

# REHABILITATION OF THE CHILI PEPPER PRODUCTION IN LHOK NGA (ACEH):

---

## Project proposal for the Rabo Foundation and Plantum NL

### **Project purpose**

Before the tsunami, the Lhok Nga Sub district counted 120 chili farmers. After the tsunami, 85 chili farmers are still alive. The Lambrineu Foundation, from its Community Home in Lampaya village, aims at supporting the Lhok Nga chili farmers. The agricultural recovery program proposed in this paper focuses on the so-called re-starters: chili farmers that were producing chili peppers before the tsunami hit the area and are therefore experienced and capable of bringing this project to a success. These re-starters lack the start-up capital to produce once again. The Lambrineu Foundation has carried out in-depth research on the required capital that is needed per hectare (or per re-starter) in order to propose an accurate work plan and budget to two potential donors of the program: the Rabo Foundation and Plantum NL, both from the Netherlands.

### **Additional project purpose**

Based on an initial discussion with the Rabo Foundation the Lambrineu Foundation proposes to also use this project to identify the possibility of a long-term relationship between the Lhok Nga area and the Rabo Foundation in the future. The additional purpose of the project is therefore to create a Chili Farmers Association, using a demand-driven and bottom-up approach. In other words: the chili farmers organize themselves in a new market-oriented organizational body, rather than being part of already established but incompetent cooperatives.

### **Project description**

Research carried out by the Lambrineu Foundation (see calculations in this proposal) shows that chili production is in fact the most suitable and best income-generating production activity in the project area (Lhok Nga). A group of re-starters has already been selected and are eagerly waiting for the program to start.

#### Activity one: start production

Supporting the re-starters in clearing their land (renting a tractor), provide high quality seed and plant material, supply additional material (stake, poly bags etc), provide and apply fertilizer and pesticides, and support post-harvest activities. These costs can be divided roughly into three categories: equipment, material and labor.

Production activities will be partly coordinated by Lhok Nga's 'SimPel' organization. This group of young men and women was established after the tsunami and has the full support from the 25 Heads of Village as well as from the Head of the Lhok Nga sub-district. The agricultural section of this organization is already involved in selecting the most feasible re-starters. It will also be involved in on-going communication between farmers, community leaders and the Lambrineu Foundation, as well as distribution of inputs and the collection of money (by involving community leaders in this process to enhance social control).

#### *Financial aspects:*

This proposed project will not provide grants. Farmers are asked to pay back the loan in one year, and calculations show this is feasible. New loans can be granted after that year. The interest rate is for this project (based on a non-commercial tsunami grant) is set at 10%. It should be noted that this

is lower than the normal 25% or more used for micro-credit in Indonesia. Following this approach, the financials per hectare (= 5 farmers) look as follows.

*Calculation of costs, income and profit for chili production in Aceh*

	Per hectare	Item	Costs per item (Euro)	Sub-totals (Euro)
<b>1</b>	<b>Costs</b>	Equipment and materials	1,580.-	<b>5,190.-</b>
		Farm inputs	1,510.-	
		Labor	2,100.-	
<b>2</b>	<b>Income</b>	15,000 kg / ha., at 1,- euro / kg -20% (loss and/or price fluctuation)		<b>12,000.-</b>
<b>3</b>	<b>Loan payback</b>	Costs + 10%	5,190.- + 519.-	<b>5,709.-</b>
<b>4</b>	<b>Profit</b>	Income – loan payback	12,000.- – 5,709.-	<b>6,291.- / ha.</b>

The total income per hectare is estimated to be nearly 6,300.- euro. On average five farmers work on one hectare (0.2 ha. per farmer). Project costs per farmer are therefore roughly 1,250.- euro, payback time is one year, and profit per farmer after payback is estimated at 1,300.- euro per year. Throughout the project year the chili farmer and his family works on his land while getting paid (having an income). The profit may therefore be sufficient for the farmer to cover the costs for the following year himself, as costs will mainly consist of ‘farm inputs’. The budget shows the costs for materials and equipment, as well as the coordination by staff from the SimPel organization.

Activity two: knowledge development

Related to the additional purpose, this project will have a pilot project component that focuses on a) organizing a group of most potential chili farmers into a producer organization, and b) creating a small but effective farmers field school where these and future chili farmers are trained in production, post-harvest and marketing techniques, as well as providing them with the opportunity to exchange ideas and learn from each other.

The Lambrineu Foundation has established solid contacts with the Agricultural Faculty of the University of Banda Aceh, and has selected a potential coordinator for this program. This coordinator is presently a senior agronomist lecturer at the university and an expert in chili pepper production techniques. Lambrineu recommends hiring the part-time services of this expert to a) establish and coordinate the farm field school, to b) provide training sessions to the group of chili farmers that will be part of the project, and to c) build a future knowledge-bridge between the Lhok Nga chili program and the university. The creation of a sustainable Chili Farmers Association will be coordinated by staff from the Lambrineu Foundation itself.

*Financial aspects:*

The budget shows costs related to this knowledge development component. It consists of training modules and lunch during such sessions, as well as the costs for hiring the services from the part-time chili expert for coordinating the farm field school and preparing the modules.

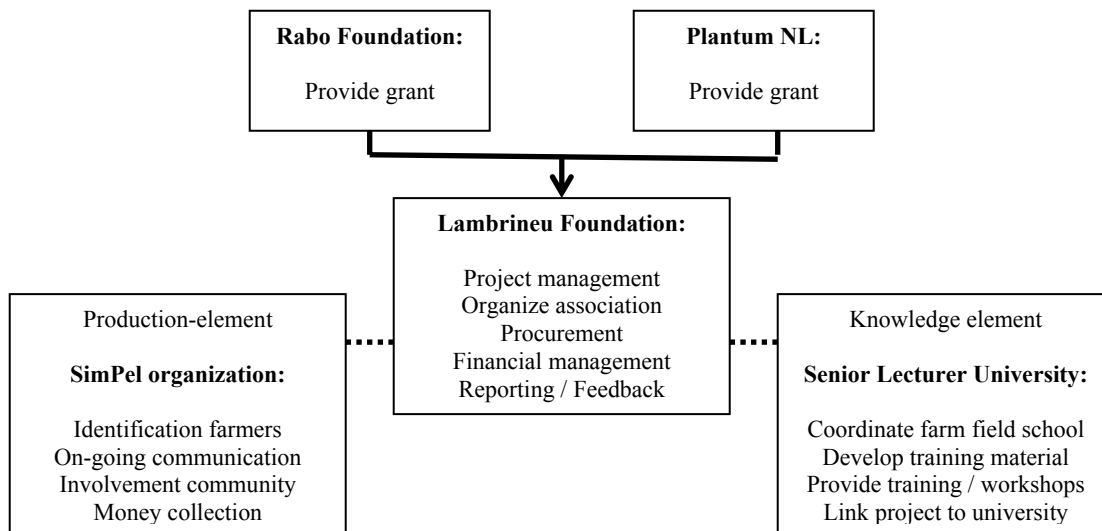
**Project management**

The Lambrineu Foundation is the project leader. It is responsible for planning and managing the project activities. It coordinates the tasks and responsibilities of local project partners and/or hired experts. It will also ensure transparent and sound procurement of farm inputs, other materials and expertise (experts). It reports to the funding organizations (Rabo Foundation and Plantum NL) on the progress of the project as well as on the financial elements.

## Project organization

The organization of the project, including roles and responsibilities, is shown in the following figure.

### *Project actors and tasks / responsibilities*



## Technical and administrative resources

All material and equipment needed for the production process are available in Banda Aceh. In case of non-availability inputs will be available in Medan (8 hours by truck). It should be noted that seeds will be supplied by the Dutch firm East-West Seeds. Farmers will work their own fields; no extra workers will need to be hired. Lambrineu will, in coordination with SimPel, rent a tractor locally and coordinate its operations. (Pick-up) trucks are available for the transportation of inputs and the collection / sales of harvested produce. Harvest can therefore be sold at any time. The Lambrineu Foundation offers its Community Home for meetings and training sessions.

## Costs-profits ratio and marketing prospects

The Lambrineu Foundation and SimPel carried out an in-depth economic study on Lhok Nga's three main products: the production of soy bean, ginger and chili peppers. The following table shows the results of this study and the reason for selecting chili pepper for this project.

### *Calculation and comparison of income generation per agricultural product*

	Produce		Per item: (in Euro)	Profit: per hectare year (in Euro)
	<b>SOY BEAN</b>			
1	Costs / ha. / year	Equipment and materials	2,820.-	
2	Income / ha. / year		4,831.-	
3	Loan payback	Costs + 10%	3,102.-	
4	Profit / ha. / year	Income – loan payback		1,729.-
	<b>GINGER</b>			
1	Costs / ha. / year	Equipment and materials	5,392.-	
2	Income / ha. / year		10,277.-	

3	Loan payback	Costs + 10%	5,931.-	
4	Profit / ha. / year	Income – loan payback		4,345.-
	<b>CHILI PEPPER</b>			
1	Costs / ha. / year	Equipment and materials	5,190.-	
2	Income / ha. / year		12,000.-	
3	Loan payback	Costs + 10%	5,709.-	
4	Profit / ha. / year	Income – loan payback		6,291.-

The calculations are based on the possible number of harvests per year. It shows the relative advantage of investing in chili pepper over investments in ginger and soy bean. Besides the good profits, the market for chili pepper is good. The demand from the Banda Aceh (the city) and Aceh Besar (the district) market is 3 tons per day. Before the tsunami, producers from the district (which includes the sub-district of Lhok Nga) could only supply 30% of this demand. Another district, Pidie, supplied the remaining 70%. The situation at this moment is unclear but will certainly not be in favor of the hard-hit Aceh Besar district. The chili farmers from the Lhok Nga sub-district have a good comparative advantage over the Pidie producers: the main market is Banda Aceh, which is only 15 km. from Lhok Nga, compared to 150 km. from Pidie.

### **Project budget, revolving fund, and request for funding**

Total costs of the proposed project are 57,000.- euro. This includes all costs for production input, training activities, farm field school, project staff, a management fee for the Lambrineu Foundation, and 8% reserved for contingencies.

Costs for material and equipment, including a 10% interest rate, will return to the project's bank account after farmers paid off their loan with the income from the first harvest. This amounts to roughly 33,000.- euro (including a 'loss' of farmers that will not pay back, and other contingencies). This project proposal strongly recommends that this amount will be used for a second batch of potential chili producers, although possibly at a higher, market conform, interest rate structure. This new project will make optimal use of the farm field school (one-time investment) and organizational structure of the Chili Farmers Association which should by then be in place. The Rabo Foundation will decide on possible participation in follow-up activities at the end of the initial project.

To support this project, the Lambrineu Foundation kindly requests the following coverage from its project partners:

- Plantum NL: 22,000.- euro
- Rabo Foundation: 35,000.- euro.

A precise project budget with costs per project element can be found on the next page. The Lambrineu Foundation and the community of Lhok Nga wish to thank you in advance for your kind contribution.

Hans Nijhoff  
 Project director Lambrineu Foundation, Aceh  
 November 25, 2005.

