PART I. FARMERS WHO RECEIVED TG-HDP RICE VARIETIES/TRAINING ON RICE PRODUCTION

Section 1. CHARACTERISTICS OF THE SURVEYED POPULATION

Tables 1 through 5 are frequency representations describing the surveyed population in terms of geographic and ethnic composition. A total of 103 farmers who had received inputs and training were included in the survey. They were approximately evenly divided between the two TG-HDP project areas of Wawi and Mae Hongson.

Table 1. DISTRIBUTION OF SURVEYED FARMERS BY PROJECT AREA

	Frequency Percent
TAMBON WAWI NAM LANG	54 52.4 49 47.6
	103 100.0

Table 2. DISTRIBUTION OF SURVEYED FARMERS BY ETHNIC GROUP

	Frequency	Percent
LISU LAHU AKHA KAREN THAI YAI THAI OTHER	11 35 23 13 18 1 1 2	10.7 34.0 22.3 12.6 17.5 1.0
	103	100.0

Table 3. DISTRIBUTION OF SURVEYED FARMERS BY VILLAGE

SAN CHAROEN KAO 4 3.9 SAN CHAROEN MAI 4 3.9 PHA DAENG MUSER 4 3.9 THUNG PRAO MUSER 3 2.9 THUNG PRAO KARIANG 2 1.9 PONG SALAM 3 2.9 HUEY KHRAI 3 2.9 HUEY NAM YEN 5 4.9 PHA DAENG LISU 7 6.8 DOI CHANG 2 1.9 HUEY PU 5 4.9 HUEY KI LEK MAI 1 1.0 WAWI 11 10.7 WANNA LUANG 3 2.9 MAE MU 4 3.9 NONG TONG 2 1.9 LUK KHAOLAM 5 4.9 SOB PONG 2 1.9 JABO 4 3.9	•
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SOB PONG 2 1.9 JABO 4 3.9	
JABO 4 3.9	
JABO 4 3.9	
TALLE DELL COLLEGE	
NONG PHA CHAM 4 3.9	
PANG KHAM NOI 5 4.9	
MAI HUNG 5 4.9	
MUANG PAM 5 4.9	
THAM LOD 5 4.9	
YAPANAE 5 4.9	
103 100.0	_

Table 4. DISTRIBUTION OF SURVEYED FARMERS BY EDUCATION LEVEL

		Frequency	Percent
NONE	\(\rangle \)	65	64.4
UNDER 4		19	18.8
4 YEARS	/	9	8.9
OVER 4 YEARS		8	7.9
		101	100.0

Table 5. DISTRIBUTION OF SURVEYED FARMERS BY AGE GROUP

	Frequency	Percent
20 OR UNDER 21 TO 40 41 TO 60	19 58 23	18.4 56.3 22.3 2.9
OVER 60	3 103	100.0

Most of the farmers were provided training on rice production at a hilltribe development center and the majority of the training occurred in April and May according to the respondants. It should be noted, however, that many of the respondants were uncertain as to exactly where and when they had received training on rice production. For that reason, the data in Tables 6 and 7 below are of questionable reliability.

Table 6. PLACE OF TRAINING ON RICE PRODUCTION

	Frequency	Percent
HILLTRIBE DEVELOPMENT CENTER PROVINCIAL AGRICULTURE OFF. LOCAL SCHOOL LOCAL TEMPLE NO ANSWER	45 16 7 4 31	43.7 15.5 6.8 3.9 30.1
	103	100.0

Table 7. MONTH OF TRAINING ON RICE PRODUCTION

	Frequency	Percent
NO ANSWER/DON'T KNOW	41	39.8
JANUARY	1.	1.0
MARCH	3	2.9
APRIL	17	16.5
MAY	21	20.4
JUNE	. 9	8.7
JULY	7	6.8
AUGUST	4	3.9
	103	100.0

Farmers were better able to recall the amount of rice seed they had received from TG-HDP or line agency personnel. (Table 8) In only four cases out of 103 was the survey unable to obtain satisfactory data.

Table 8. AMOUNT OF RICE SEED RECEIVED FROM TG-HDP

	Frequency	Percent
UP TO 10 KG	26	25.2
10.1 TO 20 KG	57	55.3
OVER 20 KG	16	15.5
NO ANSWER	4	3.9
	103	100.0

As would be expected of a population which had received training on rice through TG-HDP auspices, virtually all farmers reported knowledge of project activities. (Table 9) A very good sign that TG-HDP is not encouraging the farmers to become dependant on the project is that two thirds of the respondants said they got their knowledge of the project through government officials rather than TG-HDP staff. (Table 10)

Table 9. KNOWLEDGE OF TG-HDP ACTIVITIES

	Frequency	
NO KNOWLEDGE	2	1.9
HAVE KNOWLEDGE	71	68.9
NO ANSWER	30	29.1
	103	100.0

Table 10. SOURCE OF KNOWLEDGE OF TG-HDP ACTIVITIES

		Frequency	Percent
GOVERNMENT	SEEDS/TRAINING OFFICIALS	14 23 66	13.6 22.3 64.1
NO ANSWER		103	100.0

Section 2. RICE YIELD DATA

Tables 11 and 12 below shows the average yield per rai of the 9 farmers who had received inputs/training from TG-HDP and who had not yet harvested their crops. Table 13 shows the mean yield by ethnic group as well as the overall mean. The difference in yield between ethnic groups was not statistically significant (probably due to the small sample size).

It should be noted that these yield figures probably slightly overestimate the actual yields that would be recorded if the grain were weighed and measured after harvest by the farmer himself. This is because the measured results include virtually no post-harvest losses. Normally, farmers after cutting their rice leave it in the field for about two days to dry. During this time, birds, rodents and insects may eat part of the grain.

In addition, moving the grain, e.g., setting it out to dry, picking it up and moving it to the threshing area and moving it to the farmer's home, all involve movement and thus additional post harvest loss through shattering and/or dropped seed. The survey team, as noted above, threshed the grain without prior drying and was extremely careful not to lose any of the threshed grain.

Table 11. MEASURED RICE YIELD PER RAI (GROUPED)

		Frequency	Percent
50 TO 100 KG		2	1.9
101 TO 150 KG		3	2.9
151 TO 200 KG		2	1.9
OVER 200 KG		2	1.9
NOT MEASURED		94	91.3
	TOTAL	103	100.0

Table 12. MEASURED RICE YIELD PER RAI (UNGROUPED)

Value	Percent
	1.0
86	1.0
97	1.0
125	1.0
142	1.0
143	1.0
165	1.0
188	1.0
215	1.0
235	1.0
MEASURED	91.3
103	100.0
	86 97 125 142 143 165 188 215 235 MEASURED

Table 13. Crosstabulation: MEASURED RICE YIELD PER RAI BY ETHNIC GROUP

		Mean	Std Dev	Cases
For Entire Population	n	155.1111	50.6543	9
2 3	LAHU AKHA	189.3333 138.0000	25.0267 52.9226	3 6

Chi-Square Significance . 1639

The varieties of project-provided rice seed planted are shown in Table 18. Differences between this data and TG-HDP records on quantities of rice distributed are due to the fact that the table below is based on a random sample of the entire population receiving project rice.

Table 18. VARIETY OF RICE PLANTED

	Fr	equency	Percent
NAM RU		11	10.7
MOTOSA		5	4.9
CHAO HAW		35	34.0
SIEW MAE CHAN	Q	17	16.5
KO KHO 6, 7		7	6.8
NO ANSWER		28	27.2
	TOTAL	103	100.0

Table 19 below shows the history of the fields surveyed. There were no statistically significant differences in yields based on how many years previously a field had been used. This would seem to indicate that the farmers rotate to a new field not based on how long a field has been used but rather on how productive a field is. Possible implications for rice production development is that if a method can be found to keep a given

field fertile and producing well, farmers would not be inclined to open a new field.

Table 19. YEAR FIELD FIRST PLANTED (NUMBER OF YEARS FIELD PLANTED)

		Frequency	Percent
1986		61	59.2
1985		20	19.4
1984		6	5.8
1983		6	5.8
1982		2	1.9
1981		3	2.9
1980		3	2.9
NO ANSWER		2	1.9
	TOTAL	103	100.0

In observations of farmers' fields during the survey it was very difficult to distinguish between planting methods promoted by the project and traditional methods. That is to say, farmers' fields were all generally planted in rows. By observation it could not be determined with any degree of certainty which method was used in a given field. The data shown in Table 20 below is based on responses of farmers to a survey question on whether they used traditional or TG-HDP recommended methods. There were no statistically significant differences in terms of planting methods among tribes or project areas.

Table 20. PLANTING METHOD

	Frequency	Percent
TG-HDP RECOMMENDED METHOD TRADITIONAL METHOD	25 78	24.3 75.7
TOTA	և 103	100.0

Weeding is a very important factor in determining yields according to numerous agricultural experiments. However, the results of the survey show no significant correlation between the number of times a field was weeded and the yields as measured by the survey team. (Table 21) This result obtained in spite of the fact that there was considerable variation in number of times farmers weeded and in measured yields. Exactly how this finding should be interpreted or what it means in terms of project rice production activities is not immediately evident.

Table 21. NUMBER OF TIMES FIELD WEEDED

Times Weeded	Frequency	Percent
1 2 3 4 5 NO ANSWER/DID NOT WEED	5 40 49 3 2 4	4.9 38.8 47.6 2.9 1.9 3.9
	TOTAL 103	100.0

There were statistically significant differences among ethnic groups in number of times a field was weeded. (Table 22) This result appears to indicate that different tribes select fields where growing conditions are significantly different. That is to say, at least in the TG-HDP project areas, Akha and Karen farmers plant fields which require more than the average number of weedings. By extrapolation, it would be expected that those tribes which weed more frequently have less labor available for other project activities during the periods when rice fields are weeded. This should be considered in planning project activities.

A similar difference appeared between the two project areas. (Table 23) Farmers in the Wawi area needed to weed a third time much more frequently than in the Nam Lang area. Again, this would appear to have implications in terms of labor availability for project activities during the rice weeding season.

Table 22. Crosstabulation: NUMBER OF TIMES FIELD WEEDED BY ETHNIC GROUP
---- Part 1 of 4

TRIBE	Count Col Pct	LISU	LAHU	АКНА	KAREN	THAI YAI	Row Total
	1		5 15.2	Q-		তি বিশ্বৰ প্ৰথম পৰিচ পৰিচ পৰিচ বৰ্ষৰ প্ৰথম বিশ্বৰ বৰ্ষৰ	5 5.1
	2	6 66.7	12 36.4	26.1	3 23.1	13 72.2	40 40. 4
	3	3 33.3	15 45.5	17 73.9	9 69.2	3 16.7	49 49.5
	4		3.0	Y		1 5.6	3 3.0
(Continued)	Column Total	9 9.1	33 33.3	23 23.2	13 13.1	18 18.2	99 100.0

Table 22. (cont.) Crosstabulation: NUMBER OF TIMES FIELD WEEDED BY ETHNIC GROUP

--- Part 2 of 4

OTHER Count THAI Row Col Pct Total 1 5.1 40 40.4 2 49 100.0 49.5 4 3 1 100.0 3.0 Column 2 99 1 (Continued) Total 1.0 2.0 100.0

Table 22. (cont.) Crosstabulation: NUMBER OF TIMES FIELD WEEDED BY ETHNIC GROUP

				•		lait	3 OI 4
	Count Col Pct	LISU	LAHU	AKHA	KAREN	THAI YAI	Row Total
	5				7.7	1 5.6	·2 2.0
(Continued)	Column Total	9.1	33 33.3	23 23.2	13 13. 1	18 18.2	99 100.0

Table 22. (cont.) Crosstabulation: NUMBER OF TIMES FIELD WEEDED
BY ETHNIC GROUP

Count Col Pct	THAI	OTHER	Row Total
5			2.0
Column Total	1	2 2.0	99 100.0

Chi-Square Significance .0000

Table 23. Crosstabulation: NUMBER OF TIMES FIELD WEEDED BY PROJECT ARE Table 23. Crosstabulation: NUMBER OF TIMES FIELD WEEDED BY PROJECT ARE

----Part 1 of 2

- Part 4 of 4

	Count Col Pct	TAMBON WAWI	NAM LANG	Row Total
	1	3.7	3 6.7	5 5.1
	2	15 27.8	25 55.6	40 40. 4
	3	33 61.1	16 35.6	49 49.5
	4	3 5.6		3 3.0
(Continued)	Column Total	54 54.5	45 45.5	99 100.0

Table 23. (cont.) Crosstabulation: NUMBER OF TIMES FIELD WEEDED
BY PROJECT AREA

--- Part 2 of 2

Count	TAMBON	NAM LANG	Row
Col Pct	WAWI		Total
5	1 1.9	2.2	2 2.0
Column	54	45	99
Total	54.5	45.5	100.0

Chi-Square Significance .0281

The tables below (Table 24 - Table 32) show graphically the weeding patterns. Data is shown both grouped and ungrouped for first, second and third weeding followed in each case by the tools used for that weeding. There were no statistically significant differences in yields due to number of days or tools used in weedings. As mentioned above, this appears to be another example of just how finely attuned hilltribe farmers are to the productivity of their fields.

Table 24. FIRST WEEDING: DAYS AFTER PLANTING (GROUPED)

F	requency	Percent
1 TO 10 DAYS 11 TO 20 DAYS 21 TO 30 DAYS 31 DAYS OR MORE NO ANSWER/DID NOT WEED	13 31 40 15 4	12.6 30.1 38.8 14.6 3.9
TOTAL	103	100.0

Table 25. FIRST WEEDING: DAYS AFTER PLANTING (UNGROUPED)

Days				Frequency	Percent
6				1	1.0
7				2	1.9
8				1	1.0
10				9	8.7
15				16	15.5
17				1	1.0
20				14	13.6
21				1	1.0
22				1	1.0
25				6	5.8
28				1	1.0
29				1	1.0
30				30	29.1
35				1	1.0
36				1 /	1.0
37				1	1.0
40				3	2.9
45				8	7.8
60				1	1.0
NO ANSWER/DID	NOT	WEED		4	3.9
			TOTAL	103	100.0

Table 26. TOOLS USED FOR FIRST WEEDING

	Q F	requency	Percent
HOOKED KNIFE SMALL HOE HAND MACHINE NO ANSWER/DID NOT	WEED	65 31 2 1 4	63.1 30.1 1.9 1.0 3.9
	TOTAL	103	100.0

Table 27. SECOND WEEDING: DAYS AFTER FIRST WEEDING (GROUPED)

		Frequency	Percent
1 TO 10 DAYS 11 TO 20 DAYS 21 TO 30 DAYS 31 DAYS OR MORE NO ANSWER/DID NOT WEED)	3 23 44 24 9	2.9 22.3 42.7 23.3 8.7
	TOTAL	103	100.0

Table 28. SECOND WEEDING: DAYS AFTER FIRST WEEDING (UNGROUPED)

Ď	ays		F	requency	Percent
	7			1	1.0
	10			2	1.9
	15			10	9.7
	16			1	1.0
	20			12	11.7
	21			1	1.0
	22			ī	1.0
	25			8	7.8
	28			i	1.0
	29			ī	1.0
	30		,	32	31.1
	32				1.0
	35			$\begin{array}{ccc} & 1 & \\ & 1 & \end{array}$	1.0
	40			7	6.8
	42				1.0
	45			1 5 1	4.9
	50			Ī	1.0
	60			<u>-</u> 6	5.8
	75			1	1.0
	90			ī	1.0
NO	ANSWER/DID	NOT	WEED	9	8.7
			TOTAL	103	100.0

Table 29. TOOL USED FOR SECOND WEEDING

		Frequency	Percent
HOOKED KNIFE SMALL HOE CURVED KNIFE HAND NO ANSWER/DID NOT	WEED	59 31 2 2 9	57.3 30.1 1.9 1.9 8.7
	TOTAL	103	100.0

Table 30. THIRD WEEDING: DAYS AFTER SECOND WEEDING (GROUPED)

	Frequency Percent
1 TO 10 DAYS	9 8.7
11 TO 20 DAYS	11/ 10.7
21 TO 30 DAYS	18 17.5
31 DAYS OR MORE	15 14.6
NO ANSWER/DID NOT WEED	50 48.5
TOTAL	103 100.0

Table 31. THIRD WEEDING: DAYS AFTER SECOND WEEDING

Day	F	requency	Percent
7		2	1.9
10		7	6.8
14	Y	1	1.0
15		7	6.8
20		3	2.9
25		2	1.9
29		1	1.0
30		15	14.6
35		1	1.0
40		3	2.9
42	y	2	1.9
45		6	5.8
60		3	2.9
	ANSWER/DID NOT WEED	50	48.5
	TOTAL	103	100.0

Table 32. TOOLS USED FOR THIRD WEEDING

		Frequency	Percent
HOOKED KNIFE	,	31	30.1
SMALL HOE		17	16.5
CURVED KNIFE		5	4.9
SALT	EED	1	1.0
NO ANSWER/DID NOT W		49	47.6
	TOTAL	103	100.0

Use of fertilizer with rice has been proven in numerous experiments to improve yields. However, there is some question as to whether the hilltribe farmers would be willing and/or able to purchase fertilizer for rice. As shown in Table 33 below, less than 20% indicated they would purchase fertilizer for use on TG-HDP rice varieties. As the percentage who indicate verbally a willingness to buy fertilizer is probably higher than the number who would actually consummate the purchase, it would appear that there will not be significant use of fertilizer with rice varieties provided by TG-HDP. Based on this finding it is recommended that varieties selected by the project for promotion be varieties which do not require fertilizer inputs for satisfactory yields under hilltribe farming conditions.

0.34

Table 33. USE OF FERTILIZER

	O Y	Frequency	Percent
NOT USED		93	90.3
USED	/	8	7.8
NO ANSWER		2	1.9
	TOTAL	103	100.0

Table 34. ABILITY/WILLINGNESS TO PURCHASE FERTILIZER IF RECEIVE TG-HDP SEED

		Frequency	Percent
NOT PURCHASE PURCHASE NO ANSWER		81 20 2	78.6 19.4 1.9
	TOTAL	103	100.0

Crop protection is an area where increased TG-HDP intervention would seem to be appropriate. As shown in Table 35 below, over 70% of farmers reported problems with disease, insects or other crop pests. By far the most important pests reported were ground insects and animals. (Table 36)

The survey found, however, that another group of crop pests were quite widespread rice disease. In addition, few farmers were particularly concerned with the disease unless it actually killed the rice plant or very obviously reduced yields. Among the diseases identified by the survey are: blast (Pyricularia oryzae cavara), brown spot (Helminthosporium oryzae Breda de Heam) and narrow brown leaf spot (Cercospora oryzae Miyake). Identification of the diseases was made using FIELD PROBLEMS OF TROPICAL RICE. Revised Edition, published by the International Rice Research Institute, 1983. As the survey team did not include a plant pathologist, these identifications must be regarded as tentative.

As seen in Table 37, only a very few farmers used pesticides. The survey team does not recommend widespread indiscriminant use of pesticides. However, it is recommended that a plant pathologist take a close look at rice disease

problems and recommend which pesticides/fungicids would be most efficient in terms of increasing yield.

As noted above, farmers are quite aware of how their rice is growing and how traditional factors such as weeds affect yields. They appear, however, not to be equally aware of the benefits of judicious use of pesticides. To this end, it is recommended that TG-HDP, following the evaluation and recommendations of the plant pathologist, conduct training for farmers and provide pesticides on a demonstration basis.

One word of caution. The survey team has observed use of pesticides in other highland areas by "trained" farmers. In many cases proper safety precautions were not observed. In addition, understanding of how to use specific chemicals appeared to be insufficient. If pesticides are introduced into the TG-HDP program, it is imperative that sufficient initial training - and follow-up training - be provided and that close observation of farmers using pesticides be accomplished by project personnel or line agencies.

Table 35. PROBLEMS WITH CROP PESTS

		Frequency	Percent
NO PROBLEMS HAVE PROBLEMS		28 75	27.2 72.8
	TOTAL	103	100.0

Table 36. NATURE OF CROP PEST PROBLEMS

	Frequency	Percent
DIED, CAUSE UNKNOWN WHITE/YELLOW LEAVES, DIED	8 6	7.8 5.8
ANIMALS/ABOVE GROUND INSECTS UNDERGROUND INSECTS	47 9	45.6 8.7
APHIDS ROTTING	1 2	1.0
NO ANSWER/NO PROBLEMS	30	29.1
TOTAL	103	100.0

Table 37. USE OF PESTICIDES

		Frequency	Percent
NOT USED USED		1 95 7	1.0 92.2 6.8
	TOTAL	103	100.0

Section 3. FARMERS' ATTITUDES

One measure of the success of rice varieties introduced by the project is the farmers' assessment of how well TG-HDP yields compare to the yields achieved with local varieties. Table 38 shows that the surveyed population was almost equally divided in opinion as to whether TG-HDP varieties were superior to local varieties or not. As this survey was conducted by an independent team rather than TG-HDP or government officials, the potential for bias in favor of rating TG-HDP yields higher is reduced.

Table 38. FARMERS' ASSESSMENT OF TG-HDP VS. LOCAL VARIETY YIELDS

		Frequency	Percent
LOCAL VARIETY HIGHER EQUAL TG-HDP HIGHER NO ANSWER		25 35 33 10	24.3 34.0 32.0 9.7
	TOTAL	103	100.0

Another measure of acceptance of the TG-HDP introduced varieties is farmers' desire for the project seed. As seen in Table 39 below, over half the farmers surveyed desired to exchange seed for the new varieties.

Table 39. FARMERS' DESIRE TO EXCHANGE FOR TG-HDP RICE SEED

	Frequency	Percent
DO NOT DESIRE DESIRE TO EXCHANGE	46 57	44.7 55.3
	TOTAL 103	100.0

Among reasons expressed by farmers desiring to exchange for TG-HDP rice are the following: (1) desire to test the new variety themselves, (2) TG-HDP rice is as good as local rice (inter-village exchange of equal rice varieties is a hilltribe tradition), (3) TG-HDP rice yields better and (4) exchange because other villagers are doing so. (Table 40) The only statistically significant difference between groups was among tribes. The most frequent reason expressed by Thai Yai was to try a new variety, while Lisu merely wanted to exchange for

another equally good rice stock. Karens and Akha were interested most in improved yields. (Table 41)

Table 40. REASON FOR DESIRE TO EXCHANGE FOR TG-HDP RICE VARIETY

	Frequency	Percent
TRY NEW VARIETY USE DIFFERENT VARIETIES EARLY YIELDS FOLLOW NEIGHBORS EXAMPLE BETTER YIELDS NO ANSWER	19 4 11 1 12 56	18.4 3.9 10.7 1.0 11.7 54.4
TOTAL	103	100.0

Table 41. Crosstabulation: REASON DESIRE TO EXCHANGE FOR TG-HDP RICE VARIETY BY ETHNIC GROUP

Count Col Pct	LISU	LAHU	AKHA	KAREN	THAI YAI	Row Total
TRY NEW VARIETY	20.0	37.5	4 36.4	2 40.0	5 62.5	19 40. 4
USE DIFFERENT VARIETY	2 40.0	6.3	9. 1			4 8.5
EARLY YIELDS	20.0	31.3	2 18. 2	20.0	2 25.0	11 23.4
FOLLOW NEIGHBORS	4					2.1
Column (Continued) Total	5 10.6	16 34.0	11 23.4	5 10.6	8 17.0	47 100.0

Table 41. (cont.) Crosstabulation: REASON DESIRE TO EXCHANGE FOR TG-HDP RICE VARIETY BY ETHNIC GROUP

--- Part 2 of 4

--- Part 3 of 4

--- Part 4 of

Count Col Pct	THAI	OTHER	Row Total
TRY NEW VARIETY	1 100.0		19 40. 4
USE DIFFERENT VARIETY			8.5
EARLY YIELDS			11 23.4
FOLLOW NEIGHBORS		100.0	2.1
(Continued) Column	1 2.1	2.1	100.0

Table 41. (cont.) Crosstabulation: REASON DESIRE TO EXCHANGE FOR TG-HDP RICE VARIETY BY ETHNIC GROUP

	Count Col Pet	LISU	LAHU	AKHA	KAREN	THAI YAI	Row Total
BETTER Y	IELDS	20.0	25.0	4 36.4	2 40.0	1 12.5	12 25.5
(Continued	Column) Total	5 10.6	16 34.0	11 23.4	5 10.6	8 17.0	47 100.0

Table 41. (cont.) Crosstabulation: REASON DESIRE TO EXCHANGE FOR TG-HDP RICE VARIETY BY ETHNIC GROUP

	Count Col Pet	THAI	OTHER	Row Total
BETTER	YIELDS	5		12 25.5
	Column Total	1 2.1	1 2.1	47 100.0

Chi-Square Significance .0001

Reasons farmers did not want to exchange included: (1) TG-HDP was considered to be of lower quality than local rice, (2) local rice was considered to be more tasty, (3) some farmers already had TG-HDP rice so did not need to exchange, (4) others did not know if TG-HDP is as good as local varieties (with the implication that they were not willing to experiment with an unknown variety) and (5) TG-HDP introduced varieties have a shorter growing season and ripen earlier than local varieties and so are attacked by insects, birds and other pests more than local varieties. (Table 42) As so few farmers indicated a reason for not desiring to exchange, meaningful analysis of differences among groups was not possible.

Table 42. REASON DO NOT DESIRE TO EXCHANGE FOR TG-HDP RICE VARIETY

	Frequency	Percent
BETTER TASTE YIELDS SAME HAVE TG-HDP VARIETY UNSURE OF QUALITY EARLY YIELD PESTS NO ANSWER	2 3 8 1 4 85	1.9 2.9 7.8 1.0 3.9 82.5
	TOTAL 103	100.0

As part of an overall assessment of TG-HDP rice production activities an abbreviated attitude survey was accomplished to determine villagers' feelings toward the advice and counsul provided by the project staff and line agency personnel working in the project area. (This question looked at advice only, and does not include attitudes toward project-provided inputs which are dealt with elsewhere in this report. The results were very

encouraging as the great majority of responding farmers found the advice helpful. (Table 43) To paraphrase a familiar quotation, "TG-HDP must be doing something right."

Table 43. BENEFIT OF TG-HDP ADIVICE ON RICE PRODUCTION

		Frequency	Percent
NOT HELPFUL HELPFUL NO ANSWER		12 85 6	11.7 82.5 5.8
	TOTAL	103	100.0
			2