4%	0	0.00	
						4,788.3	4,389		91.2%	100.0%	895	197	166	37	0.05			72.1%		96.5%		66.4%		0	0.00	
70	M1-c	1	14-27-08-008	IFUGAO	Aguinaldo	Itab	19,585	5,059	26%	96.5%	100.0%	895	233	166	43			72.1%	72.1%	96.5%	96.5%	66.4%	66.4%	0	0.00	
						5,244.1	5,059		96.5%	100.0%	895															

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (5/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed	Total Area of Barangay	Area of Barangay in Sub-watershed	Occupancy Ratio of Barangay	Occupancy Ratio of Sub-watershed	Occupancy Ratio of Targeted Barangay	Population		Household Number		Pop. Density in Sub-watershed (person/ha)	Poverty		Agri-sector Population Rate		Literacy		Experience of Reforestation Project	
													Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed		Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed
		5	14-27-06-033	IFUGAO	Mayoyao	Tulaed		253	236	93%	3.8%	4.0%	350	326	74	69	0.61	72.1%	2.9%	70.5%	2.8%	70.0%	2.8%	1	0.04
		6	14-27-06-021	IFUGAO	Mayoyao	Magulon	1,745	1,585	866	91%	25.3%	26.6%	442	402	87	79		72.1%	19.2%	98.2%	26.2%	75.0%	20.0%	1	0.27
		7	14-27-06-015	IFUGAO	Mayoyao	Inwaloy	1,036	866	84%	13.8%	14.5%	300	252	72	60		72.1%	10.5%	70.9%	10.3%	58.0%	8.4%	1	0.15	
		8	14-27-06-020	IFUGAO	Mayoyao	Maga	927	776	84%	12.4%	13.0%	349	293	68	57		72.1%	9.4%	96.5%	12.6%	54.0%	7.0%	1	0.13	
		9	14-27-06-001	IFUGAO	Mayoyao	Aduyongan	385	151	39%	2.4%	2.5%	528	206	105	41		72.1%	1.8%	83.0%	2.1%	60.0%	1.5%	1	0.03	
		10	14-27-06-028	IFUGAO	Mayoyao	Poblacion	179	69	39%	1.1%	1.2%	874	341	159	62		72.1%	0.8%	48.3%	0.6%	49.0%	0.6%	1	0.01	
		11	14-27-06-035	IFUGAO	Mayoyao	Bato-Alatbang	309	72	23%	1.2%	1.2%	689	158	135	31		72.1%	0.9%	91.6%	1.1%	60.0%	0.7%	1	0.01	
						Sub-total	6,258.3	5,955	95.2%	100.0%	5,238	3,645	1,056	748			0.61	72.1%	72.1%	86.9%	62.1%	62.1%	1	1.00	
73	M1-f	1	14-27-01-004	IFUGAO	Banaue	Batad		1,054	1,041	99%	14.2%	15.5%	1,150	1,139	235	233		72.1%	11.1%	85.2%	13.2%	55.5%	8.6%	1	0.15
		2	14-27-01-009	IFUGAO	Banaue	Cambulo	3,867	3,780	98%	51.7%	56.1%	1,229	1,204	253	248		72.1%	40.5%	94.4%	53.0%	55.5%	31.1%	0	0.00	
		3	14-27-01-002	IFUGAO	Banaue	Anaba	718	484	67%	6.6%	7.2%	547	366	128	86		72.1%	5.2%	73.2%	5.3%	55.5%	4.0%	0	0.00	
		4	14-27-01-025	IFUGAO	Banaue	Pula	2,225	1,215	55%	16.6%	18.0%	535	294	120	66		72.1%	13.0%	80.5%	14.5%	55.5%	10.0%	1	0.18	
		5	14-27-01-005	IFUGAO	Banaue	Bocos	1,035	213	21%	2.9%	3.2%	2,236	470	420	88		72.1%	2.3%	60.9%	1.9%	55.5%	1.8%	1	0.03	
						Sub-total	7,314.5	6,732	92.0%	100.0%	5,697	3,473	1,156	721			0.52	72.1%	72.1%	87.9%	55.5%	55.5%	1	0.37	
74	M1-g	1	14-27-01-023	IFUGAO	Banaue	Tam-an		283	275	97%	4.1%	4.1%	1,263	1,225	217	210		72.1%	3.0%	43.0%	1.8%	55.5%	2.3%	0	0.00
		2	14-27-01-013	IFUGAO	Banaue	Kinakin	1,409	1,357	96%	20.0%	20.2%	1,140	1,094	206	198		72.1%	14.6%	52.1%	10.5%	55.5%	11.2%	1	0.20	
		3	14-27-01-016	IFUGAO	Banaue	Poblacion	334	314	94%	4.6%	4.7%	2,312	2,173	417	392		72.1%	3.4%	39.5%	1.8%	55.5%	2.6%	1	0.05	
		4	14-27-01-017	IFUGAO	Banaue	Poitan	586	531	91%	7.8%	7.9%	1,761	1,603	343	312		72.1%	5.7%	82.1%	6.5%	55.5%	4.4%	1	0.08	
		5	14-27-01-003	IFUGAO	Banaue	Bangaan	737	653	89%	9.6%	9.7%	705	627	169	150		72.1%	7.0%	67.5%	6.6%	55.5%	5.4%	1	0.10	
		6	14-27-09-010	IFUGAO	Hingyon	Ubuag	1,083	936	86%	13.8%	13.9%	456	392	96	83		72.1%	10.1%	78.2%	10.9%	78.0%	10.9%	0	0.00	
		7	14-27-01-005	IFUGAO	Banaue	Bocos	1,035	821	79%	12.1%	12.2%	2,236	1,766	420	332		72.1%	8.8%	60.9%	7.5%	55.5%	6.8%	1	0.12	
		8	14-27-01-001	IFUGAO	Banaue	Amganad	436	241	55%	3.5%	3.6%	1,699	934	349	192		72.1%	2.6%	67.9%	2.4%	55.5%	2.0%	1	0.04	
		9	14-27-01-002	IFUGAO	Banaue	Anaba	718	235	33%	3.5%	3.5%	547	181	128	42		72.1%	2.5%	73.2%	2.6%	55.5%	1.9%	0	0.00	
		10	14-27-09-012	IFUGAO	Hingyon	Northern Cababuyan	517	172	33%	2.5%	2.6%	859	283	175	58		72.1%	1.8%	68.2%	1.7%	73.0%	1.9%	0	0.00	
		11	14-27-01-010	IFUGAO	Banaue	Duculan	1,689	498	29%	7.3%	7.4%	910	264	178	52		72.1%	5.3%	76.1%	5.6%	55.5%	4.1%	1	0.07	
		12	14-27-01-024	IFUGAO	Banaue	View Point	2,388	683	29%	10.1%	10.2%	1,297	376	228	66		72.1%	7.3%	40.0%	4.1%	55.5%	5.6%	1	0.10	
						Sub-total	6,790.8	6,715	98.9%	100.0%	15,185	10,920	2,926	2,087			1.63	72.1%	72.1%	62.0%	59.1%	59.1%	1	0.76	
75	M1-h	1	14-27-06-002	IFUGAO	Mayoyao	Alimit	1,985	1,985	100%	28.1%	27.0%	561	561	98	98		72.1%	19.5%	87.4%	23.6%	49.0%	13.2%	1	0.27	
		2	14-27-06-003	IFUGAO	Mayoyao	Ayangan	1,167	1,133	97%	14.9%	15.4%	502	487	107	104		72.1%	11.1%	92.9%	14.3%	45.0%	6.9%	1	0.15	
		3	14-27-06-025	IFUGAO	Mayoyao	Nalbu	742	704	95%	9.3%	9.6%	412	391	68	65		72.1%	6.9%	98.8%	9.5%	50.0%	4.8%	1	0.10	
		4	14-27-06-027	IFUGAO	Mayoyao	Palaad	519	493	95%	6.5%	6.7%	330	314	61	58		72.1%	4.8%	92.5%	6.2%	75.0%	5.0%	1	0.07	
		5	14-27-01-007	IFUGAO	Banaue	Banao	1,712	1,330	78%	17.5%	18.1%	636	496	120	94		72.1%	13.0%	96.1%	17.4%	55.5%	10.0%	1	0.18	
		6	14-27-06-018	IFUGAO	Mayoyao	Langayan	441	269	61%	3.5%	3.7%	500	305	100	61		72.1%	2.6%	65.8%	2.4%	48.0%	1.8%	1	0.04	
		7	14-27-01-010	IFUGAO	Banaue	Duculan	1,689	901	53%	11.8%	12.2%	910	482	178	94		72.1%	8.8%	76.1%	9.3%	55.5%	6.8%	1	0.12	
		8	14-27-06-001	IFUGAO	Mayoyao	Aduyongan	385	205	53%	2.7%	2.8%	528	280	105	56		72.1%	2.0%	83.0%	2.3%	60.0%	1.7%	1	0.03	
		9	14-27-06-005	IFUGAO	Mayoyao	Banao	987	338	34%	4.5%	4.6%	502	171	86	29		72.1%	3.3%	90.0%	4.1%	75.0%	3.4%	1	0.05	
						Sub-total	7,599.9	7,357	96.8%	100.0%	4,881	3,487	923	658			0.47	72.1%	72.1%	89.1%	53.6%	53.6%	1	1.00	
76	M1-i	1	14-27-04-013	IFUGAO	Lagawe	Jucbong	1,845	1,786	97%	22.6%	24.8%	388	376	82	80		72.1%	17.9%	87.5%	21.7%	69.0%	17.1%	0	0.00	
		2	14-27-04-001	IFUGAO	Lagawe	Abinuan	3,015	2,874	95%	36.4%	39.9%	510	485	104	99		72.1%	28.8%	88.9%	35.5%	73.0%	29.1%	0	0.00	
		3	14-27-06-026	IFUGAO	Mayoyao	Nattum	2,414	2,206	91%	27.9%	30.6%	741	674	170	155		72.1%	22.1%	87.9%	26.9%	58.0%	17.8%	1	0.31	
		4	14-27-01-007	IFUGAO	Banaue	Banao	1,712	340	20%	4.3%	4.7%	636	127	120	24		72.1%	3.4%	96.1%	4.5%	55.5%	2.6%	1	0.05	
						Sub-total	7,900.4	7,206	91.2%	100.0%	2,275	1,662	476	357			0.23	72.1%	72.1%	88.6%	66.6%	66.6%	1	0.35	
77	M1-i	1	14-27-04-024	IFUGAO	Lagawe	Tupaya	3,400	3,257	96%	43.5%	43.6%	522	501	108	104		72.1%	31.4%	70.3%	30.7%	62.0%	27.0%	1	0.44	
		2	14-27-04-011	IFUGAO	Lagawe	Dulao	1,686	1,557	92%	20.8%	20.8%	438	403	90	83		72.0%	15.0%	83.0%	17.3%	76.0%	15.8%	0	0.00	
		3	14-27-04-018	IFUGAO	Lagawe	Ollicon	2,425	1,769	73%	23.6%	23.7%	461	337	83	61		72.1%	17.1%	69.8%	16.5%	74.0%	17.5%	1	0.24	
		4	14-27-04-008	IFUGAO	Lagawe	Buyabuyan	2,334	887	35%	11.8%	11.9%	463	162	90	32		72.1%	8.6%	91.4%	10.9%	75.0%	8.9%	0	0.00	
						Sub-total	7,488.9	7,470	99.8%	100.0%	1,884	1,403	371	279			0.19	72.1%	72.1%	75.4%	69.3%	69.3%	1	0.67	
78	M2-a	1	14-27-05-019	IFUGAO	Lamut	Sarafe	1,521	1,518	100%	18.9%	26.8%	766	766	157	157		72.1%	19.4%	91.9%	24.7%	60.3%	16.2%	1	0.27	
		2	14-27-05-007	IFUGAO	Lamut	Mabatobato(Lamut)	1,251	1,237	99%	15.4%	21.9%	1,587	1,571	313	310		72.1%	15.8%	82.8%	18.1%	55.7%	12.2%	1	0.22	
		3	14-27-05-004	IFUGAO	Lamut	Hapid																			

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (6/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed	Total Area of Barangay	Area of Barangay in Sub-watershed	Occupancy Ratio of Barangay	Occupancy Ratio of Sub-watershed	Occupancy Ratio of Targeted Barangay	Population		Household Number		Pop.Density in Sub-watershed (person/ha)	Poverty		Agri-sector Popiration Rate		Literacy		Experience of Reforestation Project	
													Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed		Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay 1-yes Ono	Weighted in Sub-watershed
		3	14-27-09-005	IFUGAO	Hingyon	Mompolia		657	656	100%	8.2%	8.5%	1,419	1,419	327	327	1.55	72.1%	6.1%	85.3%	7.2%	72.0%	6.1%	1	0.08
		4	14-27-09-009	IFUGAO	Hingyon	Poblacion (Hingyon)		304	304	100%	3.8%	3.9%	970	970	208	208		72.1%	2.8%	79.9%	3.2%	38.0%	1.5%	0	0.00
		5	14-27-09-011	IFUGAO	Hingyon	Umablong		1,172	1,172	100%	14.6%	15.2%	746	746	162	162		72.1%	10.9%	72.4%	11.0%	77.0%	11.7%	0	0.00
		6	14-27-09-007	IFUGAO	Hingyon	O-ong		769	747	97%	9.3%	9.7%	1,488	1,443	298	289		72.1%	7.0%	75.8%	7.3%	69.0%	6.7%	0	0.00
		7	14-27-04-006	IFUGAO	Lagawe	Burnay		435	416	96%	5.2%	5.4%	927	890	167	160		72.1%	3.9%	82.4%	4.4%	49.0%	2.6%	1	0.05
		8	14-27-04-005	IFUGAO	Lagawe	Boliwong		1,114	1,049	94%	13.0%	13.6%	1,259	1,183	238	224		72.1%	9.8%	64.5%	8.8%	57.0%	7.7%	1	0.14
		9	14-27-04-016	IFUGAO	Lagawe	Montabiong		1,331	1,218	92%	15.1%	15.8%	489	450	107	98		72.1%	11.4%	90.4%	14.3%	67.0%	10.6%	0	0.00
		10	14-27-09-004	IFUGAO	Hingyon	Cababuyan		154	133	86%	1.6%	1.7%	706	607	147	126		72.1%	1.2%	85.0%	1.5%	70.0%	1.2%	0	0.00
		11	14-27-09-006	IFUGAO	Hingyon	Namulditan		420	313	75%	3.9%	4.1%	1,026	770	200	150		72.1%	2.9%	80.0%	3.2%	75.0%	3.0%	1	0.04
		12	14-27-09-012	IFUGAO	Hingyon	Northern Cababuyan		517	345	67%	4.3%	4.5%	859	576	175	117		72.1%	3.2%	68.2%	3.0%	73.0%	3.3%	0	0.00
		13	14-27-04-023	IFUGAO	Lagawe	Tunggod		275	182	66%	2.3%	2.4%	678	447	127	84		72.1%	1.7%	60.1%	1.4%	52.0%	1.2%	0	0.00
		14	14-27-09-008	IFUGAO	Hingyon	Piwong		205	129	63%	1.6%	1.7%	1,097	691	204	129		72.1%	1.2%	63.6%	1.1%	23.0%	0.4%	0	0.00
		15	14-27-01-001	IFUGAO	Banaue	Amanad		436	189	43%	2.3%	2.4%	1,699	731	349	150		72.1%	1.8%	67.9%	1.7%	55.5%	1.4%	1	0.02
		16	14-27-04-010	IFUGAO	Lagawe	Cudog		641	197	31%	2.5%	2.6%	1,231	382	251	78		72.1%	1.8%	67.1%	1.7%	41.0%	1.0%	1	0.03
						Sub-total	8,038.9	7,718	96.0%	100.0%	100.0%	15,288	11,999	3,136	2,478	1.55	72.1%	7.2%	77.0%		64.3%		1	0.37	
82	M2-e	1	14-27-03-008	IFUGAO	Kiangnan	Dalligan		1,041	1,031	99%	15.4%	14.5%	260	257	60	59		72.1%	10.5%	83.1%	12.0%	55.5%	8.0%	1	0.14
		2	14-27-09-002	IFUGAO	Hingyon	Banatinon		479	476	99%	7.1%	6.7%	308	305	70	69		72.1%	4.8%	78.0%	5.2%	74.0%	5.0%	1	0.07
		3	14-27-04-020	IFUGAO	Lagawe	Poblacion South		135	133	98%	2.0%	1.9%	769	754	148	145		72.1%	1.3%	25.2%	0.5%	23.0%	0.4%	0	0.00
		4	14-27-01-021	IFUGAO	Banaue	Balawis		628	607	97%	9.1%	8.5%	880	854	165	160		72.1%	6.2%	72.4%	6.2%	55.5%	4.7%	1	0.09
		5	14-27-03-013	IFUGAO	Kiangnan	Lingay		441	428	97%	6.4%	6.0%	415	403	93	90		72.1%	4.3%	97.4%	5.9%	49.2%	3.0%	0	0.00
		6	14-27-04-010	IFUGAO	Lagawe	Cudog		641	443	69%	6.6%	6.2%	1,231	849	251	173		72.1%	4.5%	67.1%	4.2%	41.0%	2.6%	1	0.06
		7	14-27-02-004	IFUGAO	Hungduan	Banabang		2,360	1,489	63%	22.2%	20.9%	735	463	136	86		62.0%	13.0%	56.9%	11.9%	63.0%	13.2%	1	0.21
		8	14-27-02-011	IFUGAO	Hungduan	Poblacion		2,415	1,237	51%	18.5%	17.4%	1,697	865	288	147		54.0%	9.4%	68.8%	12.0%	30.0%	5.2%	1	0.17
		9	14-27-03-005	IFUGAO	Kiangnan	Bokiwian		1,387	609	44%	9.1%	8.6%	470	207	97	43		72.1%	6.2%	97.1%	8.3%	49.7%	4.3%	0	0.00
		10	14-27-01-022	IFUGAO	Banaue	Ohaj		866	333	38%	5.0%	4.7%	916	348	178	68		72.1%	3.4%	66.5%	3.1%	55.5%	2.6%	1	0.05
		11	14-27-09-008	IFUGAO	Hingyon	Piwong		205	76	37%	1.1%	1.1%	1,097	406	204	75		72.1%	0.8%	63.6%	0.7%	23.0%	0.2%	0	0.00
		12	14-27-09-006	IFUGAO	Hingyon	Namulditan		420	107	25%	1.6%	1.5%	1,026	257	200	50		72.1%	1.1%	80.0%	1.2%	75.0%	1.1%	1	0.02
		13	14-27-03-014	IFUGAO	Kiangnan	Mungayang		626	143	23%	2.1%	2.0%	1,044	240	196	45		72.1%	1.4%	85.6%	1.7%	58.3%	1.2%	0	0.00
						Sub-total	6,699.2	7,111	106.1%	100.0%	100.0%	10,848	6,207	2,086	1,211	0.87	72.1%	66.8%	72.9%		51.5%		1	0.80	
83	M2-f	1	14-27-01-018	IFUGAO	Banaue	San Fernando		363	363	100%	8.4%	9.5%	649	649	97	97		72.1%	6.9%	52.0%	4.9%	55.5%	5.3%	0	0.00
		2	14-27-01-011	IFUGAO	Banaue	Gohang		374	355	95%	8.2%	9.3%	686	652	129	123		72.1%	6.7%	73.4%	6.8%	55.5%	5.2%	1	0.09
		3	14-27-01-024	IFUGAO	Banaue	View Point		2,388	1,574	66%	36.3%	41.3%	1,297	856	228	150		72.1%	29.8%	40.0%	16.5%	55.5%	22.9%	1	0.41
		4	14-27-01-022	IFUGAO	Banaue	Ohaj		866	524	61%	12.1%	13.7%	916	559	178	109		72.1%	9.9%	66.5%	9.1%	55.5%	7.6%	1	0.14
		5	14-27-02-020	IFUGAO	Hungduan	Lubo-ong		3,767	996	26%	23.0%	26.1%	781	203	165	43		58.0%	15.2%	81.3%	21.2%	61.0%	15.9%	1	0.26
						Sub-total	4,331.9	3,812	88.0%	100.0%	100.0%	4,329	2,919	797	522	0.77	72.1%	68.4%	58.7%		56.9%		1	0.90	
84	M2-g	1	14-27-02-019	IFUGAO	Hungduan	Hapao		1,604	1,280	80%	22.7%	23.4%	2,020	1,616	364	291		48.0%	11.2%	21.5%	5.0%	51.0%	11.9%	1	0.23
		2	14-27-02-022	IFUGAO	Hungduan	Barang		2,808	2,099	75%	37.2%	38.3%	808	606	157	118		75.0%	28.7%	67.1%	25.7%	47.0%	18.0%	1	0.38
		3	14-27-02-021	IFUGAO	Hungduan	Nungulunan		2,947	1,727	59%	30.6%	31.5%	816	481	162	96		80.0%	25.2%	69.9%	22.0%	49.0%	15.4%	1	0.32
		4	14-27-02-018	IFUGAO	Hungduan	Bokiwian		1,708	375	22%	6.6%	6.8%	1,070	235	193	42		75.0%	5.1%	23.7%	1.6%	48.0%	3.3%	1	0.07
						Sub-total	5,648.5	5,480	97.0%	100.0%	100.0%	4,714	2,939	876	547	0.54	72.1%	70.3%	54.4%		48.6%		1	1.00	
85	M2-h	1	14-27-10-012	IFUGAO	Tinoc	Wangwang		2,595	1,672	64%	22.9%	25.3%	617	395	104	67		50.0%	12.6%	91.6%	23.1%	54.5%	13.8%	1	0.25
		2	14-27-10-011	IFUGAO	Tinoc	Tulludan		2,376	1,494	63%	20.4%	22.6%	509	321	88	55		65.0%	14.7%	97.5%	22.0%	49.1%	11.1%	1	0.23
		3	14-27-10-001	IFUGAO	Tinoc	Ahin		5,529	2,457	44%	33.6%	37.1%	707	311	118	52		70.0%	26.0%	98.8%	36.7%	49.5%	18.4%	1	0.37
		4	14-27-02-001	IFUGAO	Hungduan	Abatan		3,188	999	31%	13.7%	15.1%	757	235	125	39		68.0%	10.3%	76.8%	11.6%	56.0%	8.4%	1	0.15
						Sub-total	7,304.0	6,621	90.7%	100.0%	100.0%	2,580	1,261	435	213	0.19	72.1%	63.5%	93.4%		51.7%		1	1.00	
86	M2-i	1	14-27-10-003	IFUGAO	Tinoc	Binablayan		2,310	1,853	80%	24.3%	27.0%	1,286	1,037	219	175		65.0%	17.6%	93.4%	25.2%	48.3%	13.0%	1	0.27
		2	14-27-10-007	IFUGAO	Tinoc	Impugong		1,203	841	70%	11.0%	12.3%	904	633	163	114		65.0%	8.0%	96.5%	11.8%	55.1%	6.8%	1	0.12
		3	14-27-10-010	IFUGAO	Tinoc	Tukucan		2,068	1,314	64%	17.3%	19.2%	1,002	641	190	122		75.0%	14.4%	96.8%	18.5%	54.2%	10.4%	1	0.19
		4	14-27-10-005	IFUGAO	Tinoc	Eheb		2,327	1,267	54%	16.6%	18.5%	372	201	71	38		80.0%	14.8%	97.6%	18.0%	48.4%	8.9%	1	0.18
		5	14-27-10-006	IFUGAO	Tinoc	Gumhang		1,504	703	47%	9.2%	10.2%	764	359	124	58		70.0%	7.2%	96.6%	9.9%				

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (7/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed	Total Area of Barangay	Area of Barangay in Sub-watershed	Occupancy Ratio of Barangay	Occupancy Ratio of Sub-watershed	Occupancy Ratio of Targeted Barangay	Population		Household Number		Pop. Density in Sub-watershed (person/ha)	Poverty		Agri-sector Population Rate		Literacy		Experience of Reforestation Project			
													Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed		Total	Weighted in Sub-watershed	Total	Weighted in Sub-watershed	Total	Weighted in Sub-watershed	Total	Weighted in Sub-watershed	Total	Weighted in Sub-watershed
													Barangay		Barangay			Barangay		Barangay		Barangay		Barangay		Barangay	
		10	14-27-03-012	IFUGAO	Kiangan	Julongan	1,400	868	62%	9.1%	8.5%	410	254	90	56		72.1%	6.1%	93.8%	8.0%	54.6%	4.6%	0	0.00			
		11	14-27-03-001	IFUGAO	Kiangan	Ambabag	337	186	55%	2.0%	1.8%	678	373	132	73		72.1%	1.3%	82.0%	1.5%	46.4%	0.8%	0	0.00			
		12	14-27-03-015	IFUGAO	Kiangan	Nagacadan	545	211	39%	2.2%	2.1%	789	308	160	62		72.1%	1.5%	88.8%	1.8%	46.7%	1.0%	0	0.00			
		13	14-27-03-021	IFUGAO	Kiangan	Bolog	2,083	717	34%	7.6%	7.0%	1,341	456	250	85		72.1%	5.1%	82.3%	5.8%	53.0%	3.7%	0	0.00			
						Sub-total	9,487.6	10,194	107.4%	100.0%	14,833	12,300	2,740	2,263		1.21	68.8%	68.8%	85.1%	85.1%	59.5%	0.27					
89	M2-l	1	14-27-11-002	IFUGAO	Asipulo	Antipolo	818	778	95%	9.9%	10.2%	1,144	1,087	198	188		65.0%	6.6%	91.8%	9.4%	74.0%	7.6%	1	0.10			
		2	14-27-11-009	IFUGAO	Asipulo	Pula	3,759	3,479	93%	44.2%	45.7%	1,198	1,114	204	190		65.0%	29.7%	88.3%	40.4%	69.0%	31.6%	0	0.00			
		3	14-27-11-004	IFUGAO	Asipulo	Cawayan	3,319	2,694	81%	34.3%	35.4%	1,223	991	221	179		65.0%	23.0%	95.0%	33.6%	72.0%	25.5%	0	0.00			
		4	14-27-11-008	IFUGAO	Asipulo	Panubtuban	1,362	377	28%	4.8%	5.0%	760	213	133	37		65.0%	3.2%	91.5%	4.5%	71.0%	3.5%	0	0.00			
		5	02-50-14-007	NUEVA VIZCAYA	Villaverd	Sawmill	1,100	280	25%	3.6%	3.7%	1,182	296	209	52		7.0%	0.3%	60.0%	2.2%	85.0%	3.1%	0	0.00			
						Sub-total	7,862.6	7,607	96.8%	100.0%	5,507	3,700	965	646		0.49	62.9%	62.9%	90.2%	90.2%	71.3%	0.10					
90	M3-a	1	02-50-03-015	NUEVA VIZCAYA	Bayombong	Villa Coloma	507	506	100%	2.4%	5.4%	2,187	2,187	454	454		20.0%	1.1%	11.4%	0.6%	85.0%	4.6%	0	0.00			
		2	02-50-05-011	NUEVA VIZCAYA	Bayombong	Masoc	896	896	100%	4.2%	9.5%	1,864	1,864	391	391		70.0%	6.6%	55.2%	5.2%	90.0%	8.5%	0	0.00			
		3	02-50-05-020	NUEVA VIZCAYA	Bayombong	Cabuaan	1,014	1,014	100%	4.7%	10.7%	730	730	158	158		6.0%	0.6%	69.2%	7.4%	68.0%	7.3%	0	0.00			
		4	02-50-13-001	NUEVA VIZCAYA	Solano	Agbug	684	684	100%	3.2%	7.2%	2,419	2,419	523	523		10.0%	0.7%	47.9%	3.5%	58.0%	4.2%	0	0.00			
		5	02-50-13-002	NUEVA VIZCAYA	Solano	Bangan	323	323	100%	1.5%	3.4%	918	918	201	201		5.0%	0.2%	71.5%	2.4%	80.0%	2.7%	0	0.00			
		6	02-50-13-004	NUEVA VIZCAYA	Solano	Bascaran	625	625	100%	2.9%	6.6%	3,045	3,045	684	684		5.0%	0.3%	60.7%	4.0%	68.0%	4.5%	1	0.07			
		7	02-50-05-022	NUEVA VIZCAYA	Bayombong	Ipil-Cuneg	731	715	98%	3.3%	7.6%	405	397	89	87		30.0%	2.3%	76.2%	5.8%	87.0%	6.6%	0	0.00			
		8	02-50-13-021	NUEVA VIZCAYA	Bayombong	Communal	1,406	1,313	93%	6.2%	13.9%	1,640	1,525	344	320		20.0%	2.8%	0.0%	0.0%	65.0%	9.0%	0	0.00			
		9	02-50-05-010	NUEVA VIZCAYA	Bayombong	Magsaysay	1,083	938	87%	4.4%	9.9%	3,664	3,188	792	689		13.0%	1.3%	45.8%	4.5%	80.0%	7.9%	1	0.10			
		10	02-50-03-003	NUEVA VIZCAYA	Bayombong	Careb	521	399	77%	1.9%	4.2%	1,943	1,496	394	303		40.0%	1.7%	51.4%	2.2%	88.0%	3.7%	0	0.00			
		11	02-50-03-018	NUEVA VIZCAYA	Bayombong	Tuao South	1,111	858	77%	4.0%	9.1%	2,082	1,603	377	290		30.0%	2.7%	13.9%	1.3%	62.0%	5.6%	0	0.00			
		12	02-50-03-012	NUEVA VIZCAYA	Bayombong	Santa Lucia	1,264	574	45%	2.7%	6.1%	2,358	1,061	484	218		50.0%	3.0%	11.7%	0.7%	85.0%	5.2%	1	0.06			
		13	02-50-14-009	NUEVA VIZCAYA	Villaverd	Bintawan Notre	1,309	263	20%	1.2%	2.8%	1,997	399	433	87		5.0%	0.1%	57.4%	1.6%	88.0%	2.5%	1	0.03			
		14	02-50-01-009	NUEVA VIZCAYA	Villaverd	Tiblac	3,866	337	9%	1.6%	3.6%	1,593	139	285	25		85.0%	3.0%	85.8%	3.1%	75.0%	2.7%	1	0.04			
						Sub-total	21,347.1	9,446	44.2%	100.0%	26,845	20,971	5,609	4,430		2.22	26.6%	26.6%	42.3%	42.3%	75.0%	0.29					
91	M3-b	1	02-50-14-004	NUEVA VIZCAYA	Villaverd	Nagbitin	1,081	1,081	100%	9.0%	14.2%	1,721	1,721	355	355		5.0%	0.7%	63.1%	9.0%	85.0%	12.1%	0	0.00			
		2	02-50-14-005	NUEVA VIZCAYA	Villaverd	Ocapon	269	269	100%	2.2%	3.5%	789	789	149	149		60.0%	2.1%	72.3%	2.6%	80.0%	2.8%	0	0.00			
		3	14-27-05-002	IFUGAO	Lamut	Ambasa	339	339	100%	2.8%	4.5%	506	506	104	104		72.1%	3.2%	95.2%	4.2%	55.3%	2.5%	1	0.04			
		4	14-27-05-008	IFUGAO	Lamut	Magulon	918	917	100%	7.6%	12.1%	1,020	1,020	197	197		72.1%	8.7%	95.7%	11.6%	50.2%	6.1%	1	0.12			
		5	02-50-14-003	NUEVA VIZCAYA	Villaverd	Cabuluan	2,037	1,965	96%	16.3%	25.9%	1,312	1,260	260	250		7.0%	1.8%	63.6%	16.5%	85.0%	22.0%	0	0.00			
		6	14-27-05-020	IFUGAO	Lamut	Umilag	664	624	94%	5.2%	8.2%	767	721	131	123		72.1%	5.9%	94.8%	7.8%	52.4%	4.3%	1	0.08			
		7	02-50-14-009	NUEVA VIZCAYA	Villaverd	Bintawan Notre	1,309	1,036	79%	8.6%	13.6%	1,997	1,578	433	342		5.0%	0.7%	57.4%	7.8%	88.0%	12.0%	1	0.14			
		8	02-50-14-007	NUEVA VIZCAYA	Villaverd	Sawmill	1,100	820	75%	6.8%	10.8%	1,182	887	209	157		7.0%	0.8%	60.0%	6.5%	85.0%	9.2%	0	0.00			
		9	02-50-03-003	NUEVA VIZCAYA	Bayombong	Careb	521	122	23%	1.0%	1.6%	1,943	447	394	91		40.0%	0.6%	51.4%	0.8%	88.0%	1.4%	0	0.00			
		10	14-27-11-004	IFUGAO	Asipulo	Cawayan	3,319	423	13%	3.5%	5.6%	1,223	156	221	28		65.0%	3.6%	95.0%	5.3%	72.0%	4.0%	0	0.00			
						Sub-total	12,024.2	7,597	63.2%	100.0%	12,460	9,083	2,453	1,795		1.20	28.2%	28.2%	72.0%	72.0%	76.3%	0.38					
92	M3-c	1	02-50-04-024	NUEVA VIZCAYA	Bambang	Santo Domingo (Taban	1,103	994	90%	21.8%	26.4%	2,289	2,060	539	485		10.0%	2.6%	90.0%	23.7%	60.0%	15.8%	0	0.00			
		2	02-50-05-004	NUEVA VIZCAYA	Bayombong	Buenavista (Vista Hi	665	595	89%	13.0%	15.8%	2,376	2,115	511	455		80.0%	12.6%	61.1%	9.7%	75.0%	11.8%	1	0.16			
		3	02-50-05-005	NUEVA VIZCAYA	Bayombong	Busilac	1,164	1,030	89%	22.6%	27.4%	2,590	2,305	533	474		30.0%	8.2%	39.1%	10.7%	70.0%	19.2%	1	0.27			
		4	02-50-04-027	NUEVA VIZCAYA	Bambang	Santo Domingo West	1,859	1,146	62%	25.1%	30.4%	713	442	164	102		50.0%	15.2%	58.6%	17.8%	50.0%	15.2%	1	0.30			
						Sub-total	4,569.3	3,765	82.4%	100.0%	7,968	6,822	1,747	1,516		1.84	38.7%	38.7%	61.9%	61.9%	82.1%	0.74					
93	M4-a	1	02-50-04-016	NUEVA VIZCAYA	Bambang	Manamtam	2,681	2,387	89%	41.3%	53.7%	597	531	128	114		3.0%	1.6%	80.8%	43.4%	60.0%	32.2%	0	0.00			
		2	02-50-04-008	NUEVA VIZCAYA	Bambang	Barat	550	418	76%	7.2%	9.4%	1,458	1,108	306	233		10.0%	0.9%	56.1%	5.3%	70.0%	6.6%	1	0.09			
		3	02-50-04-027	NUEVA VIZCAYA	Bambang	Santo Domingo West	1,859	713	38%	12.3%	16.0%	713	271	164	82		50.0%	8.0%	58.6%	9.4%	50.0%	8.0%	1	0.16			
		4	02-50-10-015	NUEVA VIZCAYA	Kayapa	Nansiakan	3,169	929	29%	16.1%	20.9%	1,268	368	239	69		70.0%	14.6%	96.6%	20.2%	60.0%	12.5%	0	0.00			
						Sub-total	5,782.1	4,447	76.9%	100.0%	4,036	2,278	827	478		0.51	25.2%	25.2%	78.2%	78.2%	58.2%	0.25					
94	M4-b	1	02-50-01-004	NUEVA VIZCAYA	Ambaguio	Camandag	755	732	97%	9.6%	10.8%	1,092	1,059	185	179		50.0%	5.3%	93.4%	9.9%	75.0%	7.9%	0	0.00			
		2	02-50-01-010	NUEVA VIZCAYA	Ambaguio	Dullit	2,514	2,200	90%	30.3%	32.7%	1,072	965	213	192		50.0%	16.3%	72.7%	23.8%	80.0%	26.1%	0	0.00			
		3	02-50-01-009	NUEVA VIZCAYA	Ambaguio	Tiblac	3,866	3,153	82%	42.3%	45.6%	1,593	1,306	285	234		85.0%	38.8%	85.8%	39.1%	75.0%	34.2%	1	0.46			
		4	14-27-11-003	IFUGAO	Asipulo	Camandag	3,046	772	25%	10.4%	11.2%	2,979	745	534	134		65.0%	7.3%	92.6%	10.3%	70.0%	7.8%	0	0.00			
						Sub-total	7,454.5	6,917	92.6%	100.0%	6,736	4,075	1,217	738		0.59	67.6%	67.6%	83.1%	83.1%	76.1%	0.46					
95	M4-c	1	14-27-11-006	IFUGAO	Asipulo	Namal	2,701	2,495	92%	45.2%	59.6%	1,576	1,450	251	231		65.0%	38.7%	95.9%	57.2%	75.0%	44.7%	0	0.00			
		2	14-27-11-003	IFUGAO	Asipulo	Camandag	3,046	1,69																			

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (8/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed	Total Area of Barangay	Area of Barangay in Sub-watershed	Occupancy Ratio of Barangay	Occupancy Ratio of Sub-watershed	Occupancy Ratio of Targeted Barangay	Population		Household Number		Pop Density in Sub-watershed (person/ha)	Poverty		Agri-sector Population Rate		Literacy		Experience of Reforestation Project			
													Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed		Total	Weighted in Sub-watershed	Total	Weighted in Sub-watershed	Total	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed
99	M4-f	1	02-50-10-026	NUEVA VIZCAYA	Kayapa	Cabuyao		5,371	4,493	84%	62.2%	77.3%	697	585	121	102		5.0%	3.9%	70.0%	54.1%	40.0%	30.9%	0	0.00		
		2	02-50-10-007	NUEVA VIZCAYA	Kayapa	Banao		4,456	1,323	30%	18.3%	22.7%	632	190	105	32		40.0%	9.1%	69.0%	15.7%	60.0%	13.6%	0	0.00		
						Sub-total	7,220.0	5,816	80.6%	100.0%	100.0%	1,329	775	226	133	0.13		13.0%	68.8%	44.5%			0	0.00			
100	M4-g	1	02-50-10-005	NUEVA VIZCAYA	Kayapa	Babadi		1,239	1,072	86%	10.0%	10.0%	803	691	122	105		40.0%	4.0%	64.1%	6.4%	77.0%	7.7%	0	0.00		
		2	02-50-10-018	NUEVA VIZCAYA	Kayapa	Pinayag		3,577	2,856	80%	26.6%	26.6%	1,478	1,182	252	202		20.0%	5.4%	74.9%	20.0%	80.0%	21.4%	0	0.00		
		3	02-50-10-015	NUEVA VIZCAYA	Kayapa	Nansiakan		3,169	2,181	69%	20.3%	20.4%	1,268	875	239	165		70.0%	14.3%	96.6%	19.7%	60.0%	12.3%	0	0.00		
		4	02-50-01-005	NUEVA VIZCAYA	Ambaguio	Labang		1,782	886	50%	8.3%	8.3%	1,226	613	219	110		60.0%	5.0%	68.0%	5.6%	60.0%	5.0%	0	0.00		
		5	02-50-10-008	NUEVA VIZCAYA	Kayapa	Binalian		2,513	1,260	50%	11.7%	11.8%	667	334	113	57		20.0%	2.4%	76.5%	9.0%	50.0%	5.9%	1	0.12		
		6	02-50-10-028	NUEVA VIZCAYA	Kayapa	Latbang		6,331	2,416	38%	22.5%	22.6%	782	297	140	53		95.0%	21.5%	92.5%	20.9%	50.0%	11.3%	0	0.00		
						Sub-total	10,731.8	10,671	99.4%	100.0%	100.0%	6,224	3,992	1,085	691	0.37		52.5%	81.8%	63.6%			63.6%	0.12	0.12		
101	M5-a	1	02-50-04-017	NUEVA VIZCAYA	Bambang	Mauan		946	942	100%	12.6%	14.6%	1,130	1,130	237	237		3.0%	0.4%	60.9%	8.9%	50.0%	7.3%	1	0.15		
		2	02-50-02-008	NUEVA VIZCAYA	Aritao	Darapidap		1,115	1,042	93%	13.9%	16.1%	1,756	1,633	332	309		45.0%	7.3%	19.1%	3.1%	90.0%	14.5%	0	0.00		
		3	02-50-02-009	NUEVA VIZCAYA	Aritao	Kirang		2,962	2,704	91%	36.0%	41.9%	1,882	1,713	344	313		45.0%	18.8%	22.8%	9.5%	85.0%	35.6%	1	0.42		
		4	02-50-04-013	NUEVA VIZCAYA	Bambang	Indiana		957	822	86%	11.0%	12.7%	1,563	1,344	290	249		20.0%	2.5%	76.3%	9.7%	70.0%	8.9%	0	0.00		
		5	02-50-10-004	NUEVA VIZCAYA	Kayapa	Baan		2,295	819	36%	10.9%	12.7%	785	283	157	57		80.0%	10.1%	39.9%	5.1%	90.0%	11.4%	1	0.13		
		6	02-50-04-008	NUEVA VIZCAYA	Bambang	Barat		550	132	24%	1.8%	2.0%	1,458	350	306	73		10.0%	0.2%	56.1%	1.2%	70.0%	1.4%	1	0.02		
						Sub-total	7,502.5	6,461	86.1%	100.0%	100.0%	8,574	6,452	1,666	1,238	1.00		39.4%	37.4%	79.1%			79.1%	0.71	0.71		
102	M5-b	1	02-50-10-004	NUEVA VIZCAYA	Kayapa	Baan		2,295	1,468	64%	42.9%	27.4%	785	502	157	100		80.0%	22.0%	39.9%	11.0%	90.0%	24.7%	1	0.27		
		2	02-50-10-020	NUEVA VIZCAYA	Kayapa	San Fabian		1,294	592	46%	17.3%	11.1%	669	308	133	61		15.0%	1.7%	69.4%	7.7%	85.0%	9.4%	1	0.11		
		3	02-50-02-017	NUEVA VIZCAYA	Aritao	Baan		9,491	2,874	30%	84.0%	53.7%	377	113	80	24		45.0%	24.2%	58.8%	31.6%	75.0%	40.3%	1	0.54		
		4	02-50-04-018	NUEVA VIZCAYA	Bambang	Salinas		1,604	415	26%	12.1%	7.8%	2,307	600	474	123		15.0%	1.2%	57.5%	4.5%	80.0%	6.2%	1	0.08		
						Sub-total	3,422.2	5,349	156.3%	100.0%	100.0%	4,138	1,523	844	309	0.28		49.0%	54.7%	80.6%			80.6%	1.00	1.00		
103	M5-c	1	02-50-10-001	NUEVA VIZCAYA	Kayapa	Acacia		1,300	1,160	89%	17.4%	15.1%	903	804	168	150		50.0%	7.6%	60.8%	9.2%	60.0%	9.1%	1	0.15		
		2	02-50-04-025	NUEVA VIZCAYA	Bambang	Pallas		2,001	1,674	84%	25.0%	21.8%	792	665	142	119		5.0%	1.1%	92.8%	20.3%	30.0%	6.5%	1	0.22		
		3	02-50-10-014	NUEVA VIZCAYA	Kayapa	Mapayao		3,700	2,764	75%	41.4%	36.1%	1,167	875	209	157		10.0%	3.6%	94.1%	33.9%	75.0%	27.0%	1	0.36		
		4	02-50-04-018	NUEVA VIZCAYA	Bambang	Salinas		1,604	715	45%	10.7%	9.3%	2,307	1,038	474	213		15.0%	1.4%	57.5%	5.4%	80.0%	7.5%	1	0.09		
		5	02-50-10-020	NUEVA VIZCAYA	Kayapa	San Fabian		1,294	491	38%	7.3%	6.4%	669	254	133	51		15.0%	1.0%	69.4%	4.4%	85.0%	5.4%	1	0.06		
		6	02-50-10-011	NUEVA VIZCAYA	Kayapa	Cabanglasan		1,357	363	27%	5.4%	4.7%	684	185	116	31		70.0%	3.3%	78.8%	3.7%	50.0%	2.4%	0	0.00		
		7	02-50-10-008	NUEVA VIZCAYA	Kayapa	Binalian		2,513	500	20%	7.5%	6.5%	667	133	113	23		20.0%	1.3%	76.5%	5.0%	50.0%	3.3%	1	0.07		
						Sub-total	6,661.7	7,667	114.7%	100.0%	100.0%	7,189	3,955	1,355	743	0.52		19.2%	81.9%	61.2%			61.2%	0.95	0.95		
104	M5-d	1	02-50-10-030	NUEVA VIZCAYA	Kayapa	Tidang Village		1,082	1,064	98%	13.8%	16.1%	356	349	70	69		50.0%	8.1%	83.3%	13.4%	0.0%	0.0%	1	0.16		
		2	02-50-10-011	NUEVA VIZCAYA	Kayapa	Cabanglasan		1,357	994	73%	12.9%	15.1%	684	499	116	85		70.0%	10.6%	78.8%	11.9%	50.0%	7.5%	0	0.00		
		3	02-50-10-006	NUEVA VIZCAYA	Kayapa	Balangabang		1,551	1,080	70%	14.0%	16.4%	393	275	63	44		40.0%	6.5%	81.2%	13.3%	50.0%	8.2%	1	0.16		
		4	02-50-10-027	NUEVA VIZCAYA	Kayapa	Castille Village		357	221	62%	2.9%	3.4%	472	293	91	56		30.0%	1.0%	70.6%	2.4%	0.0%	0.0%	1	0.03		
		5	02-50-10-007	NUEVA VIZCAYA	Kayapa	Banao		4,456	2,481	56%	32.3%	37.6%	632	354	105	59		40.0%	15.1%	69.0%	26.0%	60.0%	22.6%	0	0.00		
		6	02-50-10-008	NUEVA VIZCAYA	Kayapa	Binalian		2,513	754	30%	9.8%	11.4%	667	200	113	34		20.0%	2.3%	76.5%	8.7%	50.0%	5.7%	1	0.11		
						Sub-total	7,668.9	8,594	111.9%	100.0%	100.0%	3,204	1,970	558	347	0.30		43.5%	75.7%	44.0%			44.0%	0.47	0.47		
105	M5-e	1	02-50-10-012	NUEVA VIZCAYA	Kayapa	Kayapa-Proper East		2,007	875	44%	28.3%	21.9%	204	90	45	20		60.0%	13.1%	76.9%	16.8%	0.0%	0.0%	0	0.00		
		2	02-50-10-019	NUEVA VIZCAYA	Kayapa	Pingkian		3,215	849	26%	27.5%	21.2%	1,045	272	176	46		30.0%	6.4%	70.2%	14.9%	70.0%	14.9%	1	0.21		
		3	02-50-10-002	NUEVA VIZCAYA	Kayapa	Amilong Labang		2,049	450	22%	14.6%	11.3%	219	48	43	9		40.0%	4.5%	72.2%	8.1%	70.0%	7.9%	0	0.00		
		4	02-50-10-010	NUEVA VIZCAYA	Kayapa	Cabalatan-Alang		2,607	522	20%	16.9%	13.0%	181	36	39	8		40.0%	5.2%	71.1%	9.3%	60.0%	7.8%	1	0.13		
		5	02-50-02-017	NUEVA VIZCAYA	Aritao	Baan		9,491	1,304	14%	42.2%	32.6%	377	52	80	11		45.0%	14.7%	58.8%	19.2%	75.0%	24.4%	1	0.33		
						Sub-total	3,089.5	4,000	129.5%	100.0%	100.0%	2,026	498	383	94	0.12		43.9%	68.3%	55.0%			55.0%	0.67	0.67		
106	M5-f	1	02-50-12-016	NUEVA VIZCAYA	Sta. Fe	Malico		1,671	1,253	75%	30.9%	20.6%	282	212	70	53		60.0%	12.3%	99.0%	20.3%	85.0%	17.5%	1	0.21		
		2	02-50-12-018	NUEVA VIZCAYA	Sta. Fe	Unib		2,254	1,651	73%	40.8%	27.1%	286	209	60	44		40.0%	10.8%	42.4%	11.5%	90.0%	24.4%	1	0.27		
		3	02-50-10-010	NUEVA VIZCAYA	Kayapa	Cabalatan-Alang		2,607	1,318	51%	32.5%	21.6%	181	92	39	20		40.0%	8.6%	71.1%	15.4%	60.0%	13.0%	1	0.22		
		4	02-50-12-008	NUEVA VIZCAYA	Sta. Fe	Imugan		1,294	530	41%	13.1%	8.7%	681	279	152	62		40.0%	3.5%	71.1%	6.2%	85.0%	7.4%	1	0.09		
		5	02-50-02-017	NUEVA VIZCAYA	Aritao	Baan		9,491	1,342	14%	33.1%	22.0%	377	53	80	11		45.0%	9.9%	58.8%	13.0%	75.0%	16.5%	1	0.22		
						Sub-total	4,050.3	6,093	150.4%	100.0%	100.0%	1,807	845	401	190	0.14		45.2%	66.3%	78.7%			78.7%	1.00	1.00		
107	M5-g	1	02-50-10-025	NUEVA VIZCAYA	Kayapa	Buyasvas		2,867	1,498	56%	49.2%	21.1%	321	180	60	34		30.0%	6.3%	64.4%	13.6%	50.0%	10.5%	1	0.21		
		2	02-																								

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (9/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed	Total Area of Barangay	Area of Barangay in Sub-watershed	Occupancy Ratio of Barangay	Occupancy Ratio of Sub-watershed	Occupancy Ratio of Targeted Barangay	Population		Household Number		Pop.Density in Sub-watershed (person/ha)	Poverty		Agri-sector Population Rate		Literacy		Experience of Reforestation Project	
													Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed		Total	Weighted in Sub-watershed	Total	Weighted in Sub-watershed	Total	Weighted in Sub-watershed	Total	Weighted in Sub-watershed
		6	02-50-12-013	NUEVA VIZCAYA	Sta. Fe	Atbu		2,079	1,182	57%	17.3%	16.4%	406	231	68	39		20.0%	3.3%	81.7%	13.4%	80.0%	13.2%	1	0.16
		7	02-50-12-002	NUEVA VIZCAYA	Sta. Fe	Bacneng		2,130	1,127	53%	16.5%	15.7%	1,160	615	213	113		30.0%	4.7%	95.2%	14.9%	90.0%	14.1%	0	0.00
		8	02-50-12-008	NUEVA VIZCAYA	Sta. Fe	Imugan		1,294	633	49%	9.3%	8.8%	681	334	152	74		40.0%	3.5%	71.1%	6.3%	85.0%	7.5%	1	0.09
		9	02-50-02-018	NUEVA VIZCAYA	Aritao	Balite		2,291	948	41%	13.9%	13.2%	515	211	104	43		50.0%	6.6%	33.9%	4.5%	89.0%	11.7%	1	0.13
						Sub-total	6,833.1	7,187	105.2%	100.0%	8,189	6,632	1,585	1,282	0.92	39.8%	78.1%	84.6%	0.45						
111	M6-d	1	02-50-12-004	NUEVA VIZCAYA	Sta. Fe	Bantinan		881	880	100%	10.6%	6.7%	1,056	1,056	195	195		40.0%	2.7%	66.9%	4.5%	90.0%	6.1%	0	0.00
		2	02-50-02-012	NUEVA VIZCAYA	Aritao	Santa Clara		731	726	99%	8.7%	5.6%	1,100	1,089	224	222		48.0%	2.7%	39.9%	2.2%	89.0%	4.9%	0	0.00
		3	02-50-02-019	NUEVA VIZCAYA	Aritao	Canabuan		5,223	4,393	84%	52.9%	33.6%	406	341	74	62		45.0%	15.1%	35.9%	12.1%	75.0%	25.2%	0	0.00
		4	02-50-02-020	NUEVA VIZCAYA	Aritao	Canarem		1,294	1,074	83%	12.9%	8.2%	747	620	142	118		50.0%	4.1%	54.8%	4.5%	89.0%	7.3%	0	0.00
		5	02-50-02-016	NUEVA VIZCAYA	Aritao	Anayo		1,263	769	61%	9.3%	5.9%	361	220	86	52		60.0%	3.5%	19.4%	1.1%	89.0%	5.2%	0	0.00
		6	02-50-12-015	NUEVA VIZCAYA	Sta. Fe	Canabuan		5,964	3,133	53%	37.8%	24.0%	1,221	647	244	129		60.0%	14.4%	46.4%	11.1%	85.0%	20.4%	1	0.24
		7	02-50-02-002	NUEVA VIZCAYA	Aritao	Beti		1,328	432	33%	5.2%	3.3%	1,555	513	304	100		45.0%	1.5%	32.0%	1.1%	88.0%	2.9%	0	0.00
		8	02-50-12-013	NUEVA VIZCAYA	Sta. Fe	Atbu		2,079	546	26%	6.6%	4.2%	406	106	68	18		20.0%	0.8%	81.7%	3.4%	80.0%	3.3%	1	0.04
		9	02-50-12-014	NUEVA VIZCAYA	Sta. Fe	Balete		1,111	1,111	20%	13.4%	8.5%	569	114	117	23		40.0%	3.4%	59.7%	5.1%	80.0%	6.8%	1	0.09
						Sub-total	8,296.2	13,063	157.5%	100.0%	7,421	4,706	1,454	920	0.36	48.3%	45.1%	82.2%	0.37						
112	M6-e	1	02-50-02-014	NUEVA VIZCAYA	Aritao	Tucanon		668	621	93%	13.2%	15.7%	965	897	168	156		45.0%	7.1%	66.6%	10.5%	98.0%	15.4%	0	0.00
		2	02-50-02-021	NUEVA VIZCAYA	Aritao	Latar-Nonoc-San Fra		1,136	1,000	88%	21.3%	25.3%	382	336	72	63		42.0%	10.6%	28.9%	7.3%	80.0%	20.3%	1	0.25
		3	02-50-02-006	NUEVA VIZCAYA	Aritao	Comon		990	826	83%	17.6%	20.9%	3,312	2,749	695	577		59.0%	20.7%	38.1%	8.0%	87.0%	18.2%	1	0.21
		4	02-50-02-023	NUEVA VIZCAYA	Aritao	Yaway		997	805	81%	17.2%	20.4%	575	466	104	84		95.0%	11.2%	49.1%	10.0%	83.0%	16.9%	1	0.20
		5	02-50-02-002	NUEVA VIZCAYA	Aritao	Beti		1,328	698	53%	14.9%	17.7%	1,555	824	304	161		45.0%	7.9%	32.0%	5.6%	88.0%	15.5%	0	0.00
						Sub-total	4,690.4	3,950	84.2%	100.0%	6,789	5,272	1,343	1,042	1.33	57.6%	41.4%	86.3%	0.67						
113	M6-f	1	02-50-08-003	NUEVA VIZCAYA	Dupax Del Sur	Banila		3,097	3,010	97%	57.1%	64.3%	835	810	178	173		40.0%	25.7%	53.6%	34.5%	75.0%	48.2%	1	0.64
		2	02-50-08-012	NUEVA VIZCAYA	Dupax Del Sur	Palabotan		1,602	1,176	73%	22.3%	25.1%	770	562	163	119		60.0%	15.1%	67.5%	17.0%	70.0%	17.6%	0	0.00
		3	02-50-02-016	NUEVA VIZCAYA	Aritao	Anayo		1,263	494	39%	9.4%	10.5%	361	141	86	34		60.0%	6.3%	19.4%	2.0%	89.0%	9.4%	0	0.00
						Sub-total	5,269.4	4,679	88.8%	100.0%	1,966	1,513	427	325	0.32	47.1%	53.5%	75.2%	0.64						
114	M6-g	1	02-50-08-004	NUEVA VIZCAYA	Dupax Del Sur	Carolotan		2,641	2,563	97%	44.5%	38.7%	797	773	163	158		5.0%	1.9%	63.0%	24.4%	68.0%	26.3%	1	0.39
		2	02-50-08-016	NUEVA VIZCAYA	Dupax Del Sur	Canabay		2,673	2,538	95%	44.1%	38.3%	739	702	143	136		60.0%	23.0%	65.8%	25.2%	30.0%	11.5%	1	0.38
		3	02-50-08-020	NUEVA VIZCAYA	Dupax Del Sur	Kinabuan		1,290	442	34%	7.7%	6.7%	775	264	152	52		10.0%	0.7%	61.9%	4.1%	90.0%	6.0%	0	0.00
		4	02-50-07-009	NUEVA VIZCAYA	Dupax Del Norte	Inaban		2,187	663	30%	11.5%	10.0%	1,455	437	327	98		10.0%	1.0%	22.7%	2.3%	80.0%	8.0%	0	0.00
		5	02-50-08-012	NUEVA VIZCAYA	Dupax Del Sur	Palabotan		1,602	417	26%	7.2%	6.3%	770	200	163	42		60.0%	3.8%	67.5%	4.2%	70.0%	4.4%	0	0.00
						Sub-total	5,758.1	6,624	115.0%	100.0%	4,536	2,375	948	486	0.36	30.4%	60.3%	56.2%	0.77						
115	M6-h	1	02-50-08-017	NUEVA VIZCAYA	Dupax Del Sur	Domang		256	254	99%	6.9%	9.3%	1,487	1,472	278	275		50.0%	4.7%	63.5%	5.9%	80.0%	7.5%	1	0.09
		2	02-50-08-015	NUEVA VIZCAYA	Dupax Del Sur	Balsain		232	223	96%	6.0%	8.2%	661	635	130	125		25.0%	2.0%	73.8%	6.0%	70.0%	5.7%	1	0.08
		3	02-50-08-018	NUEVA VIZCAYA	Dupax Del Sur	Dopaj		423	395	93%	10.7%	14.5%	1,665	1,548	321	299		10.0%	1.4%	47.3%	6.9%	99.0%	14.4%	1	0.14
		4	02-50-08-011	NUEVA VIZCAYA	Dupax Del Sur	Mangayang		589	515	87%	13.9%	18.9%	1,694	1,474	347	302		5.0%	0.9%	70.2%	13.3%	70.0%	13.2%	0	0.00
		5	02-50-08-014	NUEVA VIZCAYA	Dupax Del Sur	Bagumbayan		835	705	85%	19.1%	25.9%	883	751	176	150		30.0%	7.8%	41.5%	10.8%	90.0%	23.3%	0	0.00
		6	02-50-07-013	NUEVA VIZCAYA	Dupax Del Norte	Malasin (Pop.)		1,086	632	58%	17.1%	23.2%	3,126	1,813	680	394		4.0%	0.9%	47.0%	10.9%	85.0%	19.7%	0	0.00
						Sub-total	3,697.0	2,723	73.7%	100.0%	9,516	7,693	1,932	1,544	2.82	17.8%	53.7%	83.8%	0.32						
116	M7-a	1	02-50-05-012	NUEVA VIZCAYA	Bayombong	Paitan		1,164	1,089	94%	17.4%	19.8%	1,441	1,355	299	281		5.0%	1.0%	72.0%	14.1%	60.0%	11.7%	0	0.00
		2	02-50-05-019	NUEVA VIZCAYA	Bayombong	Bansing		3,582	3,169	88%	50.7%	56.8%	709	624	165	145		5.0%	2.8%	61.0%	34.7%	50.0%	28.4%	0	0.00
		3	02-50-11-008	NUEVA VIZCAYA	Quezon	Maddiangat		790	584	71%	9.0%	10.1%	1,573	1,117	329	234		30.0%	3.0%	39.7%	4.0%	95.0%	9.6%	0	0.00
		4	02-50-05-009	NUEVA VIZCAYA	Bayombong	Magapuy		1,431	759	53%	12.1%	13.6%	800	424	158	84		30.0%	4.1%	74.6%	10.1%	80.0%	10.9%	1	0.14
						Sub-total	6,246.1	5,581	89.3%	100.0%	4,523	3,519	951	744	0.63	10.9%	62.9%	60.6%	0.14						
117	M7-b	1	02-50-04-026	NUEVA VIZCAYA	Bambang	Magsaysay Hills		526	502	96%	9.4%	11.6%	1,274	1,223	280	269		50.0%	5.8%	19.3%	2.2%	70.0%	8.1%	0	0.00
		2	02-50-04-002	NUEVA VIZCAYA	Bambang	Abingan		1,054	754	72%	14.1%	17.4%	915	659	192	138		5.0%	0.9%	60.9%	10.6%	65.0%	11.3%	1	0.17
		3	02-50-04-022	NUEVA VIZCAYA	Bambang	San Fernando		621	419	67%	7.8%	9.7%	1,918	1,285	408	273		70.0%	6.8%	71.5%	6.9%	75.0%	7.3%	1	0.10
		4	02-50-04-001	NUEVA VIZCAYA	Bambang	Abian		1,601	1,007	63%	18.8%	23.3%	1,304	822	263	166		50.0%	11.6%	70.2%	16.4%	75.0%	17.5%	0	0.00
		5	02-50-05-009	NUEVA VIZCAYA	Bayombong	Magapuy		1,431	616	43%	11.5%	14.2%	800	344	158	68		30.0%	4.3%	74.6%	10.6%	80.0%	11.4%	1	0.14

Table 3.4.1(2) Socio-economic Data on Sub-watersheds (10/10)

No.	Sub-watershed Code	No.	Barangay Code	Province	Municipality	Barangay	Area of Sub-watershed	Total Area of Barangay	Area of Barangay in Sub-watershed	Occupancy Ratio of Barangay	Occupancy Ratio of Sub-watershed	Occupancy Ratio of Targeted Barangay	Population		Household Number		Pop.Density in Sub-watershed (person/ha)	Poverty		Agri-sector Population Rate		Literacy		Experience of Reforestation Project	
													Total Barangay	In Sub-watershed	Total Barangay	In Sub-watershed		Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed	Total Barangay	Weighted in Sub-watershed
		2	02-31-09-018	ISABELA	Cordon	Taliktik		4,684	2,701	58%	44.8%	53.6%	1,291	749	256	148		10.0%	5.4%	64.1%	34.4%	80.0%	48.2%	0	0.00
						Sub-total	6,033.2		5,043		83.6%	100.0%	2,773	2,038	564	416	0.40		7.7%	74.3%	88.6%			0	0.00
122	M8-b	1	02-50-06-006	NUEVA VIZCAYA	Diadi	Escoting		1,671	1,488	89%	33.4%	32.6%	872	776	165	147		50.0%	16.3%	83.3%	27.2%	80.0%	26.1%	1	0.33
		2	02-50-06-001	NUEVA VIZCAYA	Diadi	Arwas		811	625	77%	14.0%	13.7%	695	535	126	97		30.0%	4.1%	89.2%	12.2%	50.0%	6.8%	1	0.14
		3	02-50-06-012	NUEVA VIZCAYA	Diadi	Butao		998	704	71%	15.8%	15.4%	904	642	161	114		20.0%	3.1%	75.1%	11.6%	90.0%	13.9%	0	0.00
		4	02-50-06-013	NUEVA VIZCAYA	Diadi	Langca		1,575	964	61%	21.7%	21.1%	242	148	64	39		10.0%	2.1%	88.9%	18.8%	70.0%	14.8%	1	0.21
		5	02-50-06-009	NUEVA VIZCAYA	Diadi	Pinya		1,688	784	46%	17.6%	17.2%	506	233	104	48		10.0%	1.7%	51.2%	8.8%	80.0%	13.7%	1	0.17
						Sub-total	4,447.7		4,565		102.6%	100.0%	3,219	2,333	620	445	0.51		27.3%	78.5%	75.3%			0	0.85
123	M8-c	1	02-50-06-004	NUEVA VIZCAYA	Diadi	Decabacan		1,367	1,363	100%	19.8%	19.2%	580	580	136	136		15.0%	2.9%	58.6%	11.2%	80.0%	15.3%	0	0.00
		2	02-50-06-015	NUEVA VIZCAYA	Diadi	Rosario		795	794	100%	11.5%	11.2%	232	232	51	51		50.0%	5.6%	49.6%	5.5%	80.0%	8.9%	1	0.11
		3	02-50-06-007	NUEVA VIZCAYA	Diadi	Nagsabaran		946	788	83%	11.4%	11.1%	1,105	917	228	189		50.0%	5.5%	51.4%	5.7%	95.0%	10.5%	1	0.11
		4	02-50-03-017	NUEVA VIZCAYA	Bagabag	Villaros		3,512	2,290	65%	33.2%	32.2%	1,216	790	239	155		5.0%	1.6%	49.9%	16.1%	88.0%	28.4%	1	0.32
		5	02-50-06-014	NUEVA VIZCAYA	Diadi	Lurad		704	414	59%	6.0%	5.8%	426	251	81	48		24.0%	1.4%	70.5%	4.1%	90.0%	5.2%	1	0.06
		6	02-50-06-011	NUEVA VIZCAYA	Diadi	Ampakling		1,652	630	38%	9.1%	8.9%	541	206	115	44		10.0%	0.9%	61.9%	5.5%	80.0%	7.1%	0	0.00
		7	02-50-06-013	NUEVA VIZCAYA	Diadi	Langca		1,575	481	31%	7.0%	6.8%	242	75	64	20		10.0%	0.7%	88.9%	6.0%	70.0%	4.7%	1	0.07
		8	02-50-06-009	NUEVA VIZCAYA	Diadi	Pinya		1,688	344	20%	5.0%	4.8%	506	101	104	21		10.0%	0.5%	51.2%	2.5%	80.0%	3.9%	1	0.05
						Sub-total	6,898.6		7,102		103.0%	100.0%	4,848	3,153	1,018	664	0.44		19.1%	56.7%	84.1%			0	0.72
124	M8-d	1	02-50-03-002	NUEVA VIZCAYA	Bagabag	Baretbet		4,954	3,384	68%	69.6%	68.1%	3,512	2,388	759	516		40.0%	27.2%	43.5%	29.6%	90.0%	61.3%	0	0.00
		2	02-50-03-017	NUEVA VIZCAYA	Bagabag	Villaros		3,512	1,214	35%	25.0%	24.4%	1,216	426	239	84		5.0%	1.2%	49.9%	12.2%	88.0%	21.5%	1	0.24
		3	02-50-06-011	NUEVA VIZCAYA	Diadi	Ampakling		1,652	373	23%	7.7%	7.5%	541	124	115	26		10.0%	0.7%	61.9%	4.6%	80.0%	6.0%	0	0.00
						Sub-total	4,861.8		4,971		102.2%	100.0%	5,269	2,938	1,113	626	0.59		29.2%	46.4%	88.8%			0	0.24
125	M8-e	1	02-50-11-004	NUEVA VIZCAYA	Quezon	Bonifacio		1,831	1,829	100%	22.8%	23.9%	520	520	118	118		60.0%	14.4%	90.2%	21.6%	95.0%	22.7%	1	0.24
		2	02-50-11-006	NUEVA VIZCAYA	Quezon	Caliat (Pob.)		856	796	93%	9.9%	10.4%	1,581	1,470	372	346		40.0%	4.2%	45.8%	4.8%	90.0%	9.4%	1	0.10
		3	02-50-11-009	NUEVA VIZCAYA	Quezon	Nalubbunan		1,996	1,756	88%	21.8%	23.0%	1,211	1,066	254	224		20.0%	4.6%	80.2%	18.4%	97.0%	22.3%	1	0.23
		4	02-50-11-012	NUEVA VIZCAYA	Quezon	Dagupan		1,417	964	68%	12.0%	12.6%	770	524	140	95		5.0%	0.6%	85.2%	10.7%	75.0%	9.5%	1	0.13
		5	02-50-06-011	NUEVA VIZCAYA	Diadi	Ampakling		1,652	644	39%	8.0%	8.4%	541	211	115	45		10.0%	0.8%	61.9%	5.2%	80.0%	6.7%	0	0.00
		6	02-50-03-018	NUEVA VIZCAYA	Bagabag	Tuao South		1,111	251	23%	3.1%	3.3%	2,082	479	377	87		30.0%	1.0%	13.9%	0.5%	62.0%	2.0%	0	0.00
		7	02-50-11-005	NUEVA VIZCAYA	Quezon	Calacaon		1,651	385	23%	4.8%	5.0%	627	144	134	31		40.0%	2.0%	51.1%	2.6%	80.0%	4.0%	1	0.05
		8	02-50-03-002	NUEVA VIZCAYA	Bagabag	Baretbet		4,954	1,022	21%	12.7%	13.4%	3,512	738	759	159		40.0%	5.3%	43.5%	5.8%	90.0%	12.0%	0	0.00
						Sub-total	8,035.5		7,646		95.2%	100.0%	10,844	5,151	2,269	1,104	0.67		32.9%	69.5%	88.6%			0	0.75
126	M8-f	1	02-50-11-001	NUEVA VIZCAYA	Quezon	Aurora		748	695	93%	8.0%	7.4%	1,059	985	210	195		40.0%	3.0%	50.0%	3.7%	90.0%	6.7%	0	0.00
		2	02-50-11-003	NUEVA VIZCAYA	Quezon	Bulinao		4,162	3,755	90%	43.4%	40.0%	2,191	1,972	447	402		40.0%	16.0%	58.6%	23.4%	97.0%	38.8%	0	0.00
		3	02-50-11-002	NUEVA VIZCAYA	Quezon	Baresbes		611	541	89%	6.2%	5.8%	1,005	894	214	190		6.0%	0.3%	89.4%	5.1%	90.0%	5.2%	0	0.00
		4	02-50-11-011	NUEVA VIZCAYA	Quezon	Massin		2,030	1,817	89%	21.0%	19.3%	827	736	185	165		30.0%	5.8%	83.6%	16.2%	95.0%	18.4%	0	0.00
		5	02-50-11-007	NUEVA VIZCAYA	Quezon	Darubba		974	758	78%	8.8%	8.1%	1,568	1,223	351	274		50.0%	4.0%	94.3%	7.6%	80.0%	6.4%	0	0.00
		6	02-50-11-008	NUEVA VIZCAYA	Quezon	Maddiangat		790	226	29%	2.6%	2.4%	1,573	456	329	95		30.0%	0.7%	39.7%	1.0%	95.0%	2.3%	0	0.00
		7	02-50-09-009	NUEVA VIZCAYA	Kasibu	Cordon		7,239	1,606	22%	18.6%	17.1%	1,027	226	185	41		60.0%	10.3%	72.0%	12.3%	20.0%	3.4%	0	0.00
						Sub-total	8,653.6		9,397		108.6%	100.0%	9,250	6,492	1,921	1,363	0.69		40.1%	69.3%	81.1%			0	0.00
127	M8-g	1	02-50-11-010	NUEVA VIZCAYA	Quezon	Runruno		6,243	3,513	56%	44.5%	31.1%	3,054	1,710	604	338		60.0%	18.7%	92.1%	28.7%	95.0%	29.6%	1	0.31
		2	02-50-09-019	NUEVA VIZCAYA	Kasibu	Papaya		5,710	2,983	52%	37.8%	26.4%	746	388	142	74		25.0%	6.6%	47.5%	12.5%	65.0%	17.2%	1	0.26
		3	02-50-09-009	NUEVA VIZCAYA	Kasibu	Cordon		7,239	3,037	42%	38.5%	26.9%	1,027	431	185	78		60.0%	16.1%	72.0%	19.4%	20.0%	5.4%	0	0.00
		4	02-50-09-023	NUEVA VIZCAYA	Kasibu	Tadij		7,618	1,757	23%	22.3%	15.6%	702	161	126	29		30.0%	4.7%	79.2%	12.3%	60.0%	9.3%	0	0.00
						Sub-total	7,894.5		11,290		143.0%	100.0%	5,528	2,691	1,057	519	0.24		46.1%	72.9%	61.4%			0	0.58
128	M8-h	1	02-50-11-005	NUEVA VIZCAYA	Quezon	Calacaon		1,651	1,248	76%	34.1%	26.3%	627	477	134	102		40.0%	10.5%	51.1%	13.4%	80.0%	21.0%	1	0.26
		2	02-50-11-010	NUEVA VIZCAYA	Quezon	Runruno		6,243	1,990	32%	54.4%	41.9%	3,054	977	604	193		60.0%	25.1%	92.1%	38.6%	95.0%	39.8%	1	0.42
		3	02-50-09-023	NUEVA VIZCAYA	Kasibu	Tadij		7,618	1,514	20%	41.4%	31.9%	702	140	126	25		30.0%	9.6%	79.2%	25.2%	60.0%	19.1%	0	0.00
						Sub-total	3,658.0		4,751		129.9%	100.0%	4,383	1,594	864	320	0.34		45.2%	77.2%	79.9%			0	0.68
Total							844,871.9		722,521				586,654	359,600	111,186	70,820	0.50								

Table 4.2.1 Sub-watershed Ranking on Necessity of Watershed Management (1/3)

Rank	Sub-watershed Code	Agri-sector Pop Rate (a)	Score on Poverty Rate (b)	Total Score (c)=(a)+(b)
1	A3-c	5	5	10
2	A3-d	5	5	10
3	M1-a	5	5	10
4	M1-b	5	5	10
5	M1-c	5	5	10
6	M1-f	5	5	10
7	M1-h	5	5	10
8	M1-i	5	5	10
9	M2-h	5	5	10
10	M2-i	5	5	10
11	M4-c	5	5	10
12	M4-d1	5	5	10
13	A1-c	5	4	9
14	A2-a	5	4	9
15	M1-d	4	5	9
16	M1-e	4	5	9
17	M2-a	4	5	9
18	M2-b	4	5	9
19	M2-c	4	5	9
20	M2-k	4	5	9
21	M2-l	5	4	9
22	M4-b	4	5	9
23	A3-b	5	3	8
24	C3-a	5	3	8
25	C3-c	5	3	8
26	M1-j	3	5	8
27	M2-d	3	5	8
28	M2-e	3	5	8
29	M2-j	3	5	8
30	M4-d2	4	4	8
31	M4-e	4	4	8
32	M4-g	4	4	8
33	A1-a	3	4	7
34	A2-c	4	3	7
35	A2-e	5	2	7
36	A3-f	3	4	7
37	A3-g	4	3	7
38	C6-e	5	2	7
39	C11-a	4	3	7
40	M1-g	2	5	7
41	M5-d	3	4	7
42	M8-g	3	4	7
43	M8-h	3	4	7
44	A2-f	2	4	6
45	A3-e	2	4	6
46	A4-b	3	3	6
47	C1-b	5	1	6
48	C1-c	5	1	6
49	C1-e	3	3	6
50	C2-d	5	1	6
51	C3-e	5	1	6
52	C4-a	5	1	6
53	C5-b	3	3	6

Table 4.2.1 Sub-watershed Ranking on Necessity of Watershed Management (2/3)

Rank	Sub-watershed Code	Agri-sector Pop Rate (a)	Score on Poverty Rate (b)	Total Score (c)=(a)+(b)
54	C6-a	5	1	6
55	C6-b	4	2	6
56	C7-a	4	2	6
57	C9-c	4	2	6
58	C10-a	2	4	6
59	C10-c	3	3	6
60	C10-d	4	2	6
61	M2-f	1	5	6
62	M2-g	1	5	6
63	M4-a	4	2	6
64	M5-c	4	2	6
65	M5-e	2	4	6
66	M5-f	2	4	6
67	M6-c	3	3	6
68	M7-e	3	3	6
69	M8-b	4	2	6
70	A2-b	2	3	5
71	A2-d	2	3	5
72	A3-a	4	1	5
73	C1-d	4	1	5
74	C2-a	4	1	5
75	C3-b	4	1	5
76	C4-b	4	1	5
77	C5-a	3	2	5
78	C5-c	2	3	5
79	C5-d	1	4	5
80	C5-e	1	4	5
81	C7-b	3	2	5
82	C7-c	3	2	5
83	C8-g	1	4	5
84	C9-e	1	4	5
85	C9-f	3	2	5
86	C9-g	2	3	5
87	C10-b	3	2	5
88	M3-b	3	2	5
89	M3-c	2	3	5
90	M5-b	1	4	5
91	M5-g	2	3	5
92	M6-a	2	3	5
93	M6-b	1	4	5
94	M6-d	1	4	5
95	M6-e	1	4	5
96	M6-f	1	4	5
97	M8-e	2	3	5
98	M8-f	2	3	5
99	A4-a	1	3	4
100	C2-c	3	1	4
101	C4-c	3	1	4
102	C8-a	2	2	4
103	C8-c	1	3	4
104	C8-d	2	2	4
105	C8-e	1	3	4
106	C8-h	3	1	4

Table 4.2.1 Sub-watershed Ranking on Necessity of Watershed Management (3/3)

Rank	Sub-watershed Code	Agri-sector Pop Rate (a)	Score on Poverty Rate (b)	Total Score (c)=(a)+(b)
107	C8-i	2	2	4
108	C9-d	1	3	4
109	C10-f	3	1	4
110	M5-a	1	3	4
111	M6-g	2	2	4
112	M7-b	2	2	4
113	M8-a	3	1	4
114	A1-b	1	2	3
115	C2-b	2	1	3
116	C8-b	1	2	3
117	C8-f	2	1	3
118	C10-e	2	1	3
119	M3-a	1	2	3
120	M4-f	2	1	3
121	M7-a	2	1	3
122	M7-d	1	2	3
123	M8-d	1	2	3
124	C6-c	1	1	2
125	C6-d	1	1	2
126	M6-h	1	1	2
127	M7-c	1	1	2
128	M8-c	1	1	2

Table 4.2.2 Sub-watershed Ranking on Potential of Watershed Management (1/3)

Rank	Sub-watershed Code	Score on Literacy Rate (a)	Score on Experience of Reforestation Project (b)	Total Score (c)=(a)+(b)
1	A2-e	5	5	10
2	A3-a	5	5	10
3	M5-b	5	5	10
4	M5-f	5	5	10
5	A1-c	5	4	9
6	C6-b	4	5	9
7	C6-e	4	5	9
8	C8-f	4	5	9
9	C10-c	5	4	9
10	M5-a	5	4	9
11	M5-g	4	5	9
12	M6-b	5	4	9
13	M6-e	5	4	9
14	M8-b	4	5	9
15	M8-c	5	4	9
16	M8-e	5	4	9
17	M8-h	5	4	9
18	A3-b	4	4	8
19	C5-b	5	3	8
20	C5-c	4	4	8
21	C10-b	5	3	8
22	M1-e	3	5	8
23	M1-j	4	4	8
24	M3-b	5	3	8
25	M5-c	3	5	8
26	M6-a	5	3	8
27	M6-c	5	3	8
28	M6-d	5	3	8
29	M6-f	4	4	8
30	M6-h	5	3	8
31	M7-c	5	3	8
32	M7-e	4	4	8
33	A1-b	4	3	7
34	A4-b	5	2	7
35	C8-h	4	3	7
36	C10-a	4	3	7
37	C11-a	3	4	7
38	M1-h	2	5	7
39	M2-a	2	5	7
40	M2-e	2	5	7
41	M2-f	2	5	7
42	M2-h	2	5	7
43	M3-a	4	3	7
44	M3-c	3	4	7
45	M4-b	4	3	7
46	M4-d1	2	5	7
47	M4-d2	2	5	7
48	M6-g	2	5	7
49	M7-b	4	3	7
50	M8-d	5	2	7
51	M8-g	3	4	7

Table 4.2.2 Sub-watershed Ranking on Potential of Watershed Management (2/3)

Rank	Sub-watershed Code	Score on Literacy Rate (a)	Score on Experience of Reforestation Project (b)	Total Score (c)=(a)+(b)
52	A2-b	3	3	6
53	A2-f	3	3	6
54	C1-d	1	5	6
55	C3-c	1	5	6
56	C4-c	5	1	6
57	C5-d	1	5	6
58	C5-e	1	5	6
59	C8-d	1	5	6
60	C10-e	5	1	6
61	M1-d	2	4	6
62	M1-g	2	4	6
63	M1-i	3	3	6
64	M2-b	2	4	6
65	M2-c	3	3	6
66	M2-d	3	3	6
67	M2-g	1	5	6
68	M2-i	1	5	6
69	M2-l	4	2	6
70	M5-e	2	4	6
71	M7-d	2	4	6
72	M8-a	5	1	6
73	M8-f	5	1	6
74	A1-a	3	2	5
75	A2-a	4	1	5
76	A2-c	3	2	5
77	A2-d	2	3	5
78	A3-d	4	1	5
79	A4-a	3	2	5
80	C6-a	4	1	5
81	C6-c	4	1	5
82	C8-a	4	1	5
83	C8-e	1	4	5
84	C8-g	1	4	5
85	C8-i	3	2	5
86	C9-c	4	1	5
87	C9-d	2	3	5
88	C10-d	1	4	5
89	C10-f	4	1	5
90	M1-f	2	3	5
91	M2-j	1	4	5
92	M2-k	2	3	5
93	M4-c	4	1	5
94	M4-e	3	2	5
95	M4-g	3	2	5
96	M7-a	3	2	5
97	A3-c	3	1	4
98	C1-c	1	3	4
99	C3-a	1	3	4
100	C4-b	3	1	4
101	C5-a	2	2	4
102	C7-a	3	1	4

Table 4.2.2 Sub-watershed Ranking on Potential of Watershed Management (3/3)

Rank	Sub-watershed Code	Score on Literacy Rate (a)	Score on Experience of Reforestation Project (b)	Total Score (c)=(a)+(b)
103	C7-c	3	1	4
104	C9-f	3	1	4
105	C9-g	3	1	4
106	M1-a	3	1	4
107	M1-b	3	1	4
108	M1-c	3	1	4
109	M4-a	2	2	4
110	M5-d	1	3	4
111	A3-e	2	1	3
112	A3-f	2	1	3
113	A3-g	2	1	3
114	C1-e	1	2	3
115	C2-b	2	1	3
116	C2-d	1	2	3
117	C6-d	2	1	3
118	C7-b	2	1	3
119	C1-b	1	1	2
120	C2-a	1	1	2
121	C2-c	1	1	2
122	C3-b	1	1	2
123	C3-e	1	1	2
124	C4-a	1	1	2
125	C8-b	1	1	2
126	C8-c	1	1	2
127	C9-e	1	1	2
128	M4-f	1	1	2

Table 5.4.1 Possible Supplementary Field Surveys for Economic Benefits Valuation

Type of Survey	Difficulty of Survey*	Priority of Survey**
(1-1) Allowable tree cutting		
a) Survey on stumpage volume by type of tree species	Middle	Middle
(1-2) Harvest of firewood		
a) Survey on unit harvest volume by type of firewood species	Middle	Middle
(2-1) Water supply dam		
a) Survey on rainfall	Middle	Low
b) Survey on evaporation	Difficult	Low
c) Direct runoff flowing on surface of slope	Difficult	High
(2-2) Incremental agricultural produce		
a) Survey on river discharge	Middle	Middle
b) Survey on unit harvest for irrigation paddy	Easy	Low
c) Survey on unit harvest for rainfed paddy	Easy	Low
(3) Power generation		
a) Survey on present annual sedimentation volume flow into the Magat dam reservoir	Difficult	High
(4-1) Sales of agroforestry produces		
a) Survey on farm gate price by type of agroforestry product	Easy	High
(4-2) Conservation of agricultural land		
a) Survey on annual prevented soil loss	Difficult	Middle
(5) Livestock (fodder produce by silvopasture)		
a) Survey on state of pastureland livestock (The satellite image analysis can be applied.)	Difficult	Middle
(6) Mining	-	-
(7) Fishery		
a) Present catch of fish species in the Magat dam reservoir by type of fish species	Middle	High
b) Survey on number of fishermen	Easy	Middle
(8) Transportation		
a) Survey on present feeder road conditions with access time to the reforestation site and market	Middle	High
(9) Tourism and recreation & (10) Historical and cultural places		
a) Survey on state of tourism	Easy	Middle
b) Tourism potential survey	Difficult	High
(11) Social welfare	(To be studied)	-
(12) Health	(To be studied)	-
(13) Biodiversity		
a) Survey on wildlife inhabitant	Middle	Middle
(14) Prevention of soil erosion		
a) Survey on annual eroded depth by the nature of the soil	Difficult	Middle
(15) Prevention of slope failure and landslide		
a) Survey on state of slope failure and landslide	Difficult	High
(16) Water quality conservation		
a) Survey on water quality flown from bare land and forest land	Middle	Middle
(17) Flood mitigation		
a) Survey on present flood situation	Difficult	Middle
(18) CO ₂ sequestration		
a) Survey on unit volume of carbon sequestration by kind of tree	Difficult	Low
(19) Micro-climate amelioration		
a) Survey on reduction effect of temperature by forest	Difficult	Low
b) Survey on reduction effect of heavy wind by forest	Difficult	Low

Note: * - This indicates technical difficulty for the survey.

** - High: The survey should be conducted in the case of no data on site.

Middle: It is recommendable the survey be conducted in the case of no data on site. However, relevant data from similar condition of the site will be available in general.

Low: It is not necessarily that the survey be conducted in the case of no data on site, since data under similar conditions to be applied are available.

Table 5.4.2 Preliminary Evaluation of Possibility of Economic Benefit Estimation

Items of Economic Benefits	Possibility for Estimation	Remarks
(1)Forestry		
1) Allowable tree cutting	Possible	
2) Harvest of firewood	Possible	
(2)Water supply	Difficult	Relation between water supply dam and benefits brought by the dam is not clear in terms of cost of the dam.
1) Increase in agricultural produce	Possible	
(3)Power generation	Very difficult	Estimation of annual sedimentation volume flow into the Magat dam reservoir after the watershed management project is very difficult.
(4)Agriculture		
1) Sales of agroforestry produces	Possible	
2) Conservation of agricultural land	Possible	
(5)Livestock (fodder Produce by silvopasture)	Possible	
(6)Mining	-	-
(7)Fishery	Very difficult	Estimation of catch of fish by improvement of water quality in water quality indexes of pH, dissolved oxygen (DO) and suspended solid by type of fish species is very difficult.
(8)Transportation	Very difficult	Estimation of opportunity cost for time spending for transportation is very difficult.
(9)Tourism and recreation	Difficult	Estimation of annual tourist number for one-day trip tourist and lodging tourist by site of potential and existing tourism and recreation after implementation of the watershed management project is very difficult.
(10)Historical and cultural places	Difficult	Ditto
(11)Social welfare	To be studied	-
(12)Health	To be studied	-
(13)Biodiversity	Very difficult	Only in the case where enough data on habitat of flora and fauna in the project site are available, the estimation can be conducted.
(14)Prevention of soil erosion	Possible	
(15)Prevention of slope failure and landslide	Difficult	Survey on state of slope failure and landslide is difficult to conduct in terms of both technical and cost.
(16)Water quality conservation	Possible	
(17)Flood mitigation	Possible	
(18)CO ₂ sequestration	Possible	
(19)Micro-climate amelioration	Very difficult	It is very difficult to estimate reduction effect of temperature and reduction effect of heavy wind by forest.

Note: Possible – Necessary data is available for the estimation in general.

Difficult, Very difficult –Some (or all) necessary data is not available. Survey and estimation are (very) difficult from both cost and technical viewpoints.

To be studied – Applicable estimation method is not available at present.