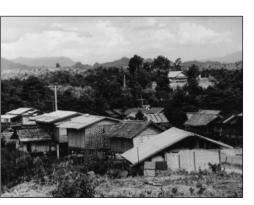


## Pro-Natura Newsletter

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# Sustainable Development at Ban Somsanouk, LAOS

PRO-NATURA INTERNATIONAL HAS ESTABLISHED DURING THE PAST FIVE YEARS A PROGRAMME OF SUSTAINABLE DEVELOPMENT FOCUSSED ON THE VILLAGE OF BAN SOMSANOUK, A COMMUNITY ORIGINALY CREATED FOR LEPERS AND THEIR FAMILIES, IN THE LAOTIAN DISTRICT OF VANVIENG.

THE VILLAGE HAS BECOME A "MODEL" FOR THE REGION AND AN IMPORTANT CENTRE FOR TRAINING AND EDUCATION.

The village of Ban Somsanouk is situated 120 kms north of the capital, Vientiane, in a hilly region which encircles the plain of Vientiane. The land belonging to this community extends over 7,000 hectares between 250 and 1000 metres above sea level. The villagers' itinerant culture has reduced the forest cover to a few remaining strips on the tops of the hills.

The village was recently created: it was established in 1964 by French religious workers to provide home for lepers and their families. It is unique, in the context of Laos society, for uniting in one community families from many different ethnic groups, whose common link is that they have all been affected by leprosy. This disease is now under control but not before it managed to affect 20% of the population. The main role of the village had left it somewhat abandoned by public support, but the success of the project has helped to bring wider recognition and aid. The population of Ban Somsanouk comprises 1,100 of which 212 suffer from the effects of leprosy, and 85 are severely handicapped. The neighbouring village of Ban Silvai, which is a dependency of Ban Somsanouk is home to twenty five refugee families from Thailand.

The sphere of influence of the project extends beyond these two villages to cover 12,000 people in 16 villages in a radius of 20 kms. The creation of a trial dispensary for this region, and the participation of neighbouring villages

in certain economic activities (forges, cultivation of medicinal plants), initiated at Ban Somsanouk, has introduced a training culture in the region. The project's influence is also reinforced because it fits in with official regional policy aimed at reducing itinerant agriculture, protecting forest land and increasing agricultural productivity.

The project, which lasted five years, ended in 1999. It was financed by the Laos Ministery of Agriculture and Forests, the French Ministry of Co-operation and Foreign Affairs (Humanitarian Action Service), the UN High Commission for Refugees, the Counsel General of the French department Hauts de Seine, the Municipality of Frontignan and the Caisse des Dépots et Consignations.

## A participatory project involving the community at all levels

To ensure that the local population felt 'ownership' of the project, feasibility studies and each stage of the project were conducted with the help of the community representatives, whose interest and adaptability were strongly displayed from the outset. The project thus evolved and was modified as necessary throughout its duration. Decisions were taken during regular meetings organised by the project director, the village leader and his deputy, along with the heads of individual project teams and the women's Union. This group of women is a government organisation aimed at increasing female participation in public life. The 47 village healers from seven neighbouring communities were also involved in the health education programme.



Women's Union has participated actively in the project development.

## An urgent health and nutrition priority

During the first year of the project, Pro-Natura addressed the urgent need to improve nutrition, health and hygiene in the community, which was not self-sufficient in food, and which harboured malaria, hepatitis, tuberculosis and other endemic diseases. Programmes focussing on the principle objectives of education, agroforestry and economic development were not introduced until the second year.

#### Creation of an agricultural co-operative, managed by the community and including a rice bank

Rice is the staple food in Laos. The annual rice intake in the village was well below the minimum. The deficit was due to the nature of cultivating rain-fed rice. Traditionally cultivation follows clearance by slash-and-burn,

> but demographic pressure from a rising population reduces the periods of fallow between harvests, leading to lower productivity and soil erosion, while at the same time increasing pressure on the surrounding forest.

the nutritional deficit.

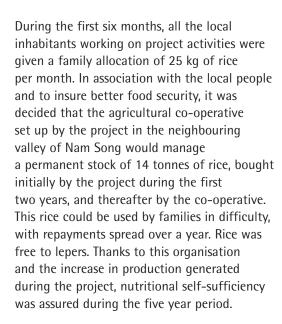
Hunting, gathering and fishing activities did not produce enough food to make up

#### > The project team

Fish farming has been introduced

with success.

- General coordinator: Guy Ponnelle
- Project manager: Chanthip Latsavanh, agro-economist
- Coonsellor: Claude Monterrain, French Foreign Affairs
- Experts : Jean-Marie Bompard, agroforestry specialist and Michel Grolleaud, agronomist
- Volunteers : Pierre-André Galy, Ariane Grisard and Emmanuel Jouve.





A new primary school has been built to accomodate all the children.

#### Establishment of a pilot dispensary serving the region

There was already a rudimentary dispensary in the leper's village. The plan has been to create a dispensary capable of serving the entire region, throughout which there were serious health problems. The training of staff in basic nursing and the installation of new equipment were organised by a team under Professor Alain Patel, Professor of orthopaedic and traumatic surgery at the Raymond Poincar' hospital at Garches, with the help of the Franco-Asiatic Medical Association (AMFA). Thanks to this training, the dispensary at Ban Somsanouk has now become a model for the nation. It provides care and treatment for some 12,000 people from throughout the Vanvieng District.

#### Electricity

Electricity has ensured the smooth functioning of the dispensary, as well as the use of modern agricultural equipment, such as water pumps and rice husking machines.

#### **Programme of Public Health** and Water Management

Training in basic hygiene has been given to villagers as well as the 47 local community healers (from Ban Somsanouk and the neighbouring villages) whose influence is considerable. The villagers did not know how to use and maintain latrines. One of the priorities has been to build latrines, while at the same time creating a linked system of water purification to ensure a continuous supply of drinking water to the village. A small dam has been built on the river which runs through the village, enabling five new water supply points, in addition to the feeble pump which already existed, and bringing, running water to the dispensary and the school.

### A sustainable development momentum

#### Education

A new primary school has been built which can accommodate all the local children (which was not previously the case). Teaching posts in a lepers' village were not much sought after, so incentives were introduced to attract new teachers, with accommodation and vegetable plots being offered. The supplementary teachers, initially paid by Pro-Natura, have now been taken on by the state. The local children did not go on to study at the secondary school, 8 km away, because there was no public transport. An agreement has been reached with this school and bicycles bought so that secondary education is now accessible to all children from the village.

## The promotion of practical Agroforestry was a key part of the project

The Laotian peasant is traditionally a master of rain-fed rice culture, but demographic changes have increased pressure on the land and new areas of cultivation have been opened up by slash-and-burn. This method exposes the land to erosion and leads to permanent forest loss. Agroforestry is an agricultural technique based on rotation between trees and cultivated land which allows the sustainable exploitation of land with increased productivity and profitability. The introduction of leguminous plans and crops other than rice, and the

planting of trees (800 trees per hectare of teak and fruit trees) in the cultivated areas has helped to stop erosion. A demonstration plot has been established and each family trained in basic agroforestry, nursery and grafting techniques. The Governor of Vientiane proposed that Ban Somsanouk should become a provincial training centre for blacksmiths.



Teak nursery has been developed and 40.000 seedlings integrated on 40 ha cultivated lead.

The families have received seedlings cultivated in the co-operative's nursery. A belt of trees has been planted to protect the watersheds and to contribute to a progressive enrichment of tree species which can provide domestic wood and fruits.

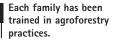
## Optimisation of market gardening and the development of animal husbandry

As well as improving techniques in these activities, new cultivated land has been rendered more productive. Cultivated areas have been protected from browsing by domestic animals thanks to new fencing. Improvements in the health and condition of livestock (for example, through vaccinations),

the construction of stabling and the poultry farming have increased the headcount of livestock beyond the village's needs, so that the surplus can be sold in the market at Vientiane.

## The creation of new economic activities

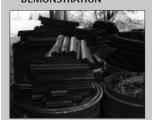
Fish farming has been introduced with success, handicrafts have developed with the development of 20 weaving workshops and the installation of artisan forges. Impressed by the products of the forges at Ban Somsanouk, the Governor of Vientiane proposed that the village should become a provincial training centre for blacksmiths.





#### **SENEGAL**

> BIOMASS-CHARCOAL : A SUCCESSFULL DEMONSTRATION



During 1999, Pro-Natura has set up two carbonisers at Ross Bethio, on a rice mill along the Senegal River. The European Commission has funded the operation. The machines have been made in Dakar and are now producing biomass-charcoal.

#### **NIGERIA**

> THE AGROFORESTRY WORKSHOPS SET UP FOR SMALL FARMERS

These workshops have trained 240 young farmers since 1997. This practical training, which lasts one year, has been established at llesha, in the Osun State in partnership with the Anglo-Nigerian Leventis' Foundation.

### Promotion of medicinal plants

The cultivation of medicinal plants, notably Artemisia annua, to counter malaria
This plant features in the traditional Chinese pharmacopoeia and was rediscovered in China where is has been used with success during the past thirty years.

Artémisia annua is an effective remedy against malaria, particularly against strains of the disease which are resistant to quinine and its derivatives.

Its cultivation is difficult and the project at Ban Somsanouk is the only place in Laos where it is grown until now. The Minister of Health has lent his support to establish a partnership with the National Institute of Medical Plant Research in Vientiane. Today, the plants are sold to the Institute, which extracts the active ingredient (Artemisine) and manufactures tablets.



Artemisia annua is now cultivated by some thirty villagers over an area of 8 hectares, of which three hectares are at Ban Somsanouk and five in the neighbouring villages. In 1999 production had reached 6.8 tonnes of dry leaves, equating to 19 kg of Artemisine.



After five years, the population is in complete control of the project, and today, there is no further need for Pro-Natura's support.

### > Pro-Natura as an organisation

in Brazil in 1986, Pro-Natura is a non-governmental organisation that specialises in sustainable development. In 1992, after the Rio Conference, Pro-Natura became one of the first NGOs in the Southern Hemisphere to gain international status. Today it is a global organisation that is composed of two major hubs: Instituto Pro-Natura in Brazil, which is responsible for the Americas and Pro-Natura International in France, responsible for Europe, Africa and Asia.

A strategic co-ordination Council manages the organisation.

www.pronatura.org

#### INNOVATION TOWARD SUSTAINABLE DEVELOPMENT