

## **COMPREHENSIVE PROJECT PROFILE**

### **I. PROJECT DESCRIPTION**

**1. Project Title:** **Participatory Forest Management for Bio-diesel Fuel and Medicinal Plants Production (PFM BioMed)**

**2. Project Type:** The project is both Technical Assistance and Capital Forming type of initiative. It builds capabilities of beneficiaries by strengthening community organization, providing training on alternative medicine, and facilitating the development of herbal-based micro-enterprises. The project also provides capital investments for the conduct of research and studies, procurement of necessary seedlings and appropriate facilities for oil extraction.

**3. Project Components:**

This medicinal plant and bio-diesel fuel production project has the following components:

1. Peoples' Organization institutionalization and strengthening
2. Research on indigenous, scientific and market information on medicinal species
3. Inventory of the natural population of medicinal plants
4. Cultivation of selected medicinal plants
5. Training on Alternative Medicine (Aromatherapy, Naturopathy and Homeopathy)
6. Development of management plan
7. Promotion of methodology and project lessons

**4. Project Location**

The project will cover the surrounding area of the proposed sanitary landfill at Barangay Danggay, Alburquerque, Bohol Province.

## **II. Project Status:**

The project is proposed for funding for its implementation. Project profile will be made available to interested funding agencies.

The project idea was conceived based on the Bohol Program Framework on Poverty Reduction that was approved by the Provincial Development Council on 19 June 2003. The Municipal Government of Alburquerque has considered this project important, as it complements the development of the Sanitary Landfill Facility in the area.

## **III. PROJECT JUSTIFICATION**

### **1. Background**

The municipality of Alburquerque is one of the coastal municipalities of Bohol, located 12 kilometers from the City of Tagbilaran, the province's capital. This 2,865-hectare municipality is generally an agricultural area, with farming and fishing as the major source of income of its people.

The municipality belongs to the lowest 10 among Bohol's poorest municipalities but ranked 10<sup>th</sup> in terms of unemployment. Based on the poverty survey conducted in 2004, about 50% of the total number of households in Albur is living below the income thresholds. The same survey also revealed that 15.68% of its working-age population are unemployed. With these situations, it can be inferred that some people in the municipality are experiencing certain levels of socio-economic deprivations.

Meanwhile, Alburquerque was identified as the sanitary landfill facility (SLF) for the Metro Tagbilaran Cluster under the Ecological Solid Waste Management (ESWM) Act of 2000. This means that member municipalities of Metro Tagbilaran namely: Albur, Tagbilaran City, Baclayon, Maribojoc, Corella, Cortes, Davis and Panglao will dump tons and tons of residual wastes in the area. Although, the ESWM Act requires proper waste segregation and non-biodegradable reuse and recycle, problems on air pollution and unsightly scenery will still be an upshot.

Cultivation of the surrounding area of the SLF and planting of edible plants may not be appropriate due to the leachate or the liquid that drains out the bottom of landfills, garbage dumps, or other waste disposal sites. Edible plants that came from polluted areas are considered dirty by the general public hence no one will purchase the produce.

However, due to the need for areas that could be developed into plantations for *Jathropa curcas* or physic nut, locally known as "tuba-tuba," this project was conceptualized. *Jathropa curcas* is a shrub that is capable of producing bio-diesel fuel that thrives only on this type of soil. Its leaves are also used as medicinal patches for sprains and pains.

With the increasing demand for medicinal or herbal medicines that come from shrubs and other foliages, cultivating an area for the purpose to supplement the local and national market is appropriate. This can be done by local people as these shrubs are easy to plant and require minimal care. After the conduct of a research on species of plants appropriate for medicinal use, an inventory of available medicinal plants will be conducted to check if there is a need to link with other agencies (that maintain similar herbal plantations) located outside the province. The species will then be cultivated. For sustainability, a management plan will be prepared, adopting the participatory approach. A guidebook on the proper methods of cultivating, extracting medicinal substances and other usage will be published. Training in scientific methods of seed collection, propagation and cultivation of selected species will also be included.

The periphery of the SLF will be bordered with *jathropa curcas* which may grow up to 1.3 meters while herbal plants will be cultivated on the outer portion.

Existing women's POs will be trained to implement the project and will be provided the opportunity to earn additional income in contribution to their family's daily needs. They, along with the Barangay Health workers and registered "hilots," will be trained on how to extract medicinal substances of the plants. For bio-diesel fuel, a facility for jathropa oil extraction will be purchased and operators (unemployed engineering graduates) will be trained on its use.

## **2. Linkages**

The project will be linked with the existing development initiatives of the Department of Health (DOH), the natural healing program on reflexology in St. Joseph Cathedral in Tagbilaran;, the organization of the disabled; Loon's NAGKALO (Nagkahiusang Kababainhan sa Loon) which is managing a homeopathy center in the same town; the Ecological Governance (EcoGov) Program of the Department of Environment and Natural Resources (DENR), and Ecological Solid Waste Management Program of the National Solid Waste Management Commission (NSWMC).

Other projects of the Metro Tagbilaran Cluster relative to environmental protection of the SLF will be linked in this project. The clean and green project of the national government will benefit from this as well.

## **3. Objectives**

### General Objectives:

To provide the locals of Albuquerque with healthy environment that could be a source of income as well as safe, cheap but effective medicines.

#### Specific Objectives:

1. To provide locals alternative source of livelihood and fuel while at the same time contributing to the prevention of air pollution;
2. To preserve the natural beauty of Alburquerque despite the presence of a sanitary landfill and reduce the extent of air pollution;
3. To support the needs for herbal medicines of local natural health practitioners and care centers;
4. To promote the use of effective natural remedies;
5. To establish a model plantation of herbal plants in the province;
6. To train local women and health workers on how to effectively use the plants for medicine: and
7. To produce alternative bio-diesel fuel for local use and supplement the national market.

#### **4. Regional and National Objectives**

The project is consistent with the national and regional objectives of reducing poverty, promoting sustainable livelihood, protection and proper management of the environment and its resources, and revival of the use of natural and organic medicines.

The cultivation of the area will also contribute to the Clean and Green Program of the National Government.

### **IV. PROJECT FINANCING**

#### **1. Funding Requirements**

The project will need **TWO MILLION PESOS (PHP 2M)** for the conduct of the study, capability-building, purchase of seedlings, purchase of oil extracting facility and training on natural alternative medicine.

#### **2. Project Financing**

The project will be funded through the national, provincial, municipal and barangay LGU budget allocations and through the financial support of the donor agencies.

These agencies are as follows:

1. The National Government Agencies
  - a. The DENR through its Philippine Environmental Governance (EcoGov) Program
  - b. The National Solid Waste Management Commission (NSWMC)
2. The Provincial Government of Bohol
  - a. Office of the Provincial Agriculturist
  - b. Bohol Environment Management Office (BEMO)
3. The Municipal Local Government Unit of Albur
4. The Barangay Local Government Unit of Dangay
5. The local People's Organization

### **3. Counterpart Funding**

The Municipality of Alburquerque will provide a counterpart fund equivalent to 10% of the total project cost. The Municipality will also commit its personnel at the Agriculture Office to assist in the implementation of the project.

## **V. PROJECT BENEFITS AND COSTS**

### **1. Beneficiaries**

Direct: women's groups, unemployed youth, barangay health workers, local registered "hilots"

Indirect: the municipal and barangay LGUs, health centers practicing natural healing methods, local businessmen, commuters and vehicle owners

### **2. Social Benefits**

Supplemental income from farming will result to better access to basic needs or services for the families of the beneficiaries. People will have better option for cheaper, more effective and accessible remedies for ailments. Training of locals on the use of the herbs and shrubs will be beneficial to their families.

### **3. Economic Benefits**

The project will contribute to the growth of the local economy through increased production and marketing of goods. Additional revenues for the MLGU and BLDF may be expected.

#### **4. Social Cost**

No social cost is expected considering that the project is prevention to a more extensive issue of area pollution.

### **VI. PROJECT IMPLEMENTATION**

#### **1. Responsible agencies:**

The Municipality of Alburquerque, in collaboration with the Bohol Local Development Foundation (BLDF) will implement the project. The Barangay LGU of Dangay will also provide assistance in community preparation and organization. People's Organization will play essential role in the planting, processing and production of medical plants and bio-diesel fuel.

#### **2. Administrative Feasibility**

The Municipality of Alburquerque, in close coordination with BLDF, will provide the necessary administrative and supervisory support to ensure the proper and successful implementation of this project.

#### **3. Legal and Political Feasibility**

There are no foreseen or actual legal impediments of the project. Through proper coordination and information drive, political opposition, if any, can be minimized or avoided.

#### **5. Environmental Clearance**

The project complements the development of sanitary landfill facility in the municipality. It provides proper support to mitigate the problems of air pollution and unsightly scenery of the landfill project.

#### **6. Social Acceptability:**

No social opposition is expected form the community that will be affected by the project.