

## **SOCIAL ASSESSMENT**

### **6.1 Project Beneficiaries**

Most of the residents within the road influence area of barangay Minsuro and Mantibugao are farmers.

The direct beneficiaries of the sub-project are the 870 residents of barangay Minsuro and 2,678 residents of barangay Mantibugao as reflected in 2010 Census on Population wherein 495 were males and 375 were females for barangay Minsuro and 1312 were males and 1366 were females in barangay Mantibugao.

There are about 174 households in barangay Minsuro and 536 in Mantibugao which are basically dependent on farming as their livelihood.

A consultation was conducted at the Barangay Hall of Minsuro and Mantibugao. Most of the attendees in barangay Minsuro were women and elderlies. While in Mantibugao most were also women because the men were working at their farm. The consultations were conducted in the morning at barangay Minsuro and mid afternoon in barangay Mantibugao. The Municipal Planning and Development Coordinator presented during the consultation the proposal to improve the existing Mantibugao-Minsuro Farm to Market Road. She also explained what is Philippine Rural Development Program and the impact of the project to the lives of the residents in both barangays.

Since the sub-project is an existing barangay road, there are no residents within the road influence area that will be displaced.

Indirect beneficiaries of the sub-project are the residents within the neighboring sitios and barangays.

### **6.2 Indigenous Cultural Communities**

Barangay Minsuro and Mantibugao are barangays located in the Province of Bukidnon. They are called Bukidnon tribes. However, most of the Indigenous people in barangay Minsuro and Mantibugao belongs to Higaonon Tribes.

During the CBMS survey conducted in 2010, it revealed that there were 280 Indigenous people in Minsuro and 273 in barangay Mantibugao wherein 141 belongs to

Bukidnon tribe and 139 belongs to Higaonon tribe for barangay Minsuro and 103 belongs to Bukidnon tribe and 170 belongs to Higaonon tribe for barangay Mantibugao. Their means of livelihood is farming. They owned the land and cultivate them in order to earn a living.

The barangay officials in Minsuro are mostly Higaonon Tribes.

The tribal chieftains of both barangays has favorably indorsed the project because they are aware that the project will surely improved their socio-economic condition. Certificate of compliance/non-overlap were also requested from NCIP and finally in April 10, 2015 , NCIP Regional office No. 10 has issued a Certificate of Compliance for the sub-project.

### **6.3 Site and Right-of-Way acquisition**

The proposed sub-project is declared an existing road for almost 35 years. It has a width of 10 meters and a length of 8.04 kilometers. This is the main access of the residents of barangay Minsuro . in going to the town center passing thru barangay Mantibugao.

Consultation was conducted with the residents of barangay Minsuro and Mantibugao, basically to inform them about the sub-project. It has been explained to them that prior to the approval of the sub-project those properties (residential, agricultural and commercial) that may be affected will require legal documents from the registered owner of the property. It will be in the form of Deed of Donation. It was also made clear that the government has no funds to pay for the affected property. Resolutions were then passed by the barangay council authorizing the barangay captains to accept the donated portion of the lot that may be affected by the project. However, the road was already reflected in the cadastral map/plan of the land which has a width of 10 meters.

The names of the property owners will be taken from the parcellary map. Deed of donations were already executed by the owners reflected in the parcellary map.

### **6.4 Damage to standing crops, houses and properties**

During the consultation, the owners of the standing crops such as cassava and bananas and properties such as house , fences and trees were informed that they should voluntarily harvest their crops and remove the structures prior to the construction of the sub-project.

Tree cutting permit were already issued by the DENR and Coconut Tree Cutting permit were also issued by the Philippine Coconut Authority.

The Local household residence were located distance from the road-right-of way of the barangay road , thus, the sub-project is free from any private structures that could be affected.

## **6.5 Physical Displacement of Persons**

There will be no displacement of affected residents since the community was previously informed by the barangay officials of no construction of permanent structures near the road. Majority of the persons living within the perimeter of the proposed sub-project are farmers which owns farm lots within the project influence area. Some are building their houses in the residential zones at the barangay proper.

## **6.6 Economic Displacement of Persons**

There are some trees and crops that will be affected during the construction, however, during the consultation, they were already informed that the trees would be cut and the LGU will seek the cutting permit from the DENR. Most of the trees that will be cut are Gmelina trees.

Considering the positive effects of the sub-project to the residents which is easy access and convenience of the road, the residents are really soliciting the project because this will boost economic activities specifically on agricultural production.

# **VII. ENVIRONMENTAL ASSESSMENT**

## **7.1 Natural Habitat**

The project site only traversed land planted with various crops and does not affect protected area of natural habitat. There are no natural bodies of water that will traverse

in the whole road section of the proposed sub-project. No records from the barangay and other agencies that accounted the presence of habitat for wildlife in the project area.

## **7.2 Physical cultural resources**

Considering that the proposed sub-project is an existing one, there are no structure monuments or physical cultural resources which can be found on site that will be affected by the sub-project. Moreover, it is not a potential archaeological site. However, if during the implementation of the project there is a chance that objects of archaeological or paleontological importance are excavated, it will be turn-over to the proper authorities who are in-charge of the archaeological matters.

## **7.3 Terrain, Soil Types and rainfall**

The terrain in the project site is gently rolling. It is located in a plateau. However, ridges and canyons are found below in some portion of the project area.

The soil in barangay Minsuro and Mantibugao is predominantly clay due to large quantities of fine-grained volcanic rocks, various sedimentary derivatives and pyroclastics. Because of its fertility, it boost agriculture in the area.

## **7.4 Terrain, Soil Types and Rainfall**

The terrain of barangay Minsuro and Mantibugao is rolling. However, deep canyons and ravines are found in the boundaries of each barangay .

The soil in the sub-project area is predominantly clay due to large quantities of fine-grained volcanic rocks, various sedimentary derivatives and pyroclastics . Due to their non-expanding and non-cracking nature, the clays are presumed to be of Kaolinitix type. The soil is of medium fertility and is high in soil acidity. This is mainly due to the dominance of pyroclastics materials that tend to produce acidic soils.

In 2008, the highest rainfall was 10.7cm. This occurred in the month of April while the lowest rainfall which was 4.0 cm was observed in the month of August.

For CY 2009, month of January which is supposed to be dry month got the highest average rainfall of 14.7 cm. and an average 1.5 cm. in December. Likewise in 2010, rainfall occurrence is quite high in month of October of 19.5 cm. For the last 3 years from 2008-2011, rainfall was observed to be high in months of May to July. (CLUP 2013-2022).

### **Hazard/risk assessment (Drainage Situations, Erosion, Flooding Potential)**

Just like the other municipalities in the northern part of Bukidnon, Manolo Fortich is vulnerable to different natural hazards owing to its geologic features that includes rugged topography, faults, fold structures, kalistics areas and floodplains.

The sub-project area is generally characterized as gently sloping to undulating topography. Per Hazard map, the occurrence of soil erosion is high and rain induced landslides. It has low susceptibility to earthquake induced landslides and flooding potentials. (CLUP 2013-2022).

The sub-project area belongs to Tagoloan River Watersheds. Rivers, Creeks and ravines served as it natural drainage.

### **Status of environmental clearances – CNC/ECC**

The proposed sub-project has more than 2kilometers stretch thus application for an Environmental Compliance Certificate (ECC) with the Initial Environmental Examination (IEE) was submitted to the DENR-EMB Regional Office No. 10 with complete requirements and documents for the issuance of the Certificate. The ECC was issued by the DENR-EMB on June 3, 2013

### **IPM-FFS OR KASAKALIKASAN**

Thru the Department of Agriculture Regional Field Unit No. 10, barangay Mantibugao has already undergone four (4) months season long training Integrated Pest

Management, Farmers Field Schools (IPM-FFS) or Kasaganahan ng Sakahan at Kalikasan (KASAKALIKASAN) to the Municipal Agricultural Office Agricultural Technicians (AT) and farmers beneficiaries with series of actual activities on the field. It aims further to reduce risk pesticide-induced pest outbreak , health hazard to farmers and consumers and environmental damage, training on proper pesticide use, handling and storage, raise and stabilize farm incomes and strengthen farmer organizations and farmers managerial capability.

### **Social and Environmental Impact**

During the implementation and post-implementation phase of the sub-project, the following potential effects will have an impact on its environment:-e

- Increase in noise level
- Ground leveling
- Increase in traffic
- Increase economic activity in the area
- Increased housing requirements
- Increased in hazard due to post construction waste and debris

Mitigating measures in the ESMP such as warning signs and other signage are to be installed to lessen the effects of the proposed construction in the area.