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# **ELEPHANTS DON'T RUST**

**An Evaluation of SIDA-supported Forestry Development  
and Forestry Industry in LAOS.**



**By Karlis Goppers, Sven Bo Bergström, Reidar Persson.**



The views and interpretations expressed in this report are those of the authors and should not be attributed to the Swedish International Development Authority, SIDA.

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# ELEPHANTS DON'T RUST

An Evaluation of SIDA-supported Forestry Development  
and Forestry Industry in Laos



This report is the result of an evaluation mission to Laos in February 1985, which, apart from the authors, also included Lars Erik Birgegård, who drafted parts of the text. Formally responsible for the conclusions and recommendations made are Karlis Goppers, mission leader, and Sven Bo Bergström, while Lars Erik Birgegård and Reidar Persson, who are both associated with the project, took part in the mission as resource persons.

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# LAOS



## ELEPHANTS DON'T RUST

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## SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Sweden's contribution to the forestry sector in Laos has had some promising results and can on the whole be positively judged. Two functioning forestry enterprises have been built up virtually from nothing, each of which today delivers about 25 000 m<sup>3</sup> of valuable logs annually. A functioning forestry administration has been created and roads, living quarters and workshops for machine maintenance etc have been constructed. A vocational school for the training of forest workers has been established.

So far, the forestry programme has however not succeeded in establishing a sustained forestry operation with a long-term perspective as re-generation has not been successful. The project has to a large extent invested in too capital-intensive a technology. A case in point is skidders. The mission has found that the cost of hauling timber with a skidder becomes much more expensive than using an elephant. The project has not been able to contribute towards protecting the forest against shifting cultivation. However, this issue is largely a matter of national policy and thus lies beyond the control of management.

Concerning allegations of forced labour being used in the forestry work, the mission has concluded that the situation in Laos is distinctly different from that of Vietnam, and that forced labour is not being used. The Lao Government has chosen a relatively soft approach to the recruitment of labour, utilizing workers both from the ex Royal Army as well as the former Pathet Lao liberation Army.

Both the Muong Mai and the Tha Bok projects have failed to generate foreign exchange, which is one of their main objectives. Virtually no export has taken place. This is however partly due to the fact that marketing is beyond the control of project management. A cost/benefit analysis of the Muong Mai project suggests that marketing problems have put the whole economic viability of the project in question. When gains and losses are measured at shadow prices, the return on invested capital is nearly zero. Unless a radical change is made in the

proposed marketing strategy, the project is unlikely to generate net foreign exchange earnings in the foreseeable future.

In retrospect the export targets set by the programme and accepted by SIDA seem somewhat unrealistic. It is conceivable that the entire design of the programme - and indeed the choice of programme - might have been different had one had a more realistic view of export possibilities. On the other hand it must be born in mind that there is also substantial import substitution satisfied by domestic production of wood.

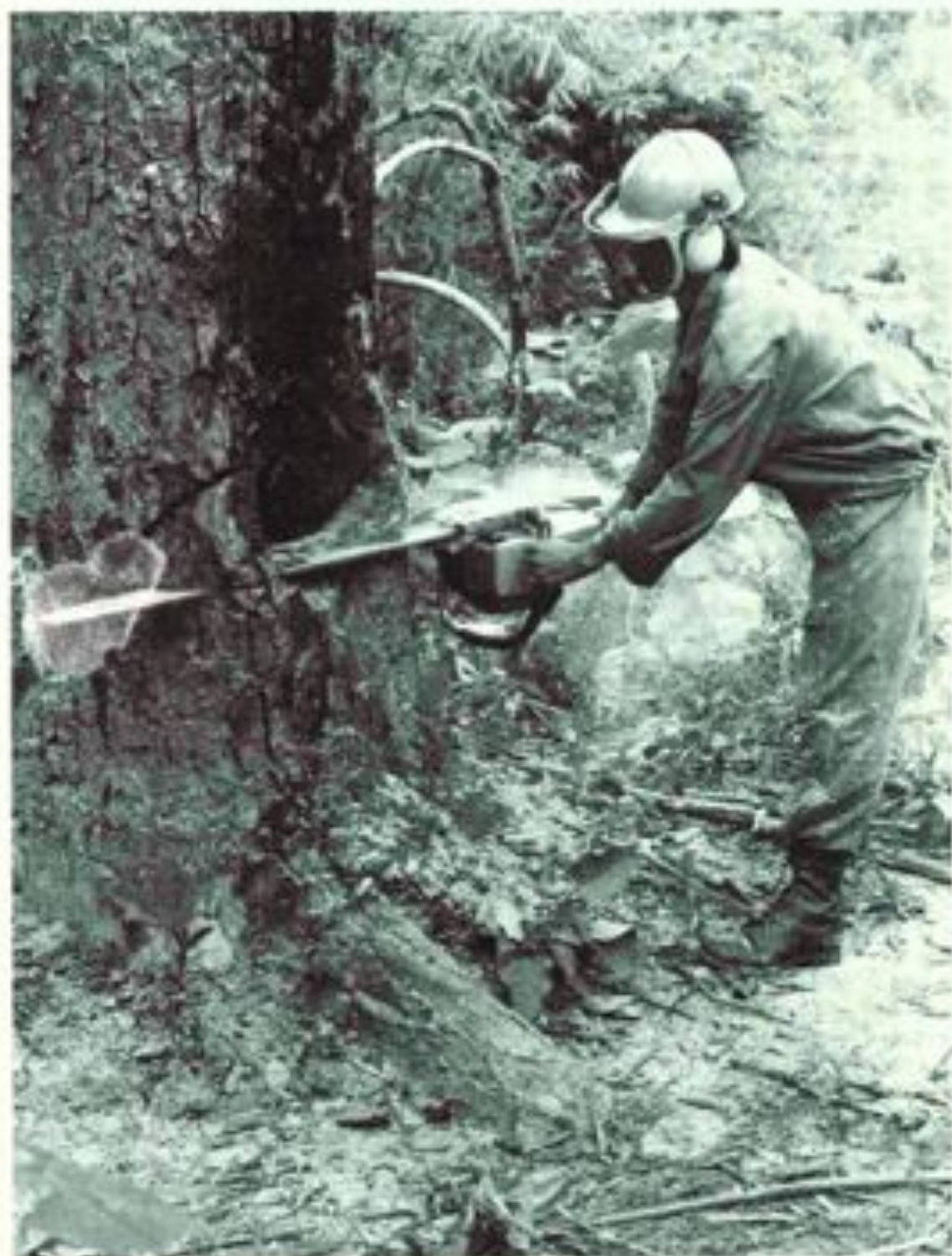
The forestry programme has encountered difficulties due to external factors such as the pricing system, salary system, building norms, purchase procedures, decision-making processes, the government's rigid planning system, export rules, banking system etc. Much economic activity and new initiatives are today hampered by the restrictions imposed on the state forestry enterprises when it comes to e.g. contracting services and labour. A restriction on holding cash also seems to prevent the forestry firms from seasonally hiring additional labour seasonally, for tending plantations.

With respect to SIDA's performance, the mission is of the opinion that the sanctions imposed by Sweden for nonfulfilment of the export targets were probably not effective and possibly ill-conceived. SIDA has further accepted widespread attempts by the enterprises and their consultants to circumvent or "go around" the system. Even though this practice has undoubtedly contributed to speeding up the implementation process, one must be aware that such attempts may have had negative effects in the long run. From a development point of view it is entirely possible that the projects might have forged ahead more rapidly, if SIDA had not participated in manipulations of the system. In the long run it may be more important to contribute to the development of an efficient Government bureaucracy and to the formulation of Government policies which effectively promote growth and social welfare objectives than it is to achieve project implementation and short run production targets.

In sum, it can be concluded that the forestry programme has succeeded in laying the foundation for long-term forestry operations but it can hardly be said to have established a



sustained forestry activity as prescribed by the projects' main objective. Economically, the programme has fallen far short of economic expectations. The absence of export sales makes it a questionable investment when judged at the national level.



*Logging at Muong Mai.  
Photo: Mats Sundgren/SIDA:s bildarkiv*

## RECOMMENDATIONS

The Evaluation Mission considers the marketing problems and the failure of the Government to export a substantial portion of the production, as a serious obstacle to the programme. In order to achieve the original objectives set by SIDA, regarding development of an export industry which in the long run can provide a secure source of foreign exchange, SIDA must emphasize the importance of creating products sellable to export markets in the West. The authorities together with SIDA should thus review the possibilities and restrictions when it comes to exports, and then revise project goals and Plans of Operations accordingly.

The rate of deforestation in Laos has been estimated to anywhere between 100 and 300 000 ha per annum, mainly due to shifting cultivation. To counter this deforestation large-scale re-afforestation is necessary. The Mission regards it as necessary for SIDA to actively follow up the question of shifting cultivation and also to consider new projects or programmes which are able to deal with the problem. Regional development programmes offering alternative economic opportunities for the local population must complement the forestry enterprises, if the latter are to be successful on a long-term basis. The evaluation mission recognizes this to be a delicate problem since interference with the age-old practice of shifting cultivation has far-reaching implications for the survival of the peasants' culture. It is also experienced as a threat to the peasants' economic survival.

The question of the government's procurement rules, disbursement routines as well as the question of prices should be studied with a view to simplifying them, in order to provide the managers of state enterprises with working conditions which are more conducive to rational decision making.

Simplification of the logging technique, involving greater use of hand saws and elephants should continue. Calculations show the very clear economic advantage of the simpler technology.

SIDA's support to Laos can in the future probably be concentrated on the more basic forestry activities, such as compiling an inventory of forestry assets, training of manage-



ment personnel and forest workers, development of knowledge of silviculture and support to regeneration and rural development including the problem of land use.

The MMTC Training Centre has not yet been utilized to its full extent. The training is, however, needed and the work must continue, so as to utilize fully the investments made.

## THE EVALUATION

The forestry programme has so far not been evaluated in a systematic way. However, program reviews have been undertaken twice a year since 1980. A special study was also made in connection with the prolongation of the project in 1983.

The present evaluation covers the entire forestry programme but the main thrust is aimed at the projects SFE 1 and SFE 2. The purpose of the evaluation is to:

- Define the existing goal hierarchy of the programme and analyse possible changes in it.
- Assess the achievements that have been made in the projects since the start of the co-operation
- Discuss how the monitoring system has been functioning so far and how the present system could be improved.
- Review the effect of sanctions imposed by the donor with respect to the conduct of the project.
- Discuss the choice of technology.
- Review how maintenance has been functioning.
- Discuss the experiences gained from SFE1 and SFE2 regarding rural development.
- A review and discussion of the functioning of the price system and of the proper set of shadow prices.
- Assess the feasibility of continued Swedish support to the Laotian forestry sector.

Preceding the evaluation a "Pre-evaluation" Desk Study was carried out by SIDA/Stockholm to serve as a guide for the missions's work.

The Evaluation team visited Laos in February 1985 and consisted of the following persons:

- Karlis Goppers, SIDA's Policy and Evaluation Division, Team Leader
- Sven Bo Bergström, Director Swedish Forestry Administration



- Lars Erik Birgegård, Consultant
- Reidar Persson, SIDA's Agricultural Division

Formally responsible for conclusions and recommendations of this report are Messrs. Karlis Goppers and Sven Bo Bergström, while Lars Erik Birgegård and Reidar Persson both being associated with the forestry project in Laos participated as resource persons to the evaluation team.

## CHAPTER 1 - INTRODUCTION AND BACKGROUND

Swedish-Laotian cooperation in forestry started in 1977, without Sweden having any previous experience of forestry in Laos, and consisted then of import-support and consultancy studies. Today Sweden contributes to the following projects:

	Time-period	Amount SEK
SFE1 (Muong Mai)	1979-86	90
SFE3 (Tha Bok)	1977-85	45
Ministry of Industries, Handcraft and Forestry	1984-86	28.5
Muong Mai Training center	1980-84	10
Muong Paksane Regional Project	1984-86	1.6

The two State Forestry Enterprises Muong Mai and Tha Bok show very similar physical results concerning logging, regeneration, rural development etc., but they have reached their accomplishments in somewhat different ways. SFE 1 has made heavy, fund-demanding investments in high quality roads, concrete buildings, heavy machines and a workshop far too large for present needs.

SFE 3 on the other hand has built up its activity in a much cheaper way, starting in 1979 with machines purchased in 1977/78 which are still in use. The enterprise has also constructed simpler roads than SFE 1 and unpretentious living quarters from wood. The workshop is only a plain shed, as SFE 3 originally was to have access to an adjacent workshop at Km 14, but it is now to be moderately enlarged.

The two enterprises are both functioning well on the whole, and can so far be said to have concentrated on building up the necessary infrastructure and a functioning administration. But there is still much work to be done before the enterprises are fully established.

The policy of the Lao Government with respect to the forestry programme is mainly to increase exports and to establish industries with wood as the main raw-material source. The

forests are considered as one of Laos' most important national resources.

According to the programme's objectives, a sustained yielding forestry should be created, thus regeneration is an essential part of the project. This has, however, hardly started. Nurseries have been constructed and planting has started on a small scale. However, several plantations seem to have failed, partly due to damages from cattle and fire, but mainly due to bad tending (weeding). The activity of regeneration must be strengthened if the objective of sustained yield is to be achieved.

#### STATE FORESTRY ENTERPRISE 1 - THE MUONG MAI PROJECT

The first discussions about Laotian-Swedish cooperation in the forestry field were initiated in 1977. A SIDA mission visited the Nai Kai area in the Khammouane province during November-December 1977. It recommended with some hesitation an investigation of the possibility of starting a pilot-forestry project in that area. After some months, the Laotian authorities moved the location of the proposed site to the Muong Huong area and later to the Muong Mai area.

From the very beginning studies were also undertaken into the possibility of supporting forest industries and related forestry activities in and around the Vientiane area. SEK 8 million were allocated in concessionary credits from the import-support which were set aside for these activities. The funds were used for repairs to a sawmill, renovation of a dry-kiln at a furniture factory etc.

During 1978, the Lao authorities proposed heavy investments in Muong Huong (sawmill, plywood, pulp mill etc). A study of the Muong Huong/Muong Mai areas was undertaken in 1978. The mission recommended investments corresponding to a forest production of about 10 000 m<sup>3</sup> annually, and a vocational training centre for 90 students, with 10 foreign instructors.







During the annual Laotian-Swedish negotiations in May 1979, SEK 50 million was set aside for the forestry project. As far as can be ascertained this figure was not based on any particular economic calculations.

An agreement about the first forestry project (SFE 1) was signed in October 1979. SIDA's management board at the time found that the background documents prepared were inadequate but it was argued by the Agricultural Division that no better document could be prepared and that the project should be under continuous review and adjustment until it found its final form.

During discussions at the start of the project, SIDA made many compromises and can be said to have chosen a "soft" approach. This must however be seen against the background of the rather strained relations that resulted from the different negotiations. The Laotian authorities were seen as having difficulty in understanding the Swedish view, namely that all background facts should be known before a decision was taken. In the end, SIDA wanted to come to an agreement so that the work could start and the Laotians "would realize that there was a serious interest to cooperate on the Swedish part".

The project began to move forward in 1980. In the main, only planning and purchases took place. Building work started in 1981. The actual forestry production was delayed as the enterprise quite naturally dealt primarily with building activities (for the Muong Mai training centre). The first phase of the project was delayed for one and a half years in order to complete the necessary investments.

SIDA had not foreseen all the bureaucratic difficulties the project would have to solve, nor had probably the Laotians. Gradual adjustment of the Plan of Operation, as foreseen by SIDA, proved much more difficult than originally thought. This was largely due to the relative rigidity of the decision-making process of the Lao Administration. It is difficult to change a decision once it is taken.

From the economic point of view, the project did not develop as successfully as foreseen in the Plan of Operation. In fact, its poor performance was seen by many as quite disastrous. One reason for this was that exports could not take

place directly from Paksane as the plan had anticipated and that log export was often banned by the Laotian Government. The Government's policy was to process the wood in Laos, instead of exporting logs. However, Thailand has a customs duty on processed products. Furthermore, charcoal-production did not prove to be as economic as calculated.

A second phase of the project was decided on for the period 1984-86. Due to the low profitability of the original investment, the decision to prolong was however taken with some hesitation.

#### STATE FORESTRY ENTERPRISE 3 - THE THA BOK PROJECT

In 1978/79 large quantities of heavy equipment were imported with concessionary credits to be used for the construction of certain dams, included in a project proposal prepared by the Mekong committee. A large part of the modern logging equipment existing in the Vientiane region (including equipment paid for by SIDA) was transferred to the newly established State Forest Enterprise 3 in 1979. Since the company encountered difficulties in handling all its tasks, a reorganization of SFE 3 was undertaken in 1980.

Already in 1980 SIDA started to investigate the possibilities of giving direct technical assistance to SFE 3. The purpose of this support would be to promote the consolidation of SFE 3 as an enterprise. However, an agreement was not signed until the spring of 1983. The delay was caused by changes in prerequisites and demands for new studies. During these three years, the enterprise was given some technical assistance as well as concessionary credits.

#### DEPARTMENT OF FORESTRY

In 1980 the Forestry Department approached SIDA for financing of equipment for inventories and plantations, and for scholarships. The intention was probably to import this equipment through concessionary credits. At SIDA's suggestion the cooperation, however, took the form of a project.

An agreement for an initial two year project was signed in 1980. It included the provision of equipment for inventories for plantations, consultancy studies, scholarships and



the import of material for certain buildings at the Dong Dok school. The imported material was efficiently used. Studies on how to continue the work were prepared regarding inventory, plantations, education and protection. A great deal of effort went into trying to develop a functioning cooperation for the development of the Dong Dok forestry school.

After a reorganization of the Forestry Department in late 1982 many of the activities as well as the future of the project became rather unclear. After some extensions a new project agreement was signed in 1984. According to present planning, all future Swedish support to the forestry sector in Laos will go to this project.

The Muong Mai Training Centre originally started as a part of SFE 1. The intention was to train 170-200 forestry workers of different types. However, for a number of reasons, it soon became clear that the training of mechanics and machine operators could not take place in Muong Mai as planned. For this reason the investment in the school at present is unnecessarily large. It represents a sizable part of the total investments in SFE 1.

For reasons of personal security Swedes can no longer work in Muong Mai. Instead, the Swedish advisors are now engaged in the training of Laotian instructors in Vientiane. In the long run this need not necessarily have a negative impact on the project. During 1984 the project was independent, but has since become an integrated part of the Department of Forestry.

In 1981 a study was undertaken in order to see if it was possible to support SFE 1 and SFE 3 with certain activities of a regional development type. It concluded that a regional development project may promote both forestry enterprises. After the study funds were allocated for the so-called Muong Pakxane Regional Project, within the budget of SFE 1.

## CHAPTER 2 - ACHIEVEMENTS

In this chapter an attempt is made to analyse the achievements in the three different projects forming the forestry programme (i.e. the support given to SFE 1, SFE 3 and the Forestry Department). The analysis is made on two levels. Firstly the main objectives for the projects are identified and the achievements in relation to these are established, and the relevance of the objectives as they are formulated is discussed. Secondly, the production targets as far as they have been stated for different project activities are listed and the performance in relation to these targets is assessed.

### STATE FORESTRY ENTERPRISE 1 - THE MUONG MAI PROJECT

#### Stated main objectives

When the first phase of the Muong Mai Project was designed, the following four main objectives were formulated in the Plan of Operation.

- (I)           The project will lay the foundation for sustained long-term forestry activities in the area.
- (II)           The project is expected to result in net foreign exchange earnings, by increasing the supply of forest products for export.
- (III)          The project will provide training in the forestry operations which are undertaken by SFE 1 and other State Forest Enterprises.
- (IV)          The project is expected to contribute to the social and economic development of the area.

The first and the second objective are operational in the sense that they require steps to be taken in a specific direction so as to meet these goals. Although training can be seen as a means of achieving the first and the second objectives, it was made a primary objective in order to underline the emphasis that was to be given to training activities.

The objective related to development of the area was added between the second and the third draft of the Plan-of-



operation. It is questionable if this objective expresses any clear intention.

It should be noted that fulfillment of the second objective, related to foreign exchange earnings, depends upon factors over which the Project management has little or no control. Export marketing is not part of its responsibilities.

There are reasons which suggest that this set of objectives was perceived somewhat differently by SIDA and the Laotian authorities directly concerned. Generally speaking, SIDA put more emphasis on economic efficiency and on a perspective of gradual development, whereas the Laotian authorities, including the project management, saw large-scale high-technology industrialization as a short-cut to progress.

#### **Achievements of main objectives**

The project has succeeded in laying the foundation for long-term forestry operations but it can hardly be said to have established a sustained forestry activity, as prescribed by the objectives.

A functioning organization (SFE 1) has evolved, physical infrastructure has been developed, managerial, technical and vocational skills have been improved and a reasonably well balanced fleet of vehicles, equipment and maintenance facilities have been provided. As a result, SFE 1 is today a going concern of considerable strength.

The two main threats to the enterprise are external. Firstly, an increase in guerrilla activities in the area could seriously disturb the operations. Secondly, there is a risk that insufficient funds will be provided by the Central Government (for replacement investments) once SIDA support is withdrawn.

So far, the project has failed to establish a sustained forestry operation with a long-term perspective, since the regeneration programme for the forest has not yet been successful. But it has made a constructive start.

The objective of generating foreign exchange has not been achieved. It will be recalled that export marketing is beyond the control of the management of SFE 1, therefore ef-

forts within the project have limited influence on the level of achievement of this goal.

The third objective - to provide training - is not entirely quantified and it is therefore somewhat difficult to judge. However, extensive training activities have been carried out, it can be argued that the objective has been largely achieved.

The fourth objective - contribution to the social and economic development of the area - is also unclear, as it only indicates the nature of the desired result but fails to indicate any magnitude. As was pointed out above, it is unclear if this objective was included with very serious intentions. The project design hardly suggests that this was the case.

An overall impression is that the formulation of all four objectives reflect the fact that none of them was analysed properly at the time they were set. The parties' main interest was to start working on a functioning forestry project.

#### STATE FOREST ENTERPRISE 3 - THE THA BOK PROJECT

##### Stated main objectives

In the plan of operations four main objectives are specified:

- (I) Develop forestry activities in the Tha Bok area so that exploitation and regeneration are balanced.
- (II) Protect the closed forest against shifting cultivation, fires and other damage. Degenerated forest will be re-afforested or transformed into agricultural land in cooperation with the local population.
- (III) The production of the forest will be marketed in such a way that the country's balance of the trade is improved.
- (IV) Provide SFE 3 with financial and personnel resources which - given that certain changes occur in Government policies - will make SFE 3 commercially self-supporting by the end of the project period.

The first and the third objectives are operational in that they cannot be achieved unless specific and identifiable



activities are undertaken. However, SFE 3 just like SFE 1 has had little or no control over the marketing of its output. Project management could therefore really do little to influence the level of achievement of this object.

The second objective is formulated as a mixture of means and ends. As it is formulated, it can be said to be unrealistic, at least in the short perspective. At the time it was formulated, this would hardly have been disputed by anyone familiar with the situation. This objective should, therefore, probably be seen as an expression of a concern and as an emphasis of an important issue, rather than as a clear statement of intent.

It is interesting to note the differences between the objectives set for SFE 3 and SFE 1. For SFE 3 no mention is made of any contribution to regional development. On the other hand, a stronger emphasis on economic efficiency is indicated by the fourth objective, while there is no such corresponding objective for SFE 1. The formulation of the fourth objective is, however, unclear, thus it is difficult to see what guiding properties it may have had.

As was the case with SFE 1 above, it can be argued that, in general, the main objectives were never really analysed before they were adopted. There was a strong pressure to start project activities, to get the enterprise going and to establish a functioning forestry operation.

#### Achievements of the main objectives

As the first objective is formulated SFE 3 has largely not been successful. Whereas the logging operation has been successful, forest regeneration has fallen far short of expectations.

In relation to the second objective - to protect the forest against shifting cultivation, SFE 3 has also been unsuccessful. However, it must be stated clearly that this is the result of the objective being unrealistic, since it is beyond the control of SFE 3's management, rather than a sign of poor performance.

Regarding the third main objective - to export wood - SFE 3 can note another failure, as only limited quantities of

wood have been exported (indirectly via Lao Plywood). As has already been noted, the project management can hardly be blamed for this failure, as it does not control marketing activities.

As noted above, it is not clear what the fourth objective really means. Consequently, it is hard to draw any conclusions regarding the level of achievement.

The above analysis of the level of achievement in SFE 1 and SFE 3 gives the impression that performance has been better in SFE 1. This, however, depends largely upon the differences in the sets of stated objectives. Judging the two forestry enterprises by the same criteria, one could on the contrary conclude that SFE 3 has been more businesslike in its operations and has come closer to living up to SIDA's philosophy of gradual development.

In sum, it can be concluded that the two enterprises have been impressively successful in developing the physical



*Primary Education at Tha Bok.  
Photo: Reidar Persson*



infrastructure required for a logging operation and that the quantities of wood extracted have come close to production targets. Few projects in Laos can show a similar degree of success. But in doing this, the projects have fallen short of economic expectations. The absence of export sales makes them a questionable investment when judged at the national level.

With respect to several of the objectives related to sustained operations, regional development, etc., performance is poor. It can, however, probably be argued that these objectives were unrealistic as formulated and that they have, therefore, not been regarded as being operational, nor have they in actual practice really been used as guidelines, either by the Laotian authorities or by SIDA.

#### PRODUCTION TARGETS AND ACHIEVEMENTS FOR SFE 1 AND SFE 3

The figures below summarize results for the periods 1979-83 for SFE 1, and 1983-84 for SFE 3.

##### Logging

	<u>Targets according to Plan of Operation</u>	<u>Actually achieved</u>
SFE 1	26 000 m <sup>3</sup>	28 400 m <sup>3</sup>
SFE 3	50 000 m <sup>3</sup>	30 000 m <sup>3</sup>

SFE 1 started logging operations very gradually due to the heavy programme of construction of buildings, roads and a workshop in the first stage of the period.

SFE 3 started their logging operations in 1979/80. The machines are now in a bad condition and have shown a very low rate of utilization. In 1984 only 50% of the skidders and only 10% of the chain saws were actually working. The rest of the time the equipment has been at the workshop, mostly waiting for spare parts.

##### Export of logs (round wood)

	<u>According to Plan of Operation</u>	<u>Actually achieved</u>
SFE 1	26 000 m <sup>3</sup>	--
SFE 3	12 000 m <sup>3</sup>	1 000 m <sup>3</sup>

During the period there has been a ban on the export of logs. Plywood and sawn wood have been exported through Lao Plywood. The export question is discussed in chapter 6 below.

#### Regeneration planted area

	According to <u>Plan of Operation</u>	Actually <u>achieved</u>
SFE 1	50 ha	33 ha
SFE 3	110 ha	65 ha

These are planted areas. When it comes to survival rates the results are considerably worse. E.g. for SFE 1 only 6 ha remain intact and can be approved. For SFE 3, only around 20 ha seem to be intact. Reasons for the poor results include delayed weeding as well as damage by cattle (due to lack of fencing).

Another reason - and perhaps the main one - for the poor regeneration results is that there is neither the incentive nor the pressure required to encourage planting and adequate care of the seedlings. This is to a large extent due to the existing restriction on purchases and other administrative routines. Also, the workload for weeding is, as always, underestimated and inadequate funds are set aside.

Some nurseries have been established at the projects and research on natural regeneration is going on at SFE 3.

#### Road Construction

	According to <u>Plan of Operation</u>	Actually <u>achieved</u>
SFE 1	Not specified	44 km + 218 metres of Bailey bridges
SFE 3	81 km	123 km

The quality of the roads differs widely between the two projects. SFE 1 has constructed roads of a very high class, whereas the roads at SFE 3 are much more crudely made and cause heavy wear and tear to the trucks. This adds considerably to the cost of maintenance of equipment.

### Future Production and Exports

In the 1985 budget, SFE 1 has planned for the following delivery of wood:

<u>Volume</u>	<u>Delivery place</u>	<u>Quality</u>
8 800 m <sup>3</sup>	Export	De luxe + hardwood
10 000 m <sup>3</sup>	Lao Plywood	Softwood
6 000 m <sup>3</sup>	Paksane saw mill	Softwood + bad qualities
24 800 m <sup>3</sup>		

Since new inventory figures for SFE 1 show the following distribution of quality classes:

De luxe	0.3 %
Hardwood	27.0 %
Softwood	72.7 %

it follows, however, that a volume only of 6 800 m<sup>3</sup> de luxe and hardwood will be available for 1985.

SFE 1 has a logging volume of 27 000 m<sup>3</sup> planned for 1985. Inventory figures show the following distribution of quality classes.

De luxe	1.2 %
Hardwood	34.9 %
Softwood	64.9 %

Therefore the volume of de luxe and hardwood should be 9 700 m<sup>3</sup> for 1985.

According to the plans, SFE 1 and SFE 3 combined will thus produce 16 500 m<sup>3</sup> de luxe and hardwood in 1985.

According to current budgets, an export of around 20 000 m<sup>3</sup> is planned from both SFE 1 and SFE 3, giving a total of 40 000 m<sup>3</sup>, including wood through Lao Plywood.

But the distribution of quality classes in the inventory imply that a total of probably no more than 16 600 m<sup>3</sup> can be exported directly to the western market. The demand for quality wood in the West is such that probably only a part of the Lactian hardwood is exportable.

In conclusion only a part of the planned quantity for 1985 will be exported to the dollar countries. Through sales to Thailand, India and the socialist countries, the planned export quota may however be reached.



To be able to correctly plan export quantities in the future, a better inventory of the forestry assets and their distribution in species and quality classes is necessary.

#### DEPARTMENT OF FORESTRY

##### Objectives

In the first document on the project, drawn up in 1980, no detailed targets and objectives are presented. The Forestry Department asked for equipment for compiling an inventory and establishing plantations, for scholarships to India and for assistance with imported material for some buildings at the Dong Dok Forestry School. This was implicitly intended to lay a foundation for future development co-operation with the Forestry Department.

The planned start of the project was delayed half a year. In 1982, it was extended to one year. Subsequently it was further extended, so that the first phase lasted up to the 1st of July, 1984.

##### Achievements

##### Inventory

1980-1982 the following activities were supported by SIDA:

- Equipment for field inventory was purchased. This has been used in inventories of 1,4 million ha.
- A study was carried out on how to establish a photo interpretation section.
- A photo interpretation section was started at the Department of Forestry.
- A course was conducted in photo interpretation.
- A study tour to Sweden and India was made.
- Co-operation was established with SFE 1 and SFE 3 to make maps of their respective concession areas.

In late 1982, the responsible Lao officers left the Forestry Department in Vientiane when they had to start work-

ing on field inventories in Khammoane and Savannakhet. The build-up of central activities more or less stopped. At present, it is doubtful how well the equipment for inventories is being used. However, a Swedish expert will now start working in the Inventory Section and continue on the foundation laid.

#### Plantation

- Equipment for nurseries has been purchased.
- Studies have been made on how to organize plantation work in Laos.

Because of reorganization, this sub-project has had difficulties in getting started. However, the studies made show what is to be done. A Swedish expert is to start working in the Silvicultural Section. This is intended to result in a central unit for seed-collection, field-trials etc.

In the opinion of the mission, the minimum target for the State Forest Enterprises should be to plant an area corresponding to the volume exploited. If the main annual increment



*Planting of trees.  
Photo: Håldur Jón Netocny/SIDA's bildarkiv*



(MAI) is  $10 \text{ m}^3/\text{year}$  and the exploited volume of an SFE is  $40\,000 \text{ m}^3/\text{year}$ , each enterprise has to plant a total of 4 000 ha as industrial plantation in order to maintain a long-term sustained yield. This implies that 100-200 ha need to be planted yearly, depending on whether the rotation period is calculated as 40 or 20 years. Since felling of trees is selective, the planting area has to be located outside the logging area.

Regarding forestry protection a minor sum was set aside to undertake certain studies and design a pilot project. Certain preparatory work has been done, but no agreement for the future has been reached.

#### Scholarships

From the beginning it was planned to send 4 students for ranger-training to India. After some delays 16 students were sent. Ten of them have now returned, the rest remaining in India for additional training, regarding inventories and silviculture.

These students will cover some of the gaps existing in the administration of the forestry enterprises.

#### Dong Dok Forestry School and Forest Technician Training

One of the main problems in the implementation of the programme and in transferring knowledge has been the lack of trained staff at middle management level, i.e. the forest technicians' level.

1980-81 SIDA therefore supported the construction of a few new buildings and some renovation work at Dong Dok forestry school. SIDA has occasionally also supported the training (e.g. training equipment) at the school.

The "Plantation Crash-course", which was the original reason for SIDA's involvement in the building activities at Dong Dok, has never taken place, but there has been a lot of other educational activities in the buildings. SIDA's support to Dong Dok has, however, been very limited.

A study of the whole sector of forestry education was undertaken in 1981. It recommended future support to forest



technician training in Dong dok. However, the training of technicians today does not seem to achieve desirable standard.\*

#### The Muong Mai Training Centre, MMTC

The Muong Mai training centre has been built up from nothing since 1980 to a vocational school beginning to function for forestry workers of different categories.

Initially MMTC was part of the so-called Muong Mai Project (SFE 1). Its size became a compromise between a Swedish plan for a school of about 90 students and a Laotian for a school of at least 300 students. The objectives of the school were basically to train forestry workers in logging, inventory, silviculture, road construction etc. The training should, according to plans, be in groups of about 20 students and last for about 9 months.

It soon became clear that MMTC could not remain included in SFE 1. The enterprise was, however, expected to earn money to help pay for this school, in the national interest. In 1981 it was, therefore, decided that the school should be transferred to the Department of Forestry. The Department had not planned for this new task.

The first courses at MMTC were run for the personnel of SFE 1. Some students from SFE 3 also took part. The courses seem to have resulted in a considerable increase in productivity.

Students from Dong Dok Technician school have also been to Muong Mai for practical training.

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\* It has lately been decided that forest technician training should be transferred to Muong Mai. Dong Dok will be used for higher training.



*Training at Muong Mai.  
Photo: Gunnar Blyckert*

It was originally planned to run courses for mechanics and operators (40 students) at the MMTC. For a number of reasons this proved impossible. Attempts have been made to get this training started in Vientiane but, so far, not much has been achieved. A crash-course may start in 1986.

In March of 1984 the Swedish teachers left the Muong Mai area for security reasons and are therefore no longer taking a direct part in the training in Muong Mai. Instead, they are mainly engaged in the training of teachers for MMTC in Vientiane. The lack of Laotian instructors able to carry out the requisite training has hitherto been a problem.

To sum up, MMTC has not yet been utilized to its full extent. The training is needed however and the work must continue so as to utilize fully the investments made. When the students in Dong Dok are moved to Muong Mai the school will probably be utilized to its full capacity.

### Conclusions

Regarding the Swedish support to the Forestry department we may state in summary that the equipment bought during the first phase for the Dong Dok and Muong Mai Training Centres has been well utilized. The Forestry Department has worked out plans for suitable development of different sectors. However, the project has not proceeded as fast as planned. But this has hardly affected the costs of the project.

One objective of the project was to provide support for a couple of years and see if prerequisites existed for more intensive co-operation. The project has, by and large, fulfilled this objective.

The support to the Forestry Department has been frequently delayed and from time to time has demanded rather a lot of work from the Swedish Embassy.

During the first phase of the support, SIDA's discussions with Laos were held with technicians participating on the Laotian side. After 1982 most discussions have been held without technicians. This has made discussions and planning more difficult.

The mission feels that what is needed today at the Forestry Department is the development of human resources. Instead, the Lao authorities have often seen the acquisition of new buildings and equipment as the main objective. Many proposals have been somewhat unrealistic and plans and policies have been changed rather often. The reorganization of the Department of Forestry in 1982, caused a stand-still for a long period.

The development during the past two years shows that if the project is to be meaningful, a few long-term Swedish experts are required for each of the different sub-projects.



### CHAPTER 3 - SOCIOECONOMIC, TARGET GROUP AND SECURITY ASPECTS

#### **THE SECTORAL ORIENTATION AND THE PROJECT CONCEPT**

At the time they were formulated, the two forestry projects at Muong Mai and Tha Bok were seen as sectoral projects rather than as projects for general rural area development.\* A number of factors contributed to this perception. Firstly, forestry had been identified as a sector to be given priority in the Lao/Swedish cooperation programme. Consequently organizational units within SIDA and the Lao Government as well as the professionals involved in the formulation of projects henceforth tended to represent forestry "interests".

Secondly, indications during the formulation phase of the Muong Mai project suggested that forestry activities could be undertaken in the proposed area without coming into a (land use) conflict with the local population, which might have called for a different and broader project design. This conclusion, which eventually proved to be wrong, was reached by a separate study undertaken with the assistance of a social anthropologist.

Thirdly, the projects never had the option to recruit labourers from the local population, thereby establishing linkages with the local economy, as the enterprises initially were given a labour force consisting of former military and police personnel.

Fourthly, the intended export orientation coupled with the rather high level of technology tended to give the forestry activities a characteristic of enclaves in the local economy. This was further enhanced as the projects choose to develop their own medical and educational facilities rather than integrating such services with those of the local authorities.

However, a few years later the sectoral perspective was questioned by external consultants. As a land use conflict, involving extensive shifting cultivation, was eventually rec-

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\* SEE ALSO "The Project Focus" in Chapter 7

ognized, both SIDA and the Lao Government accepted the argument that the forestry activities had to be seen in a broader development perspective. This resulted in the Muong Paksane Regional Development Study, which was carried out in 1981 by Lao staff assisted by an external specialist on rural development.

This study demonstrated the importance of shifting cultivation. No less than 1/3 of the staple food requirements were satisfied through shifting cultivation and nearly 3/4 of all farmers practice this cultivation method. A slow increase in agricultural productivity and limited availability of additional wet field paddy land has lead to an increasing reliance on shifting cultivation. In many areas the pressure on land has resulted in unacceptably short fallow periods with serious loss in soil fertility, severe weed problems and falling return to labour as a consequence.

It is often said, today, that the local population generally look upon the state forestry enterprises as their enemies. The reason is, of course, that the enterprises seek to prevent the population from exercising their age-old tradition of shifting cultivation.

The land use conflict is a fact in the area, and this conflict will increase over time. The study concludes that forestry activities can hardly become successful unless the conflict can be solved. This conclusion is presently shared by all concerned as was manifested in a seminar on shifting cultivation held in Vientiane in December 1984.

The Laotian Government has, however, not put forward a concrete proposal, on how to come to grips with the problem of shifting cultivation, as requested by SIDA. It is not clear what this lack of initiative means. It may be that responsibility for the intended Muong Paksane Rural Development Project was given to the Forestry Department, and that this department for understandable reasons feels somewhat at a loss to cope with a multi-sectoral development programme. As the project has now been moved from the Forestry Department to the new Borihamasai Province, the situation is likely to change for the better.





*On this burn-boat the weaving is done by women, with very primitive methods.  
Photo: Brita Asbrink/SIDA:s bildarkiv*



A regional development project should be implemented by the District Authority, as proposed in the study mentioned above, and supervised by an organization with multisectoral functions, preferably the Planning Department, at the Provincial level. Multidisciplinary research and development work on shifting cultivation could prove to be of good use in such a project.

#### SILVICULTURE

The present rate of deforestation in Laos has been estimated to be anywhere from 100 to 300 000 ha per annum, mainly due to shifting cultivation, also called slash-and-burn cultivation. This deforestation is serious, not only because it means a loss of forest resources, but also because it among other things adversely affects the Mekong river basin. Shifting cultivation, particularly in the mountainous parts of the country leads to erosion of considerable magnitude.

To counter this deforestation large scale reafforestation is necessary. If the entire area was to be replanted, the national target for planting would be enormous. Even if only 10 % of the area is replanted, a national planting target of 10 000 ha per annum is required.

According to the plans for SPE 1 and SPE 3, plantations should be established at an increasing rate, but this has not developed as fast as planned. This can be explained by the fact that managing the plantations is much more labour-consuming than actually planting the trees. It is difficult to establish plantations where the trees will survive. It is also understandable that a Government is somewhat reluctant to invest in undertakings which do not give a return until perhaps 70 years have passed.

The establishment of plantations in Laos is often seen by the Laotians more as a principle and moral obligation than a necessity in the short run. Selective cutting of the type utilized may impoverish the forests but leads to no environmental disfunction, provided that such cutting is not followed by shifting cultivation, fire or something similar.

If no regeneration measures are taken, shortage of useful wood will occur in due course. The principle of sustained

yield forestry should therefore be the guiding rule. The choice of species is important. The type of species to look for is probably a species which yields timber in 20-30 years time. A species like *Manglietia* which requires comparatively little weeding could have advantages. *Melia* species could be another possibility. There is no reason to plant fast-growing species like, e.g. *Eucalyptus*, as the wood of these species is not in demand.

The policy for exploitation and natural regeneration of the natural forests should be better developed. One improvement that could be made is to leave a certain number of seed trees after exploitation.

It is also necessary to gain knowledge about regeneration from corresponding climate zones in other countries, and to start research activities in Laos immediately. It should be an urgent task for SIDA to support such activities.

#### FORESTRY ASSETS

Basic to all forestry management is knowledge of the assets of the forests. This knowledge seems to have been very limited when SIDA decided to support the forestry sector in Laos. A very urgent task at the beginning would have been a stronger support to the work of inventory. Support to this activity has been too weak, with the result that knowledge about the forest assets, and the distribution of species, is still very limited. This has lead to a situation where SIDA in the beginning rather than risk making poor investments because of lack of knowledge chose to reject some possibly worthwhile ideas for projects.

It is important that knowledge of forest assets is gained and it is reasonable therefore that SIDA now increases its support and that more attention be given to this matter, although SIDA has already made substantial efforts in the past.

#### SIDA'S INVOLVEMENT IN THE LAND USE CONFLICT

As outlined above, shifting cultivation is one of the most crucial development issues in Laos. Involvement in the forestry sector, by definition, means an involvement with this



development issue. Both the Tha Bok and the Muong Mai projects have direct and daily experience of the land use conflict, which is one aspect of shifting cultivation. In fact, both project managements now maintain that shifting cultivation is their most serious problem. The conclusion is inescapable: that the long-term success of the forestry activities will depend upon success in resolving the land use conflict.

Even though Lao officials like to say that "...SIDA has helped us stop the slash-and-burning in Laos...", the sheer magnitude of the destruction caused by shifting cultivation today, tells us that SIDA's contribution here has been rather modest. SIDA, as a partner in development with Laos, has never stated that the abolition of shifting cultivation is an important objective of the forestry programme and obviously cannot, therefore, be held responsible for the failure to halt slash-and-burning practices.

Nevertheless SIDA, as a significant partner in the programme to develop forestry exploitation as well as the forestry industry in Laos, will in practice be implicated automatically. Whether it is fair or not, it is unavoidable that SIDA's participation in the forestry programme for a prolonged period will be associated in the eyes of outside observers with the responsibility for managing the forestry resources of Laos in a responsible way.

It seems realistic to think therefore that SIDA will not be able to escape this question in the future. In fact, each year that passes it would seem that expectations increase that SIDA will, of course together with the Laotian government, explicitly assume some kind of responsibility and undertake some kind of initiative in this area.

Many more forceful initiatives must be launched in order to drastically reduce the amount of cultivation by slash-and-burning. These initiatives involve both the government and its partner in development, SIDA. This evaluation mission regards it as necessary for SIDA to actively follow up the question of shifting cultivation and also to consider new projects or programmes which are able to deal with the problem. The conclusion of the regional study mentioned above was that such initiatives would have to be in the general field of rural and



agricultural development rather than in the forestry sector and that the approach would have to be very sensitive.

#### TARGET GROUP CONSIDERATIONS

Target group considerations were never an issue for SIDA when the forestry projects were designed. Since incomes in Laos are supposedly very evenly distributed as a result of Government policies, SIDA's equity objective as stated e.g. in the Strategy for Rural Development is met. Therefore it was regarded acceptable to support a production oriented activity which could generate foreign exchange to the country.

*Do they belong to SIDA's target group?  
Photo: Per Holmquist/SIDA:s bildarkiv*



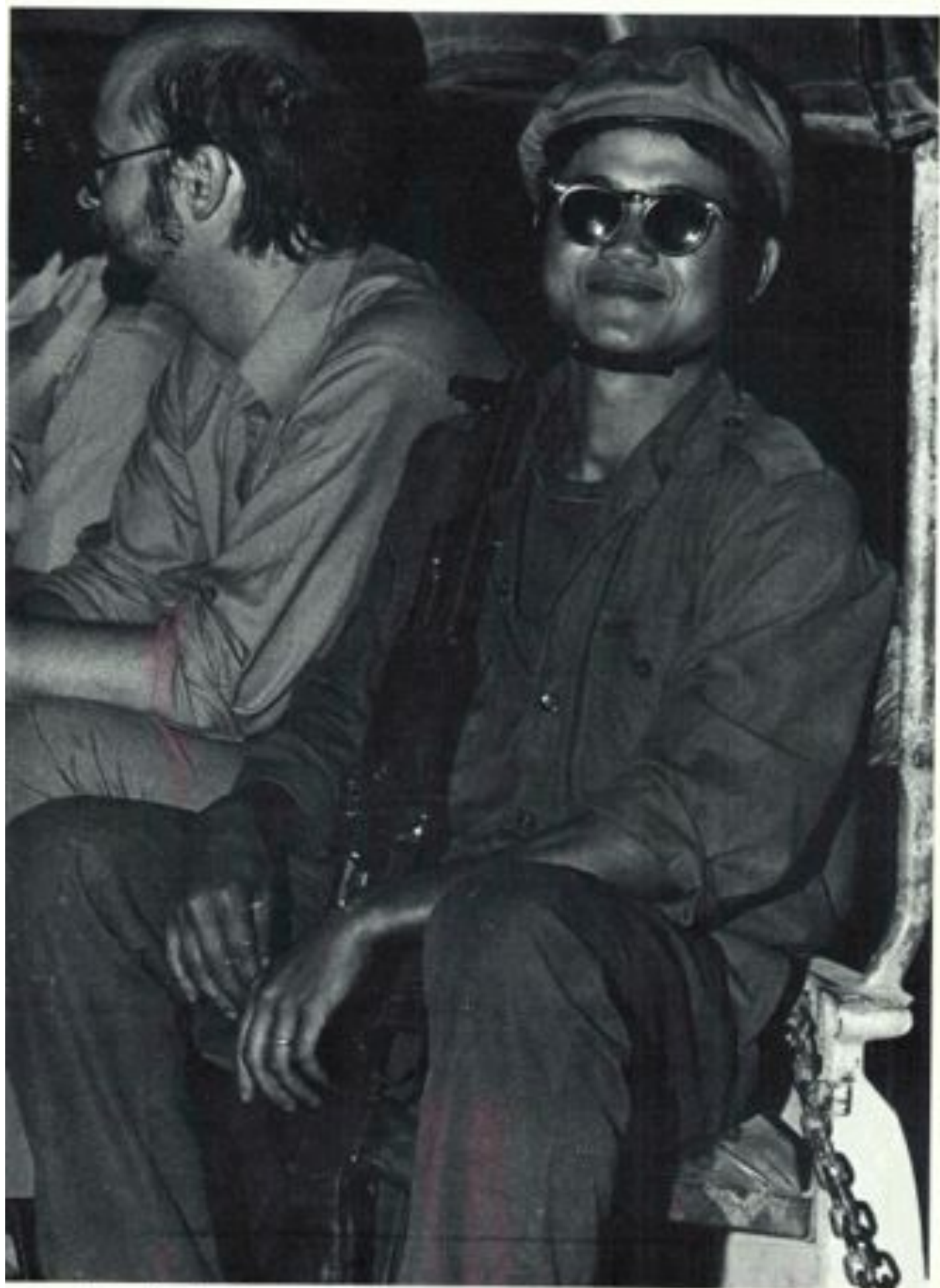
## SECURITY PROBLEMS

Throughout the history of the Muong Mai and Tha Bok projects security problems have been an issue. Increasingly SIDA came to realize that the projects, and in particular the Muong Mai project, were located in areas with considerable insurgency problems. Whereas the antigovernment guerrillas have made a number of attacks on military and civilian targets over the years, there were no indications, until 1983, that project property or project personnel had been the target. During 1983 a couple of incidents left no doubt that the situation had changed, and in early 1984 (March) a serious incident at Muong Mai with two people killed, resulted in a decision to withdraw Swedish personnel from the project site. It has been decided that unless the situation changes expatriate presence in Tha Bok should be continued.

It is hard to draw firm conclusions on the significance of the security problems on the performance of SFE 1, and to a lesser extent SFE 3. Sabotage activities have resulted in a loss of equipment worth about SEK 3-4 million. During certain periods inventory and logging activities have been suspended. In 1984 the logged volume was reduced as the guerrilla attack in March resulted in a loss of transport capacity.

According to the Plan of Operation the withdrawal of Swedish personnel from SFE 1 in Muong Mai was premature. However, the success with which the operations have been carried on since then - without expatriates - in Muong Mai suggests that the advantage of a transfer of all the responsibility in the hands of local staff has greatly outweighed the advantages of expatriate advice.





*The Swedes in Laos often have military escort when travelling in the country.  
Photo: Thorsten Nilsson/SIDA:s bildarkiv*



For the Muong Mai Training Centre, however, the decision not to post Swedish personnel in Muong Mai has created considerable short-term problems. It was expected that expatriate staff would be provided for the Training Centre for a number of years, until qualified Laotian instructors were trained.

What appeared initially to be disastrous for the Centre may, nevertheless, prove to be a blessing in disguise. To adjust to the new situation Swedish assistance is now provided for an expanded and more concerted effort to train Laotian teachers. Eventually this will result in a more rapid take-over of the responsibility for the Centre.

The March 1984 incident made it clear that the lives of Swedish staff were at stake. Apart from the tragedy the loss of life would have caused, the repercussions in Sweden on the attitude to development assistance to Laos would have been strong. In retrospect it is highly questionable if the expatriate presence in Muong Mai was important enough to justify taking any risks. These might have affected the entire aid programme in terms of orientation, etc.

#### THE QUESTION OF FORCED LABOUR

Towards the end of 1982 some Swedish journalists visiting South East Asian forestry projects, hinted in the Swedish media at the possible existence of forced labour in Laos. Without citing any particular evidence they claimed that indications suggested that forced labour was being used in the SIDA-supported forestry programme in Vietnam. They further concluded that since Vietnam and Laos are characterized by the same economic-political ideology, there were reasons to expect forced labour to be used in Laos as well.

At the time the present report was written, a SIDA-initiated report on labour productivity in the forestry programme in Vietnam showed that forced labour was being used there.\*

The experience in Vietnam shows that firm evidence on such an intricate issue can only be obtained through a careful

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\* "Socio-Economic Study of Factors Influencing Labour Productivity in the Forestry Component of the Vinh Phu Pulp and Paper Mill Project in Vietnam" by Larsson, Katarina and Birgegård, Lars-Erik

field study. No such study has been made or is planned for the forestry programme in Laos. This means that SIDA can hardly make a conclusive statement on the conditions for the labour force in the two forestry projects.

It is a fact that a large number of the workers are former prisoners-of-war and it is reasonable to assume that most of them did not choose to go to Muong Mai voluntarily. It was probably true that these workers were not permitted to leave the camp for a period. However, the following reasons suggest that the situation in Laos is distinctly different from the situation in Vietnam and that forced labour is not being used.

Throughout the life-time of the projects Swedish consultant staff have continuously worked side by side with all categories of Laotian staff including workers. The workers in these projects live in two centres, where the living quarters of the expatriate staff have been located as well.

Quite a number of the Laotian staff, including workers, know a foreign language and have been able to communicate with the expatriates. This has given the expatriate staff a very good insight into the conditions of the workers. It is their unanimous opinion that forced labour is not being used.

The project managements have shown considerable concern for their workers. Proposals for improved housing, educational and medical facilities, provision of water and electricity, etc. have often been so far-reaching that SIDA has found it necessary to be more restrictive.

The majority of the workers have their families living with them in Tha Bok and Muong Mai.

The labour force of each of the two enterprises has been reduced by more than 1/3 over the years, i.e. workers have been permitted to leave.

Forestry technicians who had been posted to Muong Mai on their return from training abroad, have simply quit and returned to Vientiane (with no penalty) because they did not like the remoteness of the project.

Former civil servants from the deposed regime, who have undergone re-education in camps for several years, hold senior positions in both enterprises.





*Temporary housing for forestry workers in a village at Muong Mai.  
Photo: Brita Ashrén/SIDA's bildarkiv*

Taken together these conditions provide a picture which is notably different from what was found in Vietnam. Indeed, the indications are that the Laotian government prefers a rather soft approach to the recruitment of labour.

Today's labour force in the forestry enterprises consists of work brigades from both the former royal army and from the liberation forces. No discrimination against the former is apparent.

In general one may conclude that working and living conditions for the forestry workers are so good today, that most workers probably stay in Muong Mai by choice.



## CHAPTER 4 - THE ADMINISTRATIVE ENVIRONMENT IN LAOS

### **BUREAUCRACY AND ADMINISTRATIVE CONSTRAINTS**

The Tha Bok project and the Muong Mai project are implemented by two state enterprises, SFE 3 and SFE 1. These state enterprises operate in a highly complex, elaborate and rather inefficient administrative setting, which has hampered progress in different ways. One key problem has been the lack of managerial autonomy. The projects operate under rules, which may be only a moderate problem to administrative departments in the Government structure, but which are highly inappropriate for a diversified businesslike operation. A particular problem has been the demand (from central authorities) for advance detailed planning of expenditures, and the very cumbersome and slow procedure for the release of funds and for procurement.

The financial control of the project management has been brought to the point where the management is permitted to operate only a very limited petty cash account. The replenishment of this fund is not automatic either.

Of more profound concern is perhaps that prevailing, administrative, prices are unlikely to make it possible to sustain the operations from sales revenue. Furthermore, access to local and particularly to foreign exchange funds for replacement investments does not follow automatically. This is so, even if regular payments have been made to the depreciation fund.

The creation of state enterprises is a new venture in Laos, and it is probably fair to say that much remains to be done until administrative systems are developed that strike a balance between the demands for central control on the one hand and operational efficiency on the other. It is also probably fair to say that the present system is in a state of flux. So many exemptions and deviations are made from the rules, that it is often difficult to tell what the actual rules are.

SIDA started supporting the two state enterprises with very little knowledge of the rules and of the administrative systems under which the projects were to operate. This ignorance caused unnecessary impatience with the slow progress, and it made SIDA underestimate the problems which the project managements were facing. SIDA was notably frustrated by not knowing and not understanding the administrative systems in the Government and by the continuous need to reconsider what was thought to be an established fact. The SIDA files contain a series of different statements on what the depreciation rules are, what the rules for procurement are, what the rules for release of funds are, etc.

At certain points voices were raised within SIDA suggesting that the bureaucratic system was so complex that it was questionable if it was meaningful even to attempt to assist state enterprises. The counter-arguments offered were that the state enterprises are expected to play a key role in Laos. Therefore, it was important to assist the country to develop such enterprises and to assist in developing systems for control and management, which could make them efficient.

In retrospect it is surprising that SIDA took so little notice of the managerial aspects of the projects. At the time the support memorandum was written for phase I of the Muong Mai project, no-one at SIDA could adequately describe the organizational structure of SFE 1, let alone describe the relationship between the enterprise and the rest of the Government structure.

This set of problems is not unique to SIDA's operations in Laos, but rather indicate that a different strategy is called for: A conclusion we can make is that in each new country it is necessary to work steadily towards a knowledge of local and national conditions. This can be done by starting with small projects and only gradually moving on to bigger ones.

Due to the administrative shortcomings in the Laotian system the problems encountered in SFE 1 and SFE 3 can be said to depend largely on factors outside the control of the enterprises. From these experiences it is tempting to come to the conclusion that SIDA should avoid going into projects which



are highly dependant on the surrounding bureaucratic system. But the present mission abstains from drawing such a conclusion. In order to do that many more aspects regarding the political and economical development of the country would have to be considered than the ones included in this evaluation.

The SIDA-supported projects have encountered difficulties due to the pricing system, salary system, building norms, purchase procedures, decision-making processes, planning system, export rules, banking system etc.

A problem in Laos that can be mentioned in this context is that many facts and circumstances of the economy and administration are kept secret. This makes it difficult for a donor to engage in a dialogue or give financial support in cases where he doesn't really know how the society is functioning.

#### MANIPULATION OF THE SYSTEM

All project directors in Laos face administrative and bureaucratic problems and, to varying degrees, all of them try to find short-cuts by circumventing the system. For instance, services and material are frequently bartered through an important and well developed informal organizational network based on kinship and friendship. SFE 1 and SFE 3 have often skillfully circumvented the system in different ways and SIDA has been manipulated to facilitate this, particularly by SFE 1.

With reference to the common objective of speedy implementation of the project, SIDA was gradually encouraged by the management of the projects and by the Lao/Swedish Committee to shoulder responsibility for control and also for procurement of material, equipment, etc. This liaison with the financier gave the project directors and their superior, the Chairman of the L/S Committee, (in his dual capacity as viceminister in charge of the projects and Chairman of the Committee), considerable power within the Lao Government. This may at times have made it possible for them to ignore established routines for the release of funds, allocation and release of foreign exchange and for procurement, but it also created conflicts within the Government.



The widespread attempts to circumvent or "go around" the system, which SIDA by implication can be said to have encouraged in SFE 1 and SFE 3, may have a number of questionable long-term effects.

Firstly, the circumvention of Government rules may take off the pressure for making the changes necessary to increase long-term efficiency in the existing system. In the worst cases, even more elaborate rules may appear necessary to prevent abuse. The malpractices, 'efficient' though they may be, certainly do not facilitate the task of technocrats in convincing political decision-makers of the need for the liberalization and de-regularization, which project directors would like to see.

Secondly, as credit is often given to those project directors who can point to physical progress, abuse of the system tends to be rewarded.

Thirdly, an unhealthy attitude is fostered wherein the bureaucratic system is seen as something more or less hopeless or at least as a major hindrance. It is then possible that such attitudes will spill over into the political system as well.

It is, of course, possible to present counterarguments to the above reasoning. It is not unlikely that the pressure put on the system by SFE 1 will bring about healthy changes in the bureaucratic system in the long run. It is not certain that these changes can take place if everything goes the "normal" way.

However, one must be aware that it may be more important, in the long run, to contribute to the development of an efficient Government bureaucracy and to the formulation of Government policies which effectively promote growth and social welfare objectives, than it is to achieve the project production targets at hand. Project support can be used as a means to achieve the former as long as these overriding considerations are kept in mind during project design and project implementation. This means that, with rare exceptions, unconventional arrangements to increase project efficiency should not be resorted to.

#### CO-OPERATION BETWEEN ENTERPRISES

Another weakness in the Laotian system is that individual enterprises have a tendency to be self-sufficient. This has been a source of continual conflict between SIDA and the different projects.

Each enterprise seems to be wanting to invest in its own machines which may be needed for only a short period in the year and which remain idle most of the time. In many cases, it would seem more efficient to establish a central pool from which the required machines could be borrowed when needed.

This fact has been pointed out by SIDA long ago, but it has not changed for the better so far.

The common lack of co-operation between different Laotian enterprises is, of course, costly for the country and thereby reduces the value of Swedish support. It has also delayed activities in the cases where SIDA has been waiting for an agreement for co-operation before taking decisions about funding.

#### PROCUREMENT OF PRIVATE SERVICES AND CONTRACTING OF PRIVATE LABOUR

Much economic activity and new initiatives are, at present, hampered by the restrictions imposed on the state forestry enterprise when it comes to contracting services and labour. There is no restriction on contracting services from private firms nor any restrictions on hiring additional labour, as long as no parastatal can supply the service in question. The practical restriction is in the fact that the state enterprises have no cash money to pay for the services. When dealing with other parastatal bodies, payments are always made by money orders through the state bank. Not unnaturally, private parties do not accept these money orders, since one sometimes has to wait for a very long time before they can be converted to actual cash.

This lack of cash has hitherto prevented State Forestry Enterprise No. 3 from contracting the services of elephants, even though SFE 3 has found that their use of elephants, in-



stead of or as a complement to skidders would be very profitable.\*

For both SFE 1 and SFE 3, this restriction of cash also seems to prevent them from seasonally hiring additional labour for tending plantations.

The present rules today are so unclear, that the ability of a state enterprise to raise and retain its own cash income seems to depend, to a large degree, on the personalities involved. For instance, a manager possessing some kind of leverage can sell his product on the open private market and thereby retain the cash earnings, which can then be freely used by his firm to contract labour and to purchase other services and inputs.

Exercising such leverage may in itself sometimes be harmful to the economy. In one case the manager of a state enterprise seems to have been holding onto large stocks of logs of about 15 000 m<sup>3</sup> and holding back deliveries to a sawmill just in order to retain the leverage that this stock of logs gives him.

The present evaluation mission is of the opinion that the entire question of procurement rules, disbursements routines as well as the question of prices must be looked into in order to provide the managers of state enterprises with working conditions which are conducive to rational decisions leading to economic growth.

According to information given to the mission there are discussions under way in the government on how to bring about reform in this area, and that reforms will soon be made. Experienced observers, however, state that such discussions have been going on for years with hardly anything concrete ever coming out of them.

#### USE OF SHADOW PRICES

Shadow prices are used in social cost/benefit analysis when market imperfections have made prevailing prices inappropriate indicators of social gains and losses. In a socialist economy the relevance of using shadow prices, which are sup-

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\* According to recent information from Laos SFE 3 has now taken over the elephants earlier used by SFE 1.

posed to express consumer willingness to pay in a hypothetical free market, is not without problems. Administrative prices in such an economy have replaced prices determined by market forces. In principle, at least the administrative prices can be set to reflect (centrally determined) considerations of 'social value', which can differ from consumer willingness to pay. To question the administrative prices and to suggest shadow prices then becomes a (political) matter of proposing what the consumers' right to influence price formation should be.

In Laos, administrative prices are set for a whole range of commodities and services. However, from the way these prices are set it is hard to conclude that they reflect considerations of 'social value'. Quite obviously this is not the case for foreign exchange, as the present exchange rate reflecting a much overvalued local currency would mean that all imports across the board were favoured, on the basis of a social value argument.

In the forestry projects the most important price which would have to be questioned is the foreign exchange rate. Despite the possible doubts about shadow pricing in socialist economies given above, there seems to be a very strong case for a shadow price on foreign exchange, when the economic efficiency of the forestry projects is discussed. Furthermore, it is reasonable to question the domestic administrative prices on logs and sawn timber.

The fact that the local currency has been grossly overvalued throughout the life time of the projects has resulted in a systematic error favouring imports rather than the use of local resources. Although few calculations have preceded investment decisions, the bias has been clear. At the project level access to generous external financing, which meant that foreign currency was more plentiful than local money, made local purchases more "expensive" than imports. It is possible, that if shadow prices had been used, locally produced wood rather than imported cement would have been used in most of the construction work in Muong Mai. Likewise certain elements of the road construction work would probably have been carried out by more labour-intensive methods. Furthermore, treefelling



may well have been done with hand saws and skidding with elephants rather than mechanical skidders. As discussed below elephants seem to be considerably cheaper than skidders under Laotian conditions.

The use of shadow prices has consequences for the judgement of the economic efficiency of the projects as shown in a cost/benefit analysis of the second phase of the Muong Mai project. One of the main conclusions drawn in the report is that large-scale export sales are imperative, in order to justify the projects on economic grounds. Any reasonable assumption regarding the proper value of the shadow price to foreign exchange, leads to this conclusion.

Generally speaking, analyses of economic efficiency have hardly played a major role in the design and in the decision-making of the projects. Shadow pricing has been used in two cost/benefit analysis of SFE 1, the last analysis eventually leading SIDA to make increased export sales a condition for the release of funds.

The lack of interest in economic analyses, and particularly the indifference to the question of shadow prices, by the Laos Government, is partly explained by the fact that hardly any official, with training to understand the meaning of the concepts, has been involved in project preparations.

SIDA's own attitude to analyses of economic efficiency have been rather ambiguous. Whereas two analyses of SFE 1 were carried out, there has not yet been one done for SFE 3.

The situation with respect to SFE 3 was that SIDA felt obliged to support this project after having contributed to the same activities through import support, thereby contributing to a generally chaotic situation in the opinion of some people. So there was at that time never any questions of conditioning future project support on a strict economic analysis being performed.

Recently, it has been reported that SIDA has now decided to ask for a full economic analysis to be performed on SFE 3. According to plans, the study would subsequently be presented and discussed in a seminar with the Laotian authorities.

## CHAPTER 5 - TECHNOLOGY AND MAINTENANCE

### CHOICE OF TECHNOLOGY

The technology chosen in the programme is of the type commonly used in logging by commercial enterprises all over the tropical world. From the technical point of view certain operations could be done with more simple equipment. For economic reasons it may, however, sometimes be hard to combine simple technology with expensive modern equipment. Also it may at times be difficult to use simple techniques in tropical logging when the logs are very heavy.

For psychological reasons it may be difficult to introduce the use of handsaws once it is known that power saws exist. Nevertheless, it is reported that Laotian workers are prepared to go back to handsaws. One incentive would be to introduce a piece rate system.

In parts of Thailand a simpler technology than in Laos is used. It is based on old rebuilt trucks from the 1940s. However, it is often impossible to start a new enterprise at this technological level, since the equipment is simply no longer available.

In Laos, elephants and handsaws have been reintroduced lately in order to try a more simple technique. These trials seem to work very well. SFE 1 is e.g. today ready to change to simpler and cheaper technology.

### EQUIPMENT SPECIFICATIONS

Specifications of equipment often caused problems in the first phase of the projects. Some of the specifications were wrong which led to difficulties that were probably underestimated by all parties. It has come to the mission's attention that the specifications were often made by amateurs.

It is not always the case that the Swedish advisors know what specification is the most appropriate. They may know the best technology and economy but they do not always appreciate all the demands posed by the particular society. Often foreign



consultants were contracted although adequate technical expertise was available locally in Vientiane.

At the beginning of the two forestry projects, lack of equipment and buildings were sometimes identified as a main obstacle to development, which lead to some unnecessary purchases and investments. As time goes on, it becomes more clear that investment in human resources and organization may be more important than investment in machines and buildings.

#### THE USE OF ELEPHANTS INSTEAD OF SKIDDERS IN LOGGING

It has been generally agreed that the use of elephants in hauling logs in tropical forests is quite efficient and reliable. Elephants are able to work in the rainy season, during which time skidders cannot be used. Their food is found locally, they can work in steeper terrain and reportedly they are able to work up to 150 days a year. By contrast, skidders frequently break down. Either they run out of fuel and no spare fuel is available on the site at the time, or spare parts are missing.

It is thus beyond doubt that from a technical point of view, elephants are a completely acceptable alternative to imported capital-intensive equipment, so called skidders.

We also need to consider the psycho-cultural aspects of using elephants instead of machinery. Are they acceptable from a cultural point of view? The answer in Laos is clearly yes. For centuries, elephants have been used in hauling timber and in other forestry works in neighbouring countries such as Burma, Thailand and India.

It then remains to determine the economics of the choice of elephants versus skidders.

The price of a skidder is currently between 90 000-140 000 USD. Since it cannot be used during the rainy season and since it frequently needs to be serviced, the practical work-year of a skidder in Laos is estimated on the average to be 100 days, during which time each skidder can haul about 5 000 m<sup>3</sup> of logs. A skidder is depreciated over five years.



*Skidders out and elephants in?*  
*"Yes" is the answer, according to the evaluation mission.*  
*Photo: Gunnar Blycker*



The average cost of repairing and maintaining a skidder during its lifetime has been calculated to be about 15 000 USD a year.

A skidder needs 2-3 persons as operators costing about USD 2 000 a year each, including the cost of training them abroad. It consumes about 20 litres of diesel fuel an hour.

With those figures we get the following costs:

#### Investment cost

100 000 USD over five years which equals 20 000 USD per year.

#### Cost of repairing and maintenance

15 000 USD a year.

#### Running costs

Diesel fuel. 20 litres x 6 hours x 100 days x 0.3 USD per litre which equals USD 3 600.

#### Operators

3 x 2 000 USD which equals 6 000 USD annually.

So the total yearly cost of a skidder is 20 000 dollars + 15 000 dollars + 3 600 dollars + 6 000 dollars which makes a total of 44 600 USD. Since the total yearly capacity of a skidder has been found to be about 5 000 cubic meters it follows that it costs 44 600 divided by 5 000 equal to about USD 9.00 for each cubic meter of log hauled by a skidder.

An elephant costs 350 kips per cubic meter logged (february 1985). This is the rate that the forestry enterprise has to pay to the owner of the elephant. That price includes all running costs, maintenance and repairs, as well as the investment costs associated with the services of an elephant. Each elephant can haul, on the average, about 10 m<sup>3</sup> per day. Since they usually work about 350 days per year, each elephant can haul up to 3,500 m<sup>3</sup> per year. This should be compared to

the yearly practical capacity of a skidder, which in Laos has been found to be on the average 3 000 m<sup>3</sup>.

If we transform 350 kip at the black market exchange rate of 250 kips per dollar, which is the one currently used for economic calculations, we find that with the conservative assumptions made above the cost of hauling timber with the skidder becomes 6-7 times more expensive than using an elephant (9 dollar compared to 1.4 USD).

#### MAINTENANCE

Maintenance of the equipment supplied by SIDA has been under continuous discussion in Laos. According to one opinion it became a tradition during the war in Laos of allowing equipment to deteriorate to the point of discarding it.

One common feature in all projects, in Laos and elsewhere, is the concentration on building workshops. Usually no preventive maintenance takes place as long as the buildings are unfinished. As buildings are very often delayed, maintenance is postponed and considerable damage to the equipment can occur.

At the beginning of a project, maintenance should be possible without workshops being in place, since the maintenance work could well be performed in a simple shed.

Swedish consulting firms have shown limitations when it comes to assisting in the building of national workshops, as in the case of the workshop at Km 14. It seems to be difficult for them to adjust the Swedish maintenance system to new and different kinds of administrations.

The need for basic training has been underestimated and the in-service training given has not been adequate. No large investments are needed for this kind of training. Education of this type was started in Muong Mai but it had to stop because of the security situation. At Km 14 no attempts have been made.

Attempts have been made to reach agreements about co-operation in the field of maintenance and repair between Km 14 and SFE 1 and SFE 3. These attempts have, so far, not been successful.



In spite of the shortcomings in maintenance described here, the bulk of the equipment delivered to the Lao forestry industry is still in working order.

## CHAPTER 6 - PROSPECTS FOR FORESTRY EXPORTS

The Muong Mai project was designed and initiated on the assumption of extensive export sales. Generation of foreign exchange was in fact a key project objective. Laos was in great need to raise convertible foreign exchange and it was a declared policy to try to increase export sales of forestry products, which amounted to some 350 000 m<sup>3</sup> of mostly round wood, prior to the Liberation. At the time the Muong Mai project was prepared exports had fallen to some 75 000 m<sup>3</sup>.

Traditionally the Thai market had been the most important one. A limited market study in Thailand undertaken as part of the formulation of the Muong Mai project showed a strong demand for round wood from Laos as their domestic supplies were insufficient.

Furthermore the Lao/Thai political relations were favourable and trade negotiations were thought of as encouraging. Among other things did the Thais indicate their willingness to open a new trading point at the border town of Paksane, provided Laos could offer an annual quantity of at least 10 000 m<sup>3</sup> wood. As SPE 1 was expected to produce 30 000 m<sup>3</sup> in a few years, this request seemed possible to meet.

Eventually a number of changes took place, which made export marketing the most controversial and today perhaps the weakest aspect of the Muong Mai and Tha Bok projects. None of these changes seems to have been foreseen when the export targets, which were accepted by SIDA, were set. Instead the promising indications mentioned above were very optimistically interpreted. With a more realistic view of the export possibilities and sufficient planning by SIDA, the entire project design might have been quite different.

The first and most important obstacle arose when the Lao Government changed its export and industrialization policy in the forest sector. A ban was introduced on the export of unprocessed wood, i.e. round wood, and negotiations were initiated with the Asian Development Bank to construct an export saw-mill and renovate and enlarge an existing plywood factory. This factory came into operation in 1964.



Secondly, a change of Government in Thailand resulted in rapidly deteriorating relations between the two countries suspending indefinitely the idea of opening a trading point for wood at Paksane. Commercial contacts were maintained, however, and the demand for Lao timber could still be satisfied through trade via Vientiane. This would, however, involve long distance transport from the logging areas to SFE 1 and SFE 3, notably affecting their profitability.

SIDA was sympathetic with the ambition to develop a processing industry in the country. However, SIDA had a more cautious opinion on the ease with which this could be done. The obstacles are many. Sawn wood is a far more complex product than round wood in terms of quality and specifications of dimensions with strong and varying preferences by buyers on different markets. Tariff structures in most countries including Thailand are such that a very skilled and market adapted sawing is necessary to yield an added value in processing. Other processed products like plywood face a very stiff competition on the world market. Quality demands are very high.

Lao has extraordinary difficulties to overcome these problems, and there are reasons to believe that it will take many years before products acceptable on the world market can be produced. At present the plywood is sold to the Soviet Union and other east block countries, where deliveries are not subjected to strict quality demands. The socialist countries accept and purchase whatever quality is produced, and consequently no pressure is put on the Lao wood industry to develop better quality products. Of course the prices paid by the east block correspond to the low quality of the merchandise. Therefore, this export trade cannot be regarded as a reasonable substitute for exports to the west.

Sawn wood will become even more of a problem to export and it is unlikely that any quantities can sustain transport costs to eastern countries, would they be interested buyers, at the extremely low prices.

The export problem of today is compounded by the lack of awareness by managers of the Laotian forestry industry of the way world market prices function. This is a natural outcome of working with an administrative price system such as that ap-

plied in Laos. The relationship between price and different qualities is quite different on the domestic market than on the international market.

Exports can also be hampered by purely bureaucratic bottlenecks. It has been reported that large quantities of exportable logs have been rotting away in the forests because two competing government export agencies could not agree on how to divide the work between them.

The implications for the Muong Mai and Tha Bok projects are far-reaching. According to a cost/benefit analysis of the Muong Mai project the export marketing problems have jeopardized the economic viability of the project. When gains and losses are measured at shadow prices, the return on invested capital is nearly zero. In the same analysis it is concluded that the project is unlikely to generate net foreign exchange earnings (accumulated) in 20-25 years unless a radical change is made in the proposed marketing strategy.

Such a change will certainly have to take into account that the saw-mill/plywood factory is there. The infant industry argument is a consideration in formulating a policy, which should aim at developing the capability to produce exportable products at the lowest possible expense to the country. A minimum quantity to be produced at the factory which has to be sufficient for training purposes, has yet to be determined. Wood which is not needed for this purpose should be exported as round wood, preferably to Thailand where roundwood is in strong demand. SIDA and other donor agencies could be helpful in providing assistance to achieve these objectives.

The technical assistance on export marketing given by SIDA is commendable, and the Mission recommends that whatever support possible is given to develop the contacts initiated by SIDA between a Swedish plywood manufacturer and the Lao plywood factory.

The evaluation mission was informed that reforms are expected, which will transfer the responsibility of wood export marketing from the Laos Export and Import Society, under the Ministry of Trade, to a new sales organization for wood products under the Ministry of Industry, Forestry and Handicraft.



As before marketing would fall outside the responsibility of the enterprises (like SFE 1 and SFE 3).

Even if this reform is made, it is not clear to the mission how this would improve the present situation. As long as the processing factory cannot produce exportable qualities, and as long as there is a ban on the export of roundwood, the problem will remain.

The Mission considers the marketing problems and the failure of Government to export a substantial portion of the output to be among the most serious obstacles to the projects. The projects are a success in terms of their physical achievements, but they can be questioned on the grounds of economic efficiency. This conclusion is most unfortunate as a different export policy would probably make it possible to capture the Thai market, where roundwood is in strong demand. Parallel with such exports, Laotian processing capability can be developed.



*Round wood should be exported, according to the mission, preferably to Thailand.*

*Photo: Gunnar Blyckert*

## CHAPTER 7 - SIDA'S CONCERNS AND OPTIONS

### **FINANCING LOCAL COSTS**

In phase I of the Muong Mai project the question of financing of local costs arose. SFE 1 had hardly any revenue during the initial period, and the financial contribution from the Central Government budget was entirely inadequate. Project implementation threatened to grind to a halt.

In this situation SIDA agreed to finance an increasing share of local costs in addition to foreign costs. At one point SIDA financed nearly 100 per cent of the total project costs. In deciding to finance local cost items, SIDA had no policy as a guideline. Questions such as how much? for how long? which cost items? etc. had to be answered in an ad hoc manner with circumstantial and unclear criteria.

The main argument leading SIDA to agree to the financing of local costs was the budget difficulties experienced by the Lao Government. It was argued that one could not expect the Government to be able to raise and to allocate sufficient funds to the project. This is a questionable argument. SIDA's decision to finance local costs in the Muong Mai project was, however, simply an accounting exercise as no additional funds were made available to Laos. It was window dressing, in the sense that foreign exchange was converted into local currency without formal decisions from the donor agency. The earmarking of a certain portion of the country's aid to the project did not, therefore, increase the Government's financial capacity in terms of local currency. The Government had still to reallocate local funds from its central budget or through the state banking system to the project. The chief effect of SIDA's decision was to give the Lao Government an amount of foreign exchange for which it was not accountable.

It may be pointed out here that this problem always arises when SIDA pays local costs. If SIDA does not pay local costs the result may often be too high a technology and too much dependence on import. Payment of local costs gives SIDA the possibility to influence the design of a "local" project.



It can also be a way to help the Government to finance a needed priority.

When SFE 1 eventually started to generate revenue, a new problem arose. A state enterprise is expected to make cash depreciation payments to a fund in the Treasury. As SFE 1 had a rather impressive stock of assets on which depreciation had to be paid, these obligations were considerable. The financial deficit was substantial despite the revenue, and SIDA was requested to cover local costs. Eventually SIDA ended up covering operating costs, while at the same time revenue was used to make depreciation payments. This was hardly acceptable as one would expect that revenue ought first to be used to cover operating costs.

A counter-argument here is that it may not always be wise to introduce specific ad hoc rules for the specific wishes of donors. It takes time to change "wrong" rules in the whole administration.

The lack of a clear policy on financing of local cost components resulted in ad hoc decisions as outlined above. In retrospect the merit of these decisions is open to question.

#### **MONITORING OF PROJECT PERFORMANCE**

A review of the SIDA supported forestry projects has been undertaken twice a year. These have largely consisted of a budgetary review, reports on the activities that have taken place and plans and budgets for activities to be undertaken during a coming period. As in the case of many other reviews, it has taken time before these meetings have found a well-functioning form.

These reviews can be seen as SIDA's major possibility of exercising some control and influence over the work of the project. In the beginning this was not so. SFE 1 often went its own way, regardless of what SIDA said. Then, all too often, SIDA expressed opinions or gave advice, but no sanctions were applied if the advice was not followed.

In 1981 SIDA's role in the reviews was strengthened. In 1983 detailed monitoring plans were introduced. These specified what information should be reported and which targets and objectives should be achieved.

A monitoring system should also specify what should be done in each case, if the various objectives and targets are not reached. In general it seems that discrepancies were explained and analysed but remedial action was seldom taken.

One difficulty with monitoring and supervision of projects is that SIDA lacks the resources to consistently check on how agreements are kept. It is a question of priorities and new agreements usually being given higher priority than an agreement reached perhaps six months earlier. This may have been the real weakness in the monitoring system during the first years, and still is, today.

Project supervision and monitoring have hitherto in principle been carried out through by SIDA's Development Cooperation Office in Vientiane and by SIDA headquarters in Stockholm.

#### THE CONSULTANT

In the main, SIDA has handed over responsibility for recruiting advisors to a consultancy company. This has not been without its problems.

In the initial phase of the SFE I project it has been claimed by some that the consultancy firm misunderstood its role. For this reason there was some irritation between the different parties during the first year. One reason may have been that the consultant's main experience was the Bai Bang project in Vietnam, which is a very special project. Nor probably did the consultancy firm have much experience in a situation where it only processed recruitment and played an advisory role. In most commercial undertakings the consultant normally plays a more important part.

Gradually, the consultancy firm has come to understand the situation and seems now to be aware that its role is mainly advisory. The individuals recruited by the consultancy firm have been successful. It is unlikely that SIDA could have found better candidates.

#### SIDA'S EFFORTS TO INFLUENCE THE IMPLEMENTATION OF THE PROJECTS

The Muong Mai forestry project provides an interesting illustration of SIDA's attempts to influence project design



and implementation. In retrospect a key means of influence proved to be different plans of operations. In phase I, SFE I made constant reference to the Plan of Operation to justify its investment decisions and also clearly indicated its opinion that the acceptance of the Plan of Operation by SIDA gave SFE I a free hand to spend project funds according to the itemized lists of equipment given in that plan. Well aware of the deficiencies of the Plan of Operation, SIDA regarded it as a guiding rather than as a binding document. This difference in the interpretation of the Plan proved to be a source of disagreement between SIDA and the project management.

SIDA then attempted to influence project implementation through the biannual reviews. During the first year and a half this influence was limited. Two reasons contributed to this situation. Firstly SIDA deliberately chose a low profile in its dealings with the Lao Government in order to avoid further stress on the somewhat strained relations over the entire programme of development co-operation at that time. Secondly, because of the absence of a formal monitoring system in the project, SIDA often lacked relevant information.

In the light of excessive procurement and the less successful specifications of equipment by the project management SIDA gradually felt a need to gain better control over events. However, mainly for psychological reasons financial discretion once given proved difficult to limit. Nonetheless SIDA pressed for changes and demanded detailed lists of planned purchases and SIDA approval of specifications as a means to achieve its ends.

This served the general purpose of control, but it had the striking disadvantage that SIDA often ended up in control of details, which at times was probably counterproductive. Also SIDA and its missions often lacked the technical competence for proper assessment of detailed proposals. Furthermore, SIDA's influence was to be exerted in relation to SIDA's somewhat ambiguous attitudes. More specifically, since it was unclear to what extent economic efficiency should be pursued, needs expressed by the project management were hard to assess.

Proposed investments and purchases were often judged on some vague consideration of whether they were "reasonable". The different professional orientation of the members of the SIDA missions (economists, foresters, etc.) led to rather different interpretations of what was "reasonable". One result of this situation was that SIDA may have been found inconsistent and unpredictable in the eyes of the project management.

Still it is clear that the demand for lists and specifications to be approved by SIDA meant a more concerted effort to influence project implementation. However, these efforts came at a time, when most of the crucial decisions for phase I were already taken.

#### ROLE AND EFFECT OF SANCTIONS

A cost/benefit analysis of the proposal for phase II of the Muong Nai project showed, that unless a very substantial part of the project output was exported, it would be hard to justify any further investments. On the basis of this analysis SIDA eventually decided to demand that a certain volume of logs had to be exported if a specified amount of the funds for phase II was to be released. In other words funds withheld were to be the sanction, if the demand was not met.

The use of sanctions was extensively discussed within SIDA and its Development Cooperation Office in Vientiane before being introduced. The problems foreseen were many. At one point several demands and several consequent sanctions were considered. This idea was abandoned, however, as the mere listing of demands and sanctions expressed as funds withheld (for each demand) made the whole scheme look absurd.

The definition of measurable and unambiguous demands proved to be another problem. Furthermore, it was unclear how fulfillment of certain demands was to be observed and established. The question of accountability was another difficult consideration. As marketing was beyond the control of the project management, the imposition of sanctions for failure to export would hit and demoralize the project management, which could, as we have pointed out above, hardly be blamed for the failure.



Nevertheless, SIDA made it a condition that 10 000 m<sup>3</sup> of logs would have to be exported directly or indirectly through Lao Plywood during the coming twelve-month period if the funds allocated, 18.6 million SEK, were to be released. This demand seemed simple and straightforward. Yet it was not.

During the biannual review in September, 1984, SFE 1 claimed to have delivered 10 000 m<sup>3</sup> to Lao Plywood during the preceding twelve-month period thereby meeting SIDA's condition. However, SIDA found out that only some 30 % of the deliveries to Lao Plywood had been exported. Therefore, SIDA argued that the condition had not been met, and consequently applied the sanction. As a concession and since some equipment had been destroyed, 5 million SEK out of the total amount of 12.6 million SEK were released, largely to compensate for the damages.

The effects of these sanctions are open to debate. So far there are no discernible effects. Lao Plywood has had neither the technical nor the marketing capability to increase exports. Higher authorities have not reacted by permitting SFE 1 to export logs. The future outcome is uncertain as well. The size of the Lao Plywood mill will require the delivery to this plant of all logs not only from SFE 1 but also from SFE 3, irrespective of whether processing will give a positive or a negative added value. For sawn wood the latter is most likely the case. Whether Lao Plywood will export its output will depend upon a number of other factors of considerably greater significance than any sanctions imposed by SIDA on SFE 1. The most important of these factors is the quality of the output, as was argued in chapter 6 above.

In this situation it is not entirely clear what was intended when the sanctions were imposed. Nor does it appear to be evident that it was a good idea to encourage deliveries to Lao Plywood when processing these means a negative added value.

It can probably be argued that the use of sanctions, in the form discussed here is based on the false assumption that it is possible to achieve rapid changes by exerting pressure. In the Laotian context, at least, this is questionable. In most situations a less provocative way of exerting influence

may be to accept that changes will take time, and to give assistance through short-term project agreements only to the extent that existing preconditions at each point in time make it meaningful.

A fruitful approach may be to work in conditions which allow for maneuverability in negotiations rather than with stipulated demands.

#### THE PROJECT FOCUS

A number of general project objectives were partly transformed into sets of physical targets and the achievement of these targets became the essence of development co-operation in the forestry sector. Decisions and actions were generally taken to satisfy ambitions at project level even when this resulted in a conflict with national concerns, as e.g. in the case of procedures for procurement. Partly for the same reasons cost/benefit calculations and the use of shadow prices (reflecting national concerns) tended to have less significance than calculations at the enterprise level using market prices and official exchange rates.

This project focus can be said to have largely characterized the co-operation in the forestry sector and has been as marked in the Lao Government as in SIDA.

The project focus in the Lao Government was reinforced by the organizational set-up for the coordination/utilization of Swedish assistance (the Lao/Swedish Committee), by the power relations in this committee and by the fact that the power centre in the committee represented a particular department (forestry). This was the situation at the time when critical decisions were made on the orientation of Swedish assistance. To the forestry department, sectoral rather than national considerations seemed relevant. Physical project performance which could give credit to the department was of paramount interest.





*This is highway no. 9 along which the forestry enterprises supported by SIDA are situated.*

*Photo: Kenneth Hermelin/SIDA:s bildarkiv*

The project focus within SIDA is partly explained by a reasonable ambition related to efficiency, measured as project output. This focus in principle implies a risk that national concerns, which would have retarded project implementation, are ignored. The project may thus unconsciously have served SIDA's ambition to exhaust the country frame, which despite official statements to the contrary is often seen to influence SIDA's actions. This suggests that the project focus is partly explained by an implicit 'turn-over' objective.

In the absence of 'countervailing powers' in the Laotian Government, the project focus became more pronounced in the Lao forestry programme than in many other SIDA-supported programmes.

#### ALTERNATIVE USES OF FUNDS

The selection of a sector for development co-operation is often the result of only a limited process of systematic

searching. Nor are there pressures on the donor agency to look for alternative uses of funds at each stage of investment or disbursement.

A project focus tends to further reduce or even to eliminate considerations on alternative uses of funds. Once funds are allocated to a project, it is almost certain that no one will ever consider whether this money could be spent more usefully outside the project. If the project fund is large and based on indicative estimates, as was the case for SFE 1, the problem that alternatives are not considered is likely to become particularly disturbing. The money is to be spent in the project and, at times, there may be a tendency to invent expenditure, in order to ensure that all the money is used. Particularly in the Muong Mai project this has been a problem and has resulted in excessive spending, which has had little to do with a commercially oriented operation. Put differently, the effects on cost consciousness may have been negative.

In the absence of a clear understanding of the relative importance of the different objectives for the forestry projects and/or an unwillingness to pursue the objectives in view of other considerations (not to reduce the spending rate, to avoid conflicts, to keep up the morale and the enthusiasm of project staff, workload, etc.) SIDA has often tended to accommodate firm requests from the projects. It is true that many have been turned down but it is also true that many requests, which have been considered excessive, unjustifiable and at times incomprehensible, have been accepted.



## CHAPTER 8 - ASSORTED LESSONS LEARNT

The following are some conclusions and lessons emerging from the missions work. Some are specific and well founded while others are of a general nature. They are offered here, not as recommendations, but simply as a sharing of lessons learnt that can serve as warning signals in future project work.

Generally, there is a conflict between short-term project efficiency, in terms of speedy implementation and level of output, and lasting improvements to the system in which the project operates. When the system is circumvented in order to achieve project efficiency, improvements to the system itself are likely to be delayed.

Allocation of large funds to projects on the basis of vague analysis and incomplete calculations of costs is often disastrous for cost consciousness. Spending to the ceiling may then become an objective in itself.

Donors should be aware of the potential dangers of a "project focus", where impatience to see a speedy project implementation leads to lines of action which are in conflict with national concerns. SIDA's active role in helping the projects to bypass rules for procurement and release of funds is a case in point.

The purpose of a project should be established as clearly as possible. Vague statements of objectives lead to a 'political' process in project implementation, where the choice and the design of activities, investment decisions, etc. tend to lead to negotiations on the basis of different interpretations of the objectives. Professional biases contribute to such differences. Where project objectives are vague and/or conflicting, SIDA should attempt to reach one interpretation and stick to that.



*Employee of one of SFE 1's nurseries.  
Photo: Mats Sundgren/SIDA:s bildarkiv*



The use of sanctions (funds withheld) as a means to influence project implementation brings with it a series of problems. Demands are difficult to define unambiguously and measurably and verification is difficult. To use sanctions within a 2-3 year period of project agreement is hardly advisable in the Lactian context, as major changes require considerable time to materialize.

A more attractive alternative to the use of sanctions may often be to identify which preconditions need to be met in order to justify different levels of involvement, and then to have the patience to render assistance only at the pace different preconditions evolve. Much frustration and misunderstanding might have been avoided, if SIDA had made greater efforts to map out the administrative setting of the forestry projects at an early stage.

When a consultant is used for long-term project implementation great care should be taken to make the role of the consultant clear. Close monitoring of the performance of the consultant during the first year is essential. In agreements SIDA should specify in detail how staff to be posted by the consultant should be trained.

In combined exploitation/afforestation projects the latter activity tends to be less successful. Not only is afforestation far more complex, but it is also less spectacular, requiring little investment and equipment. Management, therefore, tends to focus on exploitation.

A format for monitoring the implementation of each project should be made a standard part of the plan of operations. SIDA should make its information needs known, so that the monitoring system can be designed to satisfy these needs.

SIDA's ambitions to monitor and to influence an activity should be higher at the initial stage. To gain control once things go wrong is difficult.

The plan of operations is a critically important document. To the extent that it is specific, as it preferably should be, there is a danger that it will be taken as a blueprint for project implementation, so it is very important that the time schedule, etc. is realistic.

The characteristics of the personalities involved in projects may sometimes be more significant than technical aspects, in explaining the outcome of projects.

SIDA cannot usually assume the overall responsibility for a project. This must always rest with the country's own authorities.

New buildings do not bring development by themselves.

Maintenance is often regarded, erroneously, as synonymous with the existence of a workshop. Repairs and preventive maintenance should be able to take place without physical structures like workshops etc.

Training and education can also take place in simple buildings, or no buildings at all for that matter.

Success in a project is often more likely when the recipient country pays part of the project costs.

In some cases it would be an advantage to make decisions about project disbursements in steps instead of annually.

SIDA shouldn't go too far in compromises. Sometimes, going too far in compromises may not be the most useful solution for the project.



ANNEX 1 - PERSONS INTERVIEWED

- Mr Ashitomie, Construction Expert, SFE 1
- Gunnar Blychert, SIDA, Development Cooperation Office
- Dan Duan, Director, SFE 3
- Somphavan Inthevong, Vice President, National Planning Committee
- Oudone Kongxayasak, SFE 1, Silviculture Division
- Björn Kähr, Exports Advisor
- Carl Bertil Löstelius, SIDA-DCO
- Sumphorn Manodham, National Planning Committee
- Roland Offrell, Consultant
- Keukeo Siriphone, SFE 1, Cooperation Section
- Thongleua Southavilay, Director, SFE 1
- Onay Vongviengrham, SFE 1, Finance Section

## ANNEX 2 - REFERENCES

- Birgegård, Lars-Erik and Larsson, Katarina: Socio-Economic Study of Factors Influencing Labour Productivity in the Forestry Component of the Vinh Phu Pulp and Paper Mill Project in Vietnam, SIDA, January 1985
- Birgegård, Lars-Erik: Rapport från uppdrag i Laos, SIDA, September 1983
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- Kähr, Björn, Silviconsult Ltd: A Draft Proposal for the Further Development of Lao Export of Wood Products, Vientiane, March 1985
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TERMS OF REFERENCE FOR EVALUATION OF THE SIDA SUPPORTED  
FORESTRY PROJECTS IN LAOS TO TAKE PLACE IN FEBRUARY 1985Background

Swedish-Laotian co-operation in forestry started in 1977. In the beginning it consisted of import-support and consultancy studies. The first special agreement (SFE 1) was signed in 1979. Today the co-operation consists of the following separate projects:

	<u>Time-period</u>	<u>Amount \$K</u>
SFE 1 (Muong Mai)	1984-86	34.2
SFE 3 (Tha Bok)	1983-85	20.3
Ministry of Industries, Handicraft and Forestry	1984/85- 1986/87	28.5
Muong Mai Training Centre	1984	2.8
Muong Paksane Regional Project	1984	1.6

The first project (SFE 1) was not planned as thoroughly as is normally the case with SIDA projects. This was due mainly to difficulties in collecting background information. It was then envisaged that continuous adjustments should overcome any deficiencies in the first Plan of Operation. This, however, proved more difficult than originally thought.

Some of the problems encountered no doubt depend on SIDA's limited knowledge of the central planning system used in Laos, as well as on certain possible short-comings of this system. Nevertheless some of the mistakes which are now evident can perhaps be said to be inevitable in any new project.

The policy of the Laotian government with respect to the forestry programme is mainly to increase exports and to establish industries with wood as the main raw-material source. The forests are considered as one of Laos' most important national resources.

The forestry programme has so far not been evaluated in a more systematic way. However, program reviews have been undertaken twice a year since 1980. Special studies were also made in connection with the prolongation of the project in 1983.

The present evaluation will cover the entire forestry programme. In light of the above mentioned reviews and studies, and given the present state of affairs in the various projects it is proposed, however, that the main thrust should be aimed at the projects SFE 1 and SFE 3.

Preliminary Outline of the evaluation mission's work

- 1) Introduction. Description of the forestry programme and changes that have taken place over the years.
- 2) Define the existing goal hierarchy of the project and analyse any possible changes in it.
- 3) Assess achievements that have been made in the projects since the start of the co-operation (1977).
- 4) Discuss how the monitoring system has been functioning so far and how the present system could be improved.
- 5) Review the experiences regarding the various requirements and sanctions posed by the donor with respect to the conduct of the project.
- 6) Discuss the choice of technology. In tropical forestry it is often considered difficult to avoid high technology. According to the conventional wisdom, however, simple technology is considered more suitable for developing countries. An analysis of this question with special reference to the forestry sector of Laos would be of value not only for future programs but also for current investment decision.
- 7) Review how maintenance has been functioning. Lack of proper maintenance (especially preventive maintenance) often poses a serious problem in developing countries as it shortens the life-time of machines.



- 8) One basic objective of forestry programs is often that of rural development. The success in this respect so far does not seem impressive. Discuss the experiences gained from SFE 1 and SFE 3.
- 9) Conclude and summarize the success of the forestry cooperation. A review and discussion of the functioning of the price system and of the proper set of shadow prices will be called for as part of this evaluation.
- 10) Given the outcome of the above analysis the mission should assess the feasibility of continued Swedish support to the laotian forestry sector.
- 11) Conclusions and recommendations.

#### Other points

The mission is proposed to take place during 2 to 3 weeks in February 1985. It will consist of one economist and one forester plus two senior experts on Laos' general development as well as its forestry sector. The latter two will in a formal sense enter the mission in their capacities as resource persons and will therefore not be formally responsible for the conclusions and recommendations of the mission report.

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## FORESTRY IN LAOS

The SIDA-supported forestry programme in Laos has built up two functioning forestry enterprises from nothing, created roads and other infrastructure as well as a vocational training institute and a repair workshop. Whether this will be enough to establish a sustained forestry activity remains to be seen since no regeneration of forests has taken place. Too capital intensive equipment has been installed and the absence of export sales makes it a questionable investment in a national perspective, all according to this evaluation.

*Karlis Goppers*, economist from SIDA's Evaluation Section led the evaluation mission, which also consisted of *Reidar Petsson* from SIDA's Agricultural Division, *Seem Bo Bergström*, a Director of the Swedish Government's Forestry Administration and *Lars-Erik Birgegård*, agricultural economist, who participated as a resource person.

Sweden's bilateral development co-operation, handled by SIDA since 1965, comprises 17 program countries: Angola, Bangladesh, Botswana, Cap Verde, Ethiopia, Guinea-Bissau, India, Laos, Lesotho, Mozambique, Nicaragua, Sri Lanka, Swaziland, Tanzania, Vietnam, Zambia and Zimbabwe.

Each year about 30 of SIDA's over 200 projects are evaluated. Most of these evaluations are published in the Evaluation Series. Copies of the reports can be ordered from SIDA, S-105 25 Stockholm, Sweden.

