

APPENDIX B DEMONSTRATION FARMS

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B-1 OBJECTIVES

The main objective of establishing demonstration farms was to test the assumptions in the livelihood model and options before resettlement activities are started. It is necessary to demonstrate and document carefully and precisely the livelihood model as actual field tests are carried out. This allows planners to understand problems and make adjustments to the livelihood model if necessary.

Two farms were established with different goals:

- The Demonstration Farm at Theun Duane (ca. 5 km by foot from Ban Sop On) was established to test the subsistence element through the trailing and demonstrating of the basic common components of the livelihood model. The general approach has been (a) establishing a range of crops and livelihood activities that are looked after by extension workers and advisors, (b) selecting successful crops for larger trail plots, and (c) the gradual introduction of successful crops to households with supervision.
- The Demonstration Farm and Nursery at Ban Nakai Neua was established to demonstrate extra (optional) income generating activities (herbs, mushrooms, handicrafts, NTFPs) of the livelihood model and to act as a nursery facility for rearing seedlings that will be needed for the actual resettlement.

The specific objectives are the following:

- Prove that selected soils on the Nakai Plateau could produce the commodities described in the SDP given the inputs; this has been proven and demonstrated;
- Monitor labor inputs as a basis for confirming the proposed plot size envisaged in the SDP, including the forestry element;
- Pilot sedentary (irrigation) farming with communities that only had previous experience with swidden cultivation;
- Establish a centre for production of seedlings for resettlement at Ban Nakai Neua.

B-2 SELECTION OF DEMONSTRATION FARMS

The rationale of choosing the Theun Duane site for the demonstration farms was:

- Typical selection that would reflect a realistic site for livelihood trials;
- Close to Ban Oudomsouk for year round easy access;
- Near the water sources;
- Above the highest reservoir level so that it can be sustained after impoundment;
- Areas containing damaged forest due to fire and shifting cultivation;
- Poor soils (acid, low nutrient, low infiltration, low humidity, etc.) where improvements require the testing of new techniques;
- Topography of the location is characterized by sloping land, terrace system construction is necessary to keep water and prevent erosion.

In addition to the above-mentioned points, the selection of Ban Nakai Neua also considered the fact that the village would only partially be relocated and that the site could serve as a permanent source of seedlings throughout the resettlement period. In addition, the nursery would be located beside the school in an attempt to involve school children in the improved livelihood model.

B-3 CONSULTATION PROCESS

The consultation process has been ongoing from the establishment of the farms. In the case of the Theun Duane Demonstration Farm, the three families were selected from Ban Sop On after village discussions over several months in 1996-1997 and a collective decision. Meetings were held with village leaders, technical advisors and NTEC and later a selection of three families representing different levels of income (high, middle and low) were selected. These families moved voluntarily with the consent of the village leaders of Ban Sop On and with the understanding of their relatives. The move itself was sanctioned by ritual specialists and a proper relocation and moving ritual was held involving relatives and other village members.

In the case of the selection of the site at Ban Nakai Neua, an agreement was worked out involving the district authorities, village leaders, school teachers and the villagers of Ban Nakai Neua. The community agreed to give land and to promise to supply able-bodied laborers and allow for the incorporation of activities (vegetable gardens and other aspects of the livelihood model) in the school curriculum.

B-4 FARM LAYOUTS

Figures 1, 2 and 3 on the following pages indicate the layouts of the two demonstration farms. On the basis of experience with numerous SE Asian projects, the area of land per household labor inputs was established by agricultural advisors at the Theun Duane Demonstration Farm location. The layout also depended on location of deciduous forests, indicating areas that would be good for vegetable growing and adjacent areas of pine, indicating areas of poor soils and potential forest plots.

Each family at Theun Duane Demonstration Farm was supplied with 0.5 ha of land, one house of 75 sq. m. with water tank of 1,250 liters and water supply system, two cows, two pigs, ample seeds and agricultural implements, kitchen apparatus for cooking, mosquito nets and bedroom furniture.

Figure 1: Layout of the Theun Duane Demonstration Farm

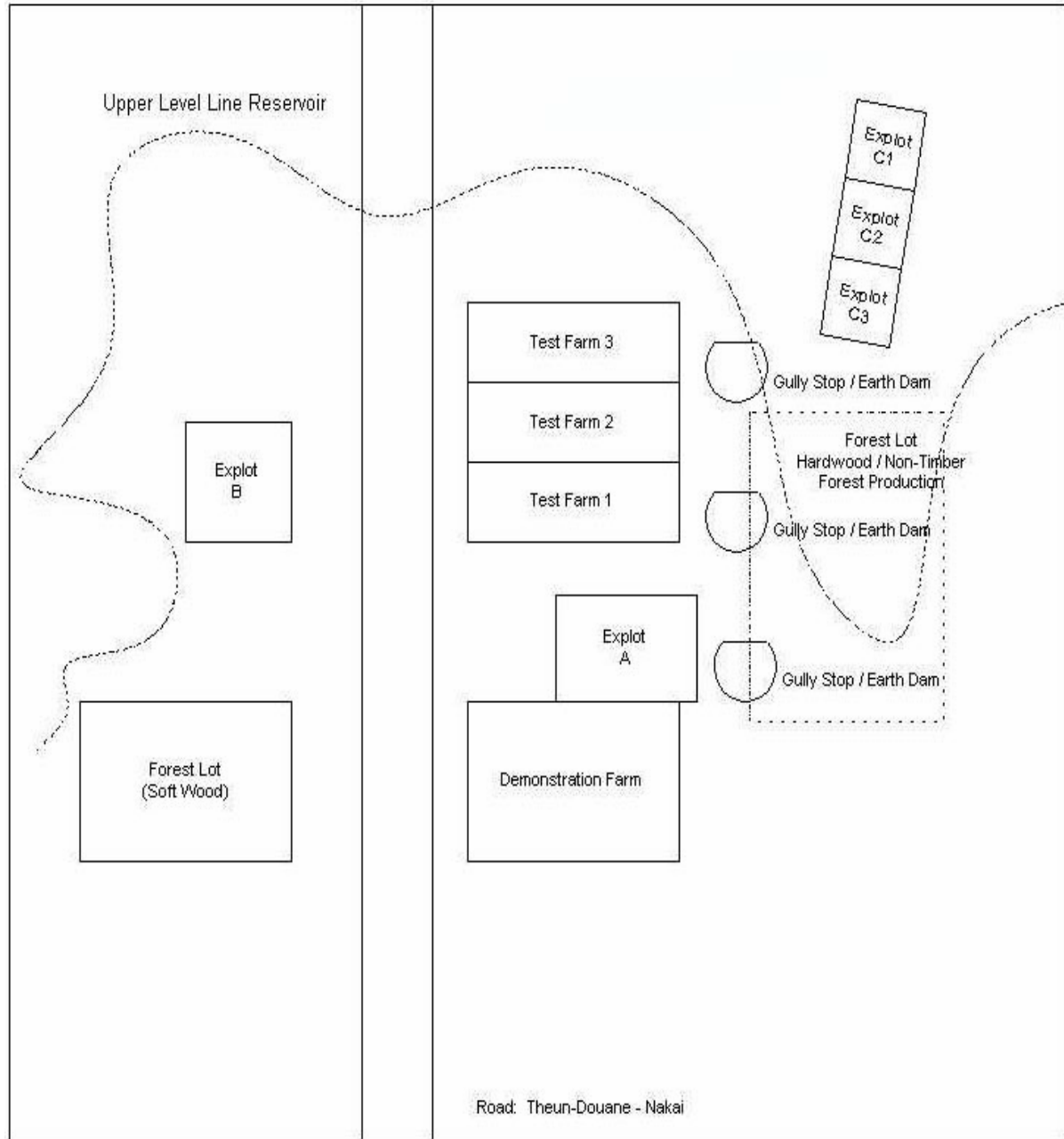


Figure 2: Detailed Layout of the Test Farms

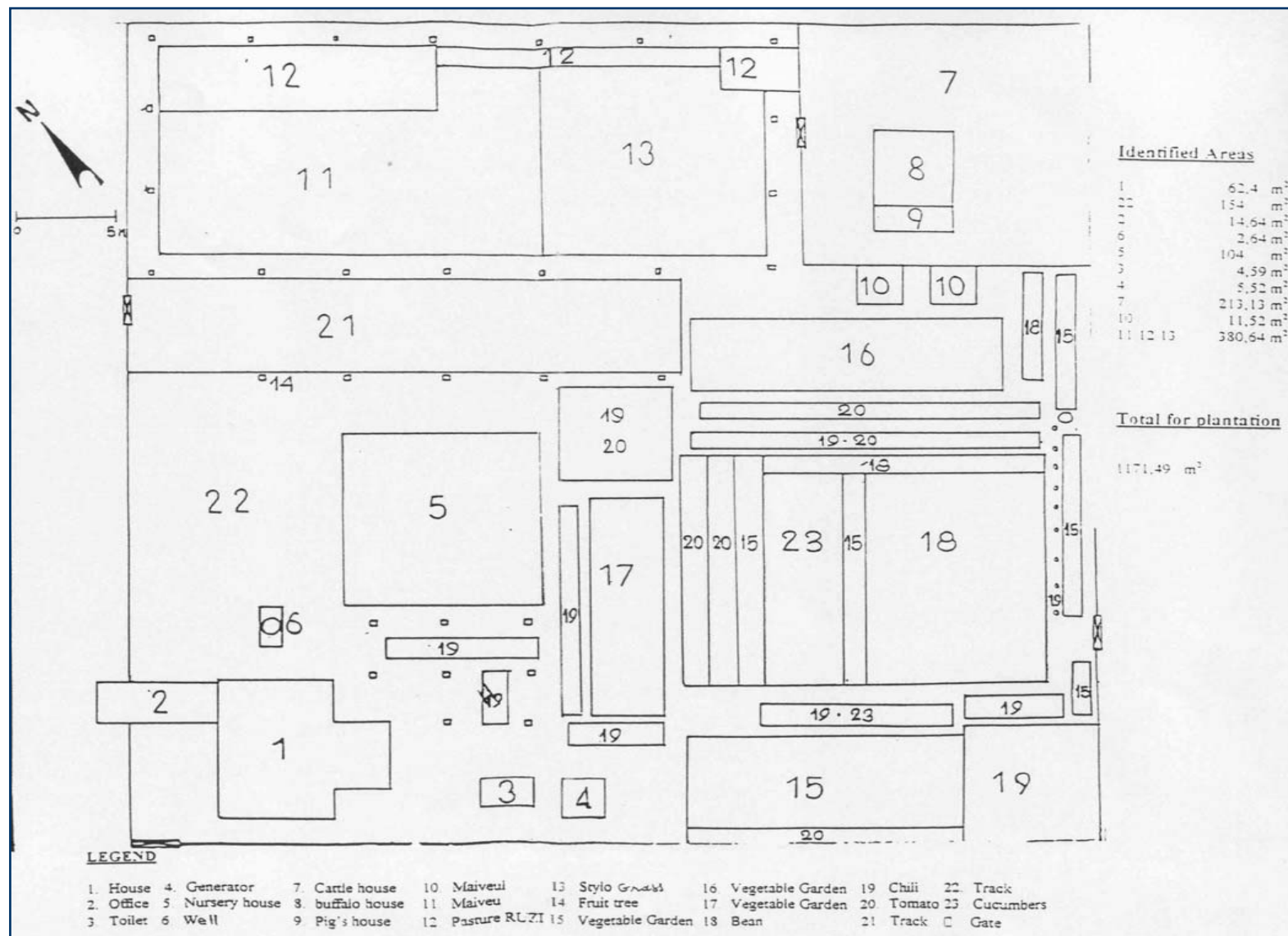
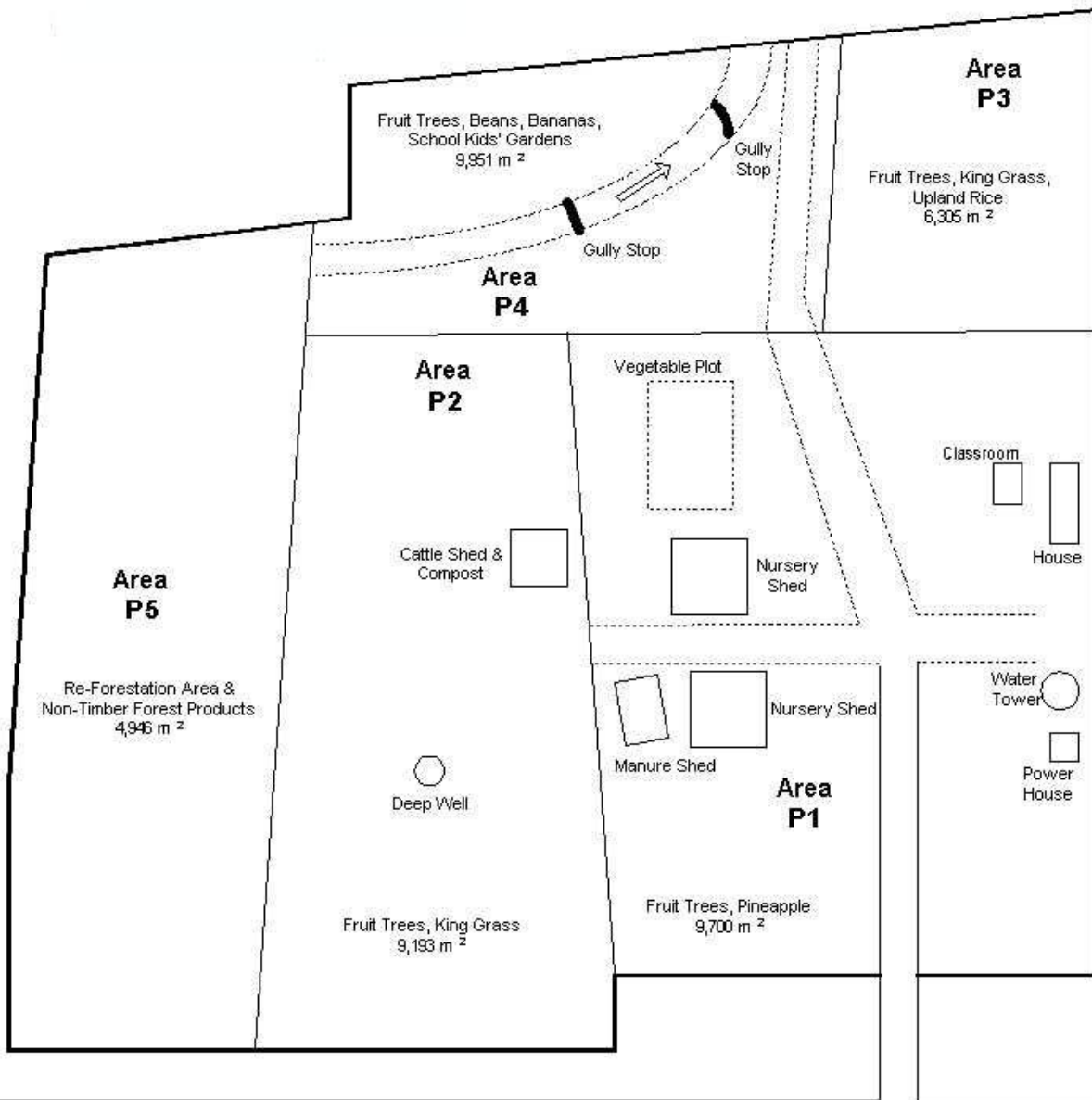


Figure 3: Ban Nakai Neua Demonstration Farm and Nursery Layout



B-5 DEVELOPMENT SCHEDULE

Table 1 outlines the main activities in establishing the demonstration farms and the stages of development. A more detailed overview of specific development activities related to the various elements in the livelihood model is presented in Tables 2 and 3.

Table 1: Overview of Development Schedule

Date	Activities
Nov-Dec 1996	Site selection for Theun Duane Demonstration Farm decided by physical conditions (water supply and representative soils) in co-operation with District authorities
Dec 1996- March 1997	Site clearing and preparation, erection of fencing and livestock shelters. Gully-stop dams for initial irrigation. Through local labor (food for work programme). Establish trial plots of a wide range of arable and tree crops that are applicable to the environmental conditions of the Nakai Plateau (continued throughout 1997) Ongoing training of extension workers (government and local consultants)
April 1997	Families moved to temporary shelters after consultations on the positioning of houses with families
May 1997	Construction of houses and moving in of families with appropriate rituals and celebrations
June 1997	Farmers planted traditional vegetables and crops of cassava, upland rice and other swidden crops after the ground was prepared (terraced)
Sept 1997	Assessment made of plant introduction trails and promising crops in farm-size trail plot and continued training of extension workers
Oct-Dec 1997	Introduction of cattle for three households at Theun Duane Demonstration Farm and emphasis on the manufacture of compost for arable crops
Jan-March 1998	Clearing and bunding for rice to be irrigated on typical soils above the Full Supply Level and bunding of valley bottoms in preparation for pond and pasture trials (later used for irrigated rice) Ban Nakai Neua Demonstration Farm and Nursery site cleared, terraced, fenced and training facilities erected, gully stops and piped irrigation systems installed, mushroom growing facilities set up, and livestock pens and compost bins established. Labor force recruited from young men and women from potential resettlers who were given employment and on-the-job training in the various technologies
April 1998	Fencing and weeding of forest plots (3 hectares per family) at Theun Duane Demonstration Farm Installation of pumped irrigation systems and potable water tube wells Local school children were involved in production of irrigated vegetables and terraces for sell in local markets at Ban Nakai Neua
May 1998- June 2002	Promotion of commercial vegetable production for selling in the market (sugarcane, chillies and other vegetables) as well as poultry Rice production in valley bottoms and limited swidden or upland rice production at Theun Duane Demonstration Farm Rearing of nursery seedlings for future distribution to resettled villages and well as selected activities at Ban Nakai Neua Demonstration Farm and Nursery
Jan 1999- June 2002	Extension of Agriculture production in neighboring villages to produce vegetables, irrigation improvements, distribution of seeds and tools by NTEC, training of model farmers as supervisors during the resettlement period, involvement of youth volunteers and ongoing evaluation of results

Table 2: Theun Duane Demonstration Farm Development Schedule

Activities	Responsible Parties	Time Fame					
		1997	1998	1999	2000	2001	2002
Farm Establishment	NTEC,Dist	■					
Land utilization	NTEC-3F	■	■	■	■	■	■
Vegetables	NTEC-3F, School, Villagers	■	■	■	■	■	■
Fruit trees	NTEC-3F, Villagers	■	■	■	■	■	■
Nursery	NTEC	■	■	■	■	■	■
Grass	NTEC-3F	■	■	■	■	■	■
Soil improvement	NTEC-3F, Villagers	■	■	■	■	■	■
Irrigation	NTEC-3F, Villagers	■	■	■	■	■	■
Ground water	NTEC	■	■	■	■	■	■
3 Pilot households	NTEC-3F	■	■	■	■	■	■
Terrace rice	3F	■	■	■	■	■	■
Seeds development	NTEC	■	■	■	■	■	■
Wet land rice	NTEC-3F			■	■	■	■
Upland rice	3F	■	■	■	■	■	■
Irrigated rice	NTEC-3F		■	■	■	■	■
Forest plantation (pine)	NTEC-3F, Villagers		■	■	■	■	■
Pig	NTEC-3F		■	■	■	■	■
Cattle	NTEC-3F		■	■	■	■	■
Training	NTEC, Villagers, Teacher, School, Youth		■	■	■	■	■
Study tour	NTEC, LWU, youth				■	■	■
Seeds distribution to villagers (sesame, millet)	NTEC, Villagers						
Evaluation workshop	NTEC-GOL RMU-VRC, LWU-Villagers					■	■

Table 3: Ban Nakai Neua Demonstration Farm and Nursery Development Schedule

Activities	Responsible Parties	Time Fame					
		1997	1998	1999	2000	2001	2002
Farm Establishment	NTEC, District	■					
Land utilization	NTEC	■	■	■	■	■	■
Vegetables	NTEC		■	■	■	■	■
Fruit trees	NTEC	■	■	■	■	■	■
Nursery	NTEC		■	■	■	■	■
Grass	NTEC	■	■	■	■	■	■
Soil improvement	NTEC	■	■	■	■	■	■
Irrigation	NTEC	■	■	■	■	■	■
Ground water	NTEC	■	■	■	■	■	■
Seeds development	NTEC		■	■	■	■	■
Upland rice	NTEC			■	■	■	■
Cattle	NTEC			■	■	■	■
Training	NTEC, Villager, LWU, Teacher, School, Youth			■	■	■	■
Study tour	NTEC, Villager, LWU, Teacher, School, Youth		■	■	■	■	
Evaluation workshop	NTEC-GOL RMU-VRC, LWU-VILL				■		■

B-6 RESULTS OF DEMONSTRATION FARMS

Rice Production

The yield per hectare has not been fully satisfactory in all cases with the possible exception for the intensive irrigated rice cultivation, being considered as acceptable despite it being lower than the average yields in the lowland regions of Khammouane Province and below the national average. Table 4 shows the average yields:

Table 4: Rice Yields at Theun Duane Demonstration Farm during 1999-2000

Rice Yields	Theun Duane Demonstration Farm	Lowland Khammouane Province	National Average
Wet season rice	1,000 kg/ha	2,680 kg/ha	2,920 kg/ha
Irrigated rice:	3,013 kg/ha	4,470 kg/ha	3,710 kg/ha
Upland rice:	1,276 kg/ha	1,220 kg/ha	1,650 kg/ha

One should be cautious in interpreting these results for a number of reasons since the rice has been grown on atypical land, that is on the valley bottoms instead on in terraces according to the livelihood model. Valley bottom locations were selected due to the ease of irrigation. However, such soils will eventually be below the Full Supply Level and, therefore, do not provide ideal conditions for fully testing the assumptions of the livelihood model. These results could be improved if there is better site selection and more intensive supervision by agricultural advisors.

Fruit Trees

Many fruit trees appear to be appropriate for cultivation in the area but in general it is too early to draw conclusions. Trees with promising results include mango, orange, leech, jackfruit, lemon and grapefruit. Less promising results have been obtained for tamarind, durian and mangosteen.

Vegetables and Other Cash Crops

Various vegetables have been successfully cultivated by villagers and some of the approximate yields are listed in the Table A-5 below with a comparison to national averages when available. The successful experiences will be further developed for introduction to the Pilot Village.

Table 5: Crop Yields at Theun Duane Demonstration Farm

Crop Type	Yields at Theun Duane Demonstration Farm	National Average
Banana	3,300 kg/ha/year	N.A.
Papaya	2,800-3,000 kg/ha/year	N.A.
Maize	6,000 kg/ha/year	2,000-2,500 kg/ha/year
Sugarcane	80,000 kg/ha/year	25,000-27,000 kg/ha/year
Sorghum	2,000 kg/ha/year	N.A.
Cassava	25,000 kg/ha/year	N.A.
Sweet potato	5,000 kg/ha/year	5,100-6,000 kg/ha/year
Millet	1,119 kg/ha/year	N.A.
Long bean	11,000 kg/ha/year	N.A.
Cucumber	20,000 kg/ha/year	N.A.
Cabbage	16,000-18,000 kg/ha/year	N.A.
Chinese cabbage	12,000 kg/ha/year	N.A.
Chinese kale	7,000 kg/ha/year	N.A.
Chinese radish	20,000 kg/ha/year	N.A.
Cauliflower	4,000 kg/ha/year	N.A.

Non Timber Forest Products

Rattan and cardamom have been planted, and it was found out that only rattan has given a reasonable return. For cardamom it may be too early to make conclusions. Other products are being tested at the Ban Nakai Neua Demonstration Farm and Nursery. Mushroom cultivation has been carried out in Ban Nakai Neua Demonstration Farm and Nursery with mixed results and work is still continuing. It will be necessary to establish links with work going on in the catchment area in this field.

Forestry

Pine and *Acacia* have been tested and it appears that only *Acacia* grows very well. Pines have been planted in the community forest area but are still small after a 3 year period. BPKP has also had experience with a pine plantation near Ban Oudomsouk. The results have not been promising due to a number of reasons, not least a lack of training and awareness for villagers and weak support for follow-up and monitoring.

Livestock

Livestock results have been good and the adjustment to fodder feeding has been highly successful. As can be seen from the income breakdown in the following section, the sale of cattle has contributed considerable to household income. The present status of the three families is listed in the table below.

Table 6: Livestock Status

Family Name	Period	Mature Buffalo	Small Buffalo	Mature Cattle	Small Cattle	Mature Pig	Small Pig	Mature Poultry	Small Poultry
Vanh	1997	-	-	2	-	2	-	-	-
	Sept 2001	1	-	4	2	-	1	5	-
Khamphou	1997	-	-	2	-	2	-	-	-
	Sept. 2001	4	3	5	3	1	2	3	3
Lae	1997	-	-	2	-	2	-	-	-
	Sept. 2001	-	-	3	2	-	-	5	4

All experimented grasses have grown very well. Very good yields have been recorded for the three species (Stylo, King and Ruzi) of about 49,000 kg/ha/year. Local cattle prefer the King and Ruzi species only.

B-7 HOUSEHOLD INCOMES

An analysis of household incomes reveals a 2000-2001 yearly average income per household of Kip 6.4 million, with little variation between the families. At an average Kip to USD exchange rate of about 8,200 for the period, the income equivalent would be US\$ 780. A note of caution on the incomes: the purpose of the demonstration farm is to demonstrate the feasibility of growing various agricultural products, as one of the components of the livelihood model. Therefore the demonstration farm incomes are not representative of what will be the ultimate resettlement experience. Two-thirds of income is derived from the Project for working on the demonstration farm (rice-for-work), while one-third comes from the sale and consumption of produce grown. This experience indicates that the rice-for-work component can be expected to be considerable during the first few years after relocation.

Table 7: Household Incomes of Theun Duane Demonstration Farm Families (in '000 Kip)

Family Name	2000			2001		
	Project Employment	Agricultural Income	Total	Project Employment	Agricultural Income	Total
Vanh	4,253	2,113	6,366	4,336	2,374	6,710
Khamphou	4,396	2,131	6,527	4,382	2,152	6,534
Lae	4,382	1,871	6,253	3,542	2,520	6,062

A further breakdown of the agricultural income, that is income that the families earn themselves, reveals that certain sources are becoming more important for earning cash. This is especially noticeable for livestock which made up nearly half of the agricultural income for two of the three families in the 9 months of data from 2001. Income from vegetable and fruits is also considerable, in spite of the fact that logging activity on the Plateau has subsided and hence the opportunity to sell vegetables and fruits to workers has declined. With most of the commercial timber in the reservoir area now gone, income from hunting and from the collection of Non-Timber Forest Products (NTFPs) has also declined as traditional sources of income. Since the demonstration farms are located further from the river as compared to the original village, the opportunity to fish has decreased; coupled with the workload on the demonstration farm, this has caused a reduction in fishing income. However, once the reservoir is established and the fish resource developed, income from fishing is expected to increase again. More detailed tables of the breakdown of income are presented at the end of this appendix.

Table 8: Sources of Agricultural Income (Incomes in '000 Kip)

Family Name	Year	Livestock	Vegetable	Fruit	NTFP	Fishing / Hunting	Rice	Total
Vanh	2000	340	277	7-2	-	614	180	2,113
	2001	1,260	228	712	-	174	-	2,374
Khamphou	2000	378	347	739	40	452	175	2,131
	2001	384	800	877	-	91	-	2,152
Lae	2000	343	276	767	40	330	115	1,871
	2001	1,550	301	669	-	-	-	2,520

B-8 LABOUR INPUT

The labour provided by the farm families is considerable when the inputs for all agricultural activities are added to the project employment on the demonstration farm.

Table 9: Person-days of Theun Duane Demonstration Farm Families

Family Name	2000			2001		
	# Days for Project Employment	# Days for Agriculture*	Total # Days	# Days for Project Employment	# Days for Agriculture*	Total # Days
Vanh	605	234	839	619	223	842
Khamphou	628	223	851	626	192	818
Lae	626	235	861	506	199	705

* Includes vegetables, fruit and rice.

Table 10: Person-days for All Agricultural Activities

Family Name	Year	Days for livestock	Days for vegetable	Days for fruit	Days for NTFP collection	Days for fishing & hunting	Days for rice	Total days
Vanh	2000	353	118	46	0	0	70	587
	2001	356	108	70	0	0	45	579
Khamphou	2000	361	120	35	2	55	68	641
	2001	365	119	25	0	15	48	572
Lae	2000	357	110	57	2	33	68	627
	2001	348	98	58	0	11	43	558

Notes: 1. Livestock is almost everyday in the year because the cattle are going out in the morning and return in late afternoon. They are taken care of by the children in each family. Sometimes the families have to go out to search for the cattle because some of them did not return for a couple of days. These days are added.

2. Since the start of growing rice in demonstration farms in irrigated paddy field area (Na nong Phong), the three families work together on this. On upland rice they work individually.

B-9 EVALUATION OF DEMONSTRATION FARM EXPERIENCES

Despite a short period of development the two farms have firmly concluded some results concerning the experimentation of agricultural production. The outcome is very clear regarding what is suitable or appropriate and what is not for vegetables, fruit trees, grasses and some other cash crops. These can be summarized as follows:

- Siting the home lot in the garden has led to very high labor efficiency. Each family has been able to keep its half hectare farm lot completely weed-free. On an additional quarter hectare per family (external to the farm lot), they cultivated paddy rice on available land, and still had more than one laborer available for employment in forests or other off-farm activities.
- Families at Theun Duane Demonstration Farm have demonstrated that they understand and can adopt the composting of animal wastes to maintain the productivity of the home-lot soils thus minimizing the need for importing chemical fertilizers. This is significant since swidden cultivators believe that you cannot utilize plots for more than one year in a seven to ten year cycle.
- Terracing and bunding have been completely effective in preventing soil erosion under intensive arable cultivation.
- Growth rate of both fruit trees and fast-growing timber plantations given proper care has been very satisfactory.
- The availability of hand-feed irrigated green forage in the dry season for cattle has led to greatly improved health and productivity of cattle.
- The important contribution of fencing has greatly reduced the labour requirement for animal husbandry and eliminated damage to crops by free-ranging animal stock.
- Given adequate attention to varietal selection of rice and irrigation techniques, there is every reason to believe that the estimates for rice production (see Chapter 21) can be attained and maintained.

B-10 EXTENSION EDUCATION AND TRAINING

Theun Duane and Ban Nakai Neua Demonstration Farms extension education and training program has focus on the following:

- Forest plantation;
- Wet land rice farming;
- Upland irrigation techniques;
- Vegetable and fruit cultivation; and
- Livestock management.

One of the difficulties in holding training courses at the Training Centre at Theun Duane Demonstration Farm is that the majority of farmers attending lectures and demonstrations are illiterate, with little experience and no or limited schooling. The demonstration plots of new techniques are an effective way of showing people that new techniques work such that all courses should consist of time on the farm and actual instructions with technical advisors in the fields.

B-11 OPINIONS OF THEUN DUANE DEMONSTRATION FARM FAMILIES

After 4 years of living at Theun Duane Demonstration Farm and working on the new livelihood, the three families' lifestyle has improved in many respects. They summarize experiences in the following manner:

- Food security is no longer a pressing concern since there is no deficiency in rice, the staple crop;
- Able to purchase better clothes;
- Reside in a sturdier and cleaner house;
- More opportunities for cash crops production and making money;
- Better overall health;
- Stable lifestyle with few risks (predictability);
- Ability to save money in order to buy luxury goods such as TV sets and other items.

B-12 CONCLUSIONS AND RECOMMENDATIONS

A number of general conclusions can be made along with recommendations based on the work at the demonstration farms since their inception in 1996-97:

- Consideration for enlarging existing home lot based on the successful results of the trails. Families at Theun Duane Demonstration Farm have demonstrated that they have more than sufficient labor to maintain, productive and weed-free, a three-quarter hectare irrigated home lot (vegetables, fruit and forage).
- The combination of animal fertilizer, terracing and bunding and irrigation has resulted in a sustainable agricultural regime within the managerial and labor-capacity of the resettled farmers once trained and experienced.
- Strong indications that increasing the amount of irrigation water delivered throughout the dry season could greatly increase (perhaps double) present levels of agricultural production given adequate trail of labor-saving irrigation options.
- Given a reliable year-round pumped irrigation supply, it should not be necessary to bear the cost of installing tube wells, provided that filters are installed.
- It took at least three years to convince people of the benefits of self-supporting sedentary farmers using irrigation – time frame is realistic in the SDP.
- Motivation factor: farmers respond positively to adopting new techniques once they have been convincingly demonstrated, with rigorous technical support applied in a culturally sensitive manner. Particular emphasis should be placed on the participation of the younger generation and women.
- Experimentation work must be maintained without a break, because it is fundamental to the success of the livelihood change and adaptation activities.

Table 11: Production Status - Family 1

Activity	Unit	Quant	Area (m ²)	Product		Consumption			Sold			New Receive		Dead	Balance
				(kg)	(kip)	(kg)	(head)	(kip)	(kg)	(kip)	(head)	(kg)	(Unit)		
Fruit tree	Tree	87	1,200												87
Banana	Tree	161	1,450	306	383,419	223		279,419	83	104,000					161
Pineapple	Tree	500	400	170	327,704	52		100,204	118	227,500					300
Tapioca	Tree	200	460	40		40									0
All Vegetables			200	256.5	149,374	157		91,374	99.5	58,000					200
Papaya	Tree	10	90	34	57,445	5		8,445	29	49,000					10
Guava	Tree			5	20,000	4		16,000	1	4,000					
Gathering	Kg														
Fishing	Kg			22	173,544	13		102,544	9	71,000					
Hunting	Kg														
Employment (rice)	Kg	619.5		1,239	2,478,000					2,478,000					
Employment (cash)	Kp	619.5			1,858,500					1,858,500					
General employment	Kp														
Animal shade	Sgm	1	225												225
Big buffalo	Head	0													0
Small buffalo	Head	2			1,000,000					1,000,000	1			1	0
Big cattle	Head	4													4
Small cattle	Head	1										1			2
Big poultry	Head	5													5
Small poultry	Head	0													0
Big pig	Head	1			260,000					260,000	1				0
Small pig	Head	2										2	1		1
Grass / Feed	Sgm		400												400
Total					6,707,986			597,986		6,110,000					
					6,709,986			6,709,986							

Family (1) Mr. Vanh
For January to December 2001

Total Member = 06
Man Labor = 02
Sub Labor = 01

Table 12: Production Status - Family 2

Activity	Unit	Quant	Area (m ²)	Product		Consumption			Sold kp			New Receive		Dead	Balance
				(kg)	(kip)	(kg)	(head)	(kip)	(kg)	(kip)	(head)	(kg)	(Unit)		
Fruit tree	Tree	107	1,200												107
Banana	Tree	143	1,359	260	457,285	115		202,285	145	255,000					143
Pineapple	Tree	550	300	280	420,000	40		60,000	240	360,000					850
Tapioca	Tree	876	1,970	57		57									1,594
All Vegetables			250	471	494,450	129		135,450	342	359,000					
Papaya	Tree	840	640	400	204,281	71		36,281	329	168,000			10		840
Guava	Tree	115	49	11	59,125	3		16,125	8	43,000					115
Gathering	Kg	10	90	25	41,676	8		13,176	17	28,500					10
Fishing	Kg			31	93,000	28		84,000	3	9,000					
Hunting	Kg														
Employment (rice)	Kg	626		1,252	2,504,000				1,252	2,504,000					
Employment (cash)	Kp	626			1,878,000					1,878,000					
General employment	Kp														
Animal shade	Sgm	1	225												225
Big buffalo	Head	4													4
Small buffalo	Head	4										3	1		3
Big cattle	Head	4													4
Small cattle	Head	4													4
Big poultry	Head	14			144,000					144,000	11				3
Small poultry	Head	43			35,000		3			35,000	9	43	28		3
Big pig	Head	1			185,000					185,000	1	1			0
Small pig	Head	6			20,000					20,000	1	6	5		0
Grass / Feed	Sgm		400												400
Total					6,535,817			547,317		5,988,500					
					6,535,817					6,535,817					

Family (2) Mr. Khamphou
For January to December 2001

Total Member = 06
Man Labor = 02
Sub Labor = 01

Table 13: Production Status - Family 3

Activity	Unit	Quant	Area (m ²)	Product		Consumption			Sold kp			New Receive		Dead	Balance
				(kg)	(kip)	(kg)	(head)	(kip)	(kg)	(kip)	(head)	(kg)	(Unit)		
Fruit tree	Tree	93	1,200												93
Banana	Tree	175	1,641	354	556,640	120		188,640	234	368,000					175
Pineapple	Tree	650	400	96	112,192	19		22,192	77	90,000					650
Tapioca	Tree	1,594	1,594	35		35									1,594
All Vegetables		250	150	184	176,292	84		85,092	90	91,200					150
Papaya	Tree	250	250	25	125,000				25	125,000					250
Guava	Tree														
Gathering	Kg														
Fishing	Kg														
Hunting	Kg														
Employment (rice)	Kg	506		1,012	2,024,000				1,012	2,024,000					
Employment (cash)	Kp	506			1,518,000					1,518,000					
General employment	Kp														
Animal shade	Sgm	1	225												225
Big buffalo	Head	1			1,250,000					1,250,000	1				0
Small buffalo	Head	0													0
Big cattle	Head	4											1		3
Small cattle	Head	2													2
Big poultry	Head	5					2								5
Small poultry	Head	4													4
Big pig	Head	2			300,000					300,000	2				0
Small pig	Head	1										1	1		0
Grass / Feed	Sgm		400												400
Total					6,062,124			295,924		5,766,200					
					6,062,124			6,062,124							

Family (1) Mr. Lae / Bouummy
For January to December 2001

Total Member = 06
Man Labor = 02
Sub Labor = 01



Photo 1: Theun Duane Demonstration Farm Plot



Photo 2: Nakai Neua Theun Demonstration Farm