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**Institutional capacity development of the  
Shifting Cultivation Research Sub-Programme from  
1992 - 2000**

by

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## **1. INTRODUCTION**

An attempt has been made to measure the institutional capacity development of the Shifting Cultivation Research Sub-programme from 1992 to 2000 using the years 1992, 1996 and 2000 as benchmark points. The information of the first two years was based on an assessment done by the previous agricultural research adviser and the information on year 2000 was done by the present research adviser in co-operation with key staff. The years 1996 and 2000 were chosen as they represent the start and completion years of the present LSFP phase IV.

The result of this assessment, which presents a measure of the capability of staff in 1992, 1996 & 2000, is described in section 2. Section 3 subsequently deals with the different methods that have been used in building capacity and includes a description and analysis. Recommendations for future capacity building efforts finally are presented in section 4.

## **2. STAFF CAPACITY DEVELOPMENT**

The amount of staff and educational status of staff for 1996 and 2000 are compared in table 1 & 2. The total staff number decreased somewhat from 27 in 1996 to 22 in 2000 with the descriptive and experimental research unit mostly affected with a decrease of respectively 3 and 2 staff. (Table 1). In total 3 staff left the government or retired, 2 have been reshuffled within the government but are still working within forestry research, 1 person is doing a higher level study in Laos and 2 new staff have been appointed. Despite this reduction in numbers, most of the staff which were in place in 1996 are still working in the subprogramme at present.

**Table 1. Assignment of staff of SCRIP into different units in 1996 and 2000**

Unit/Responsibility*	1996	2000	Change
Management	2	1	- 1
Administration unit	6	7	+ 1
Experimental research unit	7	5	- 2
Descriptive research unit	7	4	- 3
Demonstration unit	5	5	0
<b>Total</b>	<b>27</b>	<b>22</b>	<b>- 5*</b>

\* 3 leave govt or retire, 3 reshuffle within govt, 1 leave for in-country study, 2 new staff assigned;

**Table 2. Educational level of staff of the sub-programme in 1996 and 2000**

Educational level*	1996	2000	Change
MSc	0	1	+ 1
BSc	1	0	- 1
High level	8	5	- 3
Medium level	15	13	- 2
Low level	3	3	0
<b>Total</b>	<b>27</b>	<b>22</b>	<b>- 5</b>

\* High level = Dong Dok forestry or Nabong agricultural college

Medium level = Regional agricultural and forestry school

Low level = No tertiary education

When comparing the educational level of staff in 1996 and 2000, the general education level has gone down somewhat due to leaving or reshuffling of staff with a higher education (Table 2). No new higher level staff has been assigned to the sub-programme. However the project director increased his level by attaining a MSc degree abroad and one staff completed a higher level education in Vientiane and returned to work at Thong Khang.

In annex 1 the capacity development of staff of the sub-programme is described. From this assessment it is clear that staff have increased their skills considerably over time. Progress has been made in most disciplines. Financial management and planning are now almost completely managed by Lao staff and staff capacity in using computers and writing reports in Lao language has increased tremendously. Good competence in field trial and descriptive research has been developed and appropriate methods for integration of on-farm research and extension as well as in socio-economic research have been developed. Staff are also more involved as resource persons for training's, study tours & visits and have increased their cooperation with research institutions within and outside Laos. Finally more and more students are doing studies and thesis work in Luang Prabang based on priority topics identified by the research station.

Constraints still remain plentiful and systematic planning, analysis and advanced report writing still require continued outside assistance. However most of the limitations are thought to be more related to hard working conditions and salary levels which require additional income sources in order to support livelihoods, than to a lack of capacity.

### 3. ANALYSIS OF METHODS USED IN STAFF CAPACITY DEVELOPMENT

Over time different methods have been used in building up staff capacity at SCRP. In annex 2, a comparison is made of the methods used during three periods: prior to 1992, 1992-6 and 1996 - 2000. This comparison shows that over time more and more diverse methods of capacity building have been applied. During 1996 - 2000 i.e., staff increased competence through the use of long-term in-country study, graduate study abroad and collaborative research, methods which previously have not been used. The most important capacity building methods for each of these periods as well as the experiences learned with each of them are described in tables 3 & 4. On-the-job training by long-term advisers and short-term in-country courses have been important means to increase staff capacity throughout the three periods. Study tours were important in the earlier phases while in-country long-term courses, recurrent training by consultants and collaborative research became more important later on.

**Table 3. The main capacity building methods used during three periods**

- 1992	1992 - 1996	1996 - 2000
On-the-job training by adviser	On-the-job training by adviser	On-the-job training by adviser
In-country short-term training	In-country short-term training	In-country short-term training
Foreign study tours	Foreign study tours	In-country long-term study
Foreign short term courses		Recurrent training by short term consultant
		Collaborative research

**Table 4. Experiences gained with different capacity building methods**

	Capacity building method	Experiences gained
1	On-the job training by long-term adviser	Effective as able to provide continuous support to staff. Lao/Thai language capacity essential
2	In-country short term courses	Good experiences and lot of capacity improvement. However only 1 staff got sufficient English capacity for study abroad. Training arrangement done at central level. This sometimes resulted in unclear selection of candidates and in competition between staff training & ongoing work
3	In country - Recurrent short term training by consultants or Univ.	Very effective if experienced consultants who speak local language can come on regular basis & train and support staff. Could be expanded to include a team of resource persons from university
4	In country -Collaborative research (students, Universities)	Got more important over time. Good experience with SLU cooperation and with MFS student inputs. Collaboration though requires a lot of support. Research is to be based on research priorities in Laos.
5	In-country long term studies	Good potential but not enough utilized yet. Need to explore possibilities of getting more staff enrolled at studies of Lao university and/or to develop special courses to increase educational level of staff.
6	Foreign study tours	Good for exposure to new ideas and to increase staff motivation, less so for transfer of new skills
7	Foreign short term workshops/courses	Limited used as English level is insufficient. Some staff trained on invitation from outside. These training's did not always match local needs. Need to find appropriate training in Thailand or Vietnam as done prior to 1992.
8	Foreign graduate training	Staff do not have enough technical and English competence to participate in BSc or MSc study. In the future with increased language competence it is expected to become more important.

#### 4. RECOMMENDATIONS

Most staff of the Thong Khang research station have a medium level education. Future capacity building should therefore initially focus on various means of training & study within Laos. Upgrading the educational level of researchers up to higher or BSc level at the National University is therefore essential, before participating in studies abroad.

English training should primarily focus on those staff with ability for training or study abroad and those with upgraded language skills should then get opportunity to participate in foreign courses or studies. It is essential to maintain a range of capacity building methods. For Thong Khang staff, the following methods of increasing staff capacity, ranked in order of importance, are thought to be important:

1. On-the job training by long-term adviser
2. In-country - long term studies
3. In-country - short term courses
4. In country - Recurrent short term training by consultants or Univ.
5. Foreign short term workshops/courses
6. Foreign study tours
7. Foreign graduate training
8. In country -Collaborative research (students, Universities)

#### Annex 1. Institutional capacity development of the Shifting Cultivation Research Sub-programme from 1992 - 2000

	Capacity in 1992	Capacity in 1996	Capacity in 2000
<b>Staff capability</b>			
Personnel management	Authoritarian management.  Staff waiting for orders.  No staff development plans	Head of Sub-programme very capable manager.  Delegation of responsibility to unit heads.	Head of sub-programme highly capable, increasing capability of the 4 heads of units
Accounting and budgeting	Controlled and managed by advisor.  Staff skills in budgeting absent.  Accounting procedures known, but not always adhered to.	2 staff capable, 3 have basic skills. Staff follow the regulations, although sometimes a bit late.  Advisor's assistance minimal.  Financial monitoring can be improved.	3 staff very capable, 3 have basic skills. Financial management improved. All staff can follow the financial routines affecting their work.
Planning and monitoring	Planning limited to aspirations, but with little idea of how to achieve the plans. Monitoring perceived as checking. Advisor driven.	5 staff can use logframe for planning, monitoring and reporting. Systematic evaluation of activities is still weak.	5 staff fully capable of using logframe. Limited adviser inputs required. Activity plans, monthly, quarterly and annual plans made by Lao staff. Annual plans are too detailed. Monitoring & evaluation improved but not yet regular and systematic.
Computer skills	One staff could use DOS based word processing programme in Lao.	4 staff: intermediate level,  8 persons: basic skills and  15 staff: no capacity	9 staff: advanced level,  1 staff: intermediate level,  3 persons: basic skills and  9 staff: no capacity
Secretarial skills	One person took care of all practical matters	4 admin staff capable (of typing) , but personal initiative often lacking (waiting for orders)	6 admin staff capable (of typing), other secretarial and translation capacities quite limited

Writing skills in Lao	Writing skills mostly limited to literacy; capability to put together succinct, well structured reports limited to one or two people.	About 5 staff can write reports reasonable well (Man : 2, Adm:1, Exp: 1, Descr: 1). Analytical skills could be improved. Attention to detail very often lacking.	8 staff have good capability (Man: 1, Adm: 2, Exp: 3, Descr: 1, Demo: 1)  7 staff have intermediate level skills (Exp: 2, Descr: 3, Demo:2) .  Analytical skills have improved
Writing skills in English	Not available	One staff capable of informal writing.	One staff capable of report writing in English
English comprehension and conversation <sup>1</sup>	3 staff intermediate level.  5 staff beginner.  10 staff no English skills.	2 person advanced level  1 person intermediate level,  11 staff beginner level  13 people with no skills	2 staff very advanced level (> 3 m study abroad)  2 staff advanced level  6 staff intermediate level  7 staff beginner level  5 staff no skills
Consideration to gender issues	Little awareness on importance of gender issues, 2 female field staff	Some awareness obtained amongst staff on importance of gender issues, but gender still understood as separate activity.  1 female research staff with basic skills	Staff capacity increased in promoting participation of men and women in on-farm research and studies. Specific gender studies and gender analysis performed by staff. Lao MSc gender study supported. Female regional short term consultants hired.  1 female research staff with intermediate research capability
Skills in field trial research	No skills	6 staff with good basic capability Analysis and reporting still weak	All 5 staff with good capability in implementing most research stages. Improved capability in :  <ul style="list-style-type: none"> <li>• formulating a focused research agenda,</li> <li>• on-farm trial farmer participation,</li> <li>• integration of research &amp; extension</li> <li>• data analysis, summarizing results over years &amp; writing reports,</li> <li>• organizing research workshops</li> <li>• being resource person for training/study tours</li> <li>• assisting in development of manuals &amp; basic translation</li> </ul>
Skills in descriptive research	Quite low level, confined to (illdesigned surveys). However, descriptive research is not a well defined discipline.	Skills still inadequate, but very much improved.  General understanding of analytical approaches has been achieved.	All 4 remaining staff capable of performing studies with support of consultant. One staff has advanced capacity, 3 staff intermediate skills. All have documented work in comprehensive reports. Improved capability in :  <ul style="list-style-type: none"> <li>• defining scope and conceptual framework of study</li> <li>• design and implementation of data collection</li> </ul>

			<ul style="list-style-type: none"> <li>analyzing and classification of data &amp; writing reports (with support of consultant or adviser)</li> <li>presentation at workshops</li> </ul>
Skills in demonstrations and training	Top-down approach. Often demonstration of unproven technology	Management of demonstration facilities OK but their use for demonstration should be improved. Little documentation of experiences learnt	Demonstration facilities maintained but little used except for student research. 3 staff have improved skills in supervision of Lao students. A lot of practical experiences gained and some capacity developed in documenting these in basic reports & extension pamphlets
<b>Methods and models</b>			
	Field trials methods  No proper methods introduced.  No training or reference material available.	Methods suitable for implementation described, but more background and theoretical material needed in Lao.	Field trial manual developed. Integrated on-farm research-extension methods for the uplands tested, developed and described. Increased use of farmer participatory methods in trials design & evaluation
Descriptive research methods	Some surveys conducted, but the methodology was inappropriate.	Surveys at field, farm, village, district and province level have been carried out. Methods of technology evaluation have been employed. Data collection methods consisted mainly of using pre-designed forms and questionnaires. Data was often collected without thinking for what purpose and how to use it.	Appropriate methods for each of the type of studies were developed, employed and described in a manual. More comprehensive and participatory methods of data collection were applied. More systematic methods of design, implementation and documentation were applied.
<b>Co-operation and institutional links</b>			
Co-operation with Target Areas	Much of the work previously carried out in BTK were implemented in the target areas (SFAs). However, this was largely because the former director and advisor moved to the SFA sub-programme.	Good co-operation established in field trials in 7 target areas. BTK staff and advisor had too little time to properly support all target areas. Target area staff skills in performing trials increased however links between research and extension were limited and farmer participation in trials was insufficient	Support limited to intensive work in two districts in LP. Integrated research and extension work focused on developing technologies for sloping land. Joint work with extension enable use of results in extension.
Research network in Laos	Some co-operation with Lao-IRRI upland project, mostly based on advisors' personal contact.	Co-operation with Lao-IRRI. Limited work with NARC and Livestock Department.	Intensive co-operation with Lao-IRRI & IBSRAM. Organized joint agro-forestry training for staff of different NAFRI-centres. Assisted in development of research strategy for FRC as the Thong Khang station is now part of FRC and NAFRI.
International links	No external links. International contact difficult because of restrictions, lack of telephone, etc	Assistance from Thai research organisations.	Close support from Chiangmai University (Fac. of Soc. Science). Collaborative research with SLU & ACIAR.. Access to e-mail & internet facilitates internal & external links

Input to extension	Carried out extension in 14 villages. Got considerable experience, although much of it clarified constraints rather than opportunities. Technology oriented extension.	Responsibility for extension transferred to the DAFOs and to the Extension Sub-programme. Some demonstration and training activities are retained at Ban Thong Khang Station. More reporting is needed.	Research results and extension recommendations formulated based on field trials in target areas and at station. Integrated research - extension work ongoing in two districts. Staff are requested as resource person for training's at Training Centre. Demonstration facilities at BTK. still maintained.
Links to educational institutions	Received trainees from Pak Xueang  Agricultural schools and Xieng Ngeun Forestry School	Co-operation with Pak Xuang Agr. School, Nabong, Dong Dok. Lao Ph.D. students from Australia, Germany, Thailand affiliated.	Continued co-operation with Lao institutions (thesis & practical work of students of agricultural schools & university). Increasing support to research by foreign students (MFS programme) and Lao MSc students. Research based on priority research topics identified by Thong Khang staff.

1 Beginner = completion of beginner 1-2 or pre-intermediate courses, Intermediate = completion of Intermediate 1-3 courses, Advanced = completion of EAP or advanced courses, very advanced = completion of > 3 months study abroad

## Annex 2. Capacity building methods used by SCRP during three periods

No	Capacity building method	- 1992	1992 - 1996	1996 - 2000
1	On-the job training by long-term adviser	Important; Three advisers employed for support on management, agriculture & socioeconomics	Important; One agricultural adviser.	Important; One agricultural research adviser
2	In-country short term courses	Important, mainly on technical topics, some project management, English & gender as well	Very important, mainly technical training, computer	Less important more oriented towards administrative skills: English, computer, finance, management but also gender
3	In country - Recurrent short term training by consultants or Univ.	No	Some training done by short- term consultants but this is not their main activity	Important. Training is main activity of consultants from Chiangmai Univ. & Royal Forestry Dept
4	In country - Collaborative research (students, Universities)	No	A number of MFS students do research	More important. More MFS students do studies. Studies linked to research priorities.  Collaborative research with SLU.
5	In-country long term studies	No	No	Important. Three staff do/did studies at Forestry or Agricultural college, one has returned to Thong Khang
6	Foreign study tours	Important, mainly agriculture	Important, mainly agriculture	Less important though trips linked with ongoing research
7	Foreign short term workshops, courses	Important, Technical training's in Thailand	Less important	Less important, mainly technical training's
8	Foreign graduate training	No	No	Important, but limited to 1 staff who completed MSc

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