



RESEARCH PROJECT PROPOSAL

I. BASIC INFORMATION

Program/Project Title: *Improvement of Abaca Fiber Extraction and Processing Machines Phase 3:*

Project Leader (s): Dr. Feliciano G. Sinon, Project Leader

Study 1: Development of hydraulic system as pressure control for APS.

Study 2: Development of Stripping machine equipped with 24 TPI Blade Serrations

Implementing Unit: National Abaca Research Center (NARC)

Location: NARC, VSU, Baybay City, Leyte

Duration: 2 Years

Proposed Budget: 330,000 PhP

Discipline: Agriculture and Biosystems Engineering

Classification: Applied

II. TECHNICAL INFORMATION

A. Rationale:

The Philippines is the highest abaca producing country in the world, although other parts in the Visayas such as Leyte and Samar has experienced the devastating effect of the bunchy top virus for the past decade. Other areas in Mindanao are now supplying the bulk of the abaca fiber needed in the two pulp manufacturing plants in the province of Leyte. Currently, however, several plantations in Leyte, such as in Sogod and in Ormoc areas are now starting to recover through its rehabilitation programs. It is now expected that in the coming years, vibrant abaca production will come again in Region 8.

The "Portable Abaca Stripping Machine", commercially known as "Abaca Power Stripper (APS)" is a machine technology developed at NARC sometime in 2009. Production and commercialization of the machine started in 2010 at NARC under Special Trust Fund (STF). Since 2010, about 250 units has already been fabricated and sold all throughout the country contributing a Total Gross Income of not less than 18M pesos.

The machine technology was applied for registration at IPOPhil under Utility Model Patent with VSU as an assignee sometime in 2011 and registration was granted in 2013. Unfortunately, patent registration was unknowingly expired in 2018. So far, limited follow-up improvement was done to merit patent to regain ownership of the technology. As a result, 2 known machine manufacturers of the machine such Green Valley Machineries (GVM), Coronadal City, South Cotabato and JD Davao Metal Fabrication and Services, Davao City are currently commercializing the machine at prices of 120,000 to 150,000 PhP/unit which is far expensive than we charge. As a business strategy of NARC,

