TIP 2000-01

Targeted Inputs Programme

Food Production and Security

Module 1

Dr Pickford K. Sibale (team leader)

Dr A.M. Chirembo, Dr A.R. Saka and Mr V.O. Lungu

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Introduction

The 2000-01 TIP campaign, which is a follow-up on the Starter Pack (SP) campaigns of 1998-99 (SP1) and 1999-2000 (SP2), intended to provide 1.5 million smallholder rural households with one Starter Pack containing 0.1 ha-worth of fertiliser, an open pollinated variety maize seed and legume seed in time for the start of the rains in the 2000-01 cropping season. The main objective of the TIP campaign was to increase household food security and it was envisaged as a programme that transfers resources to poor households in Malawi.

The Evaluation Programme for the 2000-01 TIP comprises a set of five modules, of which Module 1 is an integral component. The Food Production and Security module was designed to provide forecasts on TIP's contribution to national food production, as well as to show how the inputs contained in the TIP packs were used. It was also designed to evaluate the contribution of SP2 to household food security, and compare the expected food production of TIP recipients with that of non-recipients.

The approach followed by Module 1 of the 2000-01 TIP Evaluation was the same as the one used for evaluating SP2. At the centre of this approach is the idea of triangulating results from different methods to arrive at trends and orders of magnitude when assessing the impact of TIP. The different methods that have been used include:

- year-to-year comparisons;
- comparisons between TIP recipients and non-recipients or between SP2 recipients and non-recipients; and
- farmers' perceptions and experiences.

The food production and security survey has provided evidence on the following:

- estimates of staple food production in the 1999-2000 crop season;
- production forecasts for 2000-01;
- months of household maize self sufficiency and food security between the 2000 harvest and March-April 2001;
- use of TIP inputs, and, if they were not used as instructed, why not;
- how the use of inputs was affected by the delivery of the packs, especially the timing of the delivery;
- what proportion of the farmers' total inputs came from TIP as compared with inputs from other sources;
- farmers' perceptions on the state of their maize and legume crops, including the perceived reasons for the condition of the crops; and
- whether farmers received and understood the leaflets accompanying the packs.

The Module 1 study was contracted out to a team of consultants based at Chitedze Agricultural Research Station, who worked hand in hand with the Statistical Services Centre (SSC) of the University of Reading in the UK in the design of the survey, data entry and the overall management of the consultancy. Data analysis, interpretation and report writing was the sole responsibility of the consultants.

Methodology

Sampling

Given that the administration of TIP 2000-01 was conducted by District Assemblies, rather than the Agricultural Development Divisions (ADDs) as was the case in the second year of the Starter Pack programme in 1999-2000, we chose to use the districts as the basis for our sampling scheme.

The sampling scheme used 27 strata, each stratum representing one of the 27 districts of Malawi. Within each stratum, a 2-stage sampling scheme was used to randomly select 4 villages (1st-stage sampling) and 30 households (2nd-stage sampling). The selection of villages was limited to those with more than 40 households and less than 250 households. This was done to exclude small villages, where we could not get enough respondents, and large villages, where we could have spent a disproportionately long time just to complete the household listing form for each village. This limitation on village size was based on our assumption that the receipt and use of TIP packs would not be affected by the size of the village.

For each village, a Household Listing Form (HLF) was completed on which all the household members were listed and 15 TIP recipients and 15 non-recipients were randomly selected for interviews (see **Appendix 1**). The Household Questionnaire (HQ) was administered to all the 30 selected households, with the 15 TIP recipients also answering the Individual Questionnaires (IQ). Where we had more than one TIP recipient per household (which was rare in TIP 2000-01), then more than one IQ was completed. The head of the household was interviewed, or a spouse in their absence. Copies of the questionnaires can be found in **Appendix 2**.

The sampling frame used was the TIP Logistics Unit's Register of Recipients for SP2. For each district, a big effort was made to cover all the 4 villages as originally selected. However, 2 replacement villages were used because of impassable roads in some flood-affected districts, especially in southern districts of Nsanje and Chikwawa. A total of 108 villages and 3030 households were visited by this survey.

Questionnaire design

We designed and administered three different instruments to obtain information on food production and security under the second year of the Starter Pack programme in 1999-2000 (SP2) and food production forecasts under TIP.

The design features were arrived at in joint discussions between consultants and the managers from the Statistical Services Centre (SSC) of the University of Reading, UK. These were based on selected and modified questions from Modules 1 and 2 of the SP2 Evaluation and on our Terms of Reference (see **Appendix 3**). The three instruments used were: the Household Listing Form (HLF), the Household Questionnaire (HQ) and the Individual Questionnaire (IQ). The main sections for each questionnaire are shown in Box 1.

Box 1: Main sections of the information collection instruments

1. Household Listing Form

Total number of households
Number of households that received a TIP pack
Number of households that did not receive a TIP pack
Number of female headed households
Number of male headed households
Distance from the distribution centre (km)
Date of distribution (day/month/year)
Whether the date of distribution was changed or not

2. Household Questionnaire

Part A
Whether or not the household received a TIP pack
Whether or not the household used contents of the TIP pack, even if they did not receive a pack
When rains first came in 2000-01 season
When the first rains normally come

Part B
Basic characteristics of the sample population, i.e. inheritance pattern, sex, age, marital status, household size, language, land owned and cultivated, etc

Part C (Wealth/poverty indicators)
Livestock and other household assets
Sources of cash income

Part D (Production)
Food production in 1999-2000 under SP2
Food production forecasts in 2000-01 under TIP
Main household staple
Whether or not they received SP2 in the 1999-2000 crop growing season

Part E (Food self-sufficiency and security)
Food self-sufficiency and food security under SP2
Sales and purchases of food between the 2000 harvest and March-April 2001
Whether the household received any food from government-aided programmes, from relatives or through ganyu labour
Whether the household used any coping strategies to survive food shortages

3. Individual Questionnaire

Part A
Basic characteristics of the sample population, limited to age and sex of recipient

Part B (Timeliness of pack delivery)
When the farmer planted his/her maize in the 2000-01 crop season
When the household received the TIP pack
When the farmer planted TIP maize
The farmer's perception of the distribution time for TIP packs
Preferred month for receiving the TIP pack

Part C (Content of the pack)
Whether the "mother bag" containing the TIP inputs was tampered with
The farmer's perception of the quality of the TIP inputs

Part D (Use of the inputs)
Whether the farmers planted the maize/legume seed and, if not, what they did with it
Whether the maize/legume was planted as recommended
Whether the fertiliser was applied as recommended
The proportion of maize/legume/fertiliser used on the household farm (to determine the contribution of TIP inputs in relation to inputs from other sources)

Part E (OPV)
Questions designed to assess whether the farmer knew that open pollinated variety (OPV) maize was given out in 2000-01 instead of hybrid maize

Part F (Assessment of harvest)
The farmer's assessment of his/her expected harvest for the 2000-01 crop season

Part G (TIP leaflet and extension)
Whether farmers followed the instructions in the leaflet which came with the TIP packs
Whether farmers made any contacts with the field assistant
Whether farmers visited a field demonstration site
Whether farmers received the HIV/AIDS messages included in the TIP pack.
Whether farmers received a condom with the pack

Pre-testing, amending and translating the questionnaires

The HLF, HQ and IQ were pre-tested at Kadyaudzu village near Msundwe in Lilongwe district to check on the design features of the questionnaires and whether any amendments or modifications to the questions would be called for. We also checked on how long it takes to complete each interview.

After incorporating the amendments, the final English version of the HQ and IQ were translated into Chichewa and Tumbuka, the two languages spoken by most respondents. We would like to point out here that there were some variations between the two versions, and these variations were not noted until after the field survey. In the Chichewa version, one question was missed; the Tumbuka version also missed one question. Other differences were attributable to difficulties of translating English into these two languages. As a result, some information obtained from the survey has been deliberately excluded from the analysis.

Organization of field work

Having completed the questionnaire design and translation, as well as the questionnaire pre-testing and amendments, we embarked on the training of enumerators and supervisors in readiness for fieldwork.

A total of 27 enumerators with a Malawi School Certificate of Education (MSCE) were hired on a temporary basis for the duration of the fieldwork (25 working days). In addition, nine supervisors were hired for a maximum period of 35 days. The supervisors were drawn from a pool of recently retired agricultural officers who had access to a motorbike and are very familiar with agricultural activities in the country.

The training was conducted at Chitedze Agricultural Research Station for a period of four days. This included one day of field practical training in Kadyaudzu village that is not far away from Chitedze Agricultural Research Station. All Module 1 consultants took part in the training of the enumerators and supervisors.

Planning for field work

During the training sessions, an outline of the fieldwork plan was provided to the enumerators and supervisors. Each supervisor was allocated three enumerators to cover three districts; whereas each of the three consultants coordinated and supervised three supervisors (covering nine districts). This allocation clearly identified the villages and districts where each team would operate at any one point in time. In a nutshell, one consultant was responsible for coordinating and supervising the work of three supervisors and nine enumerators in nine districts.

Given that the sample of respondents would be drawn from 108 villages in 27 districts throughout the country, each one of the 27 enumerators was to cover four villages. Each of the nine supervisors, together with his team of three enumerators, would cover 12 villages in three contiguous districts. Each one of the three consultants was to supervise the work of three supervisors and nine enumerators, covering 36 villages in nine districts.

The fieldwork was designed to be completed within 25 working days in March-April 2001. While in the field, the supervisor's role was to identify the village, carry out the household listing for the village, assign one enumerator to interview the sampled respondents, and then move on to another village to repeat the cycle of activities before coming back to supervise the work of the first enumerator. This cycle of events would be repeated again until all the 12 villages in the three districts had been covered.

The completion of the HLF was the first activity for the supervisor and the enumerators of the survey team upon reaching the village. Having listed all the households in the village, a random selection of 15 TIP recipients and 15 non-recipients was done using random numbers before interviewing the farmers.

The quality control of completed questionnaires required that the supervisor, while in the field, checked for completeness and correctness of the filled-in questionnaire as well as checking for inconsistencies of responses provided by the farmers. Quality control was also undertaken by the consultants, both in the field and at Chitedze Agricultural Research Station, before the data were processed and analysed.

Data processing

At the end of the fieldwork, all questionnaires were gathered together at Chitedze Agricultural Research Station and individually checked for completeness, correctness and consistency of responses by the consultants before data processing was started.

A team of eight data entry clerks, including one supervisor, were hired for two weeks to enter the data. The data entry programme was prepared in Microsoft Access by the SSC, while Mr Carlos Barahona, one of the managers from SSC, provided overall guidance and closely supervised the data entry process. The data cleaning process involved producing summary statistics for all the variables and spotting any odd values, which were then checked against the questionnaires, and the database cleaned up. Any odd value that originated from the questionnaire was filtered out from the analysis wherever deemed necessary.

Data analysis was carried out using SAS and Excel programmes. It should be pointed out that the estimates presented in our results section refer to our sample population and are unweighted. This is mainly due to the difficulty of deriving appropriate weights when using the SP2 Register of Recipients that, even when it was the best sampling frame available at the time of the survey, is known to have problems of omissions and duplications.

Evaluation approach

The SP1 Evaluation approach set out to measure "incremental yield" from Starter Pack plots by comparing plots on which Starter Pack seed had been planted according to instructions with adjacent non-Starter Pack plots.

The SP2 Evaluation adopted a different approach, based on the view that the comparison between the perfect Starter Pack plot and a perfect "control" plot was an artificial construct, since farmers had in fact used the Starter Pack inputs in different ways, often spreading them beyond the recommended 0.1 ha plot. Also, there was no perfect counterfactual, since results from SP1 suggested that many farmers used fertiliser from other sources on their non-Starter Pack maize crops. Thus, an attempt to measure the incremental yield attributable to Starter Pack, as if under experimental conditions, would not be accurate enough to merit the high cost of the exercise.

Instead, the SP2 Evaluation decided to accept the multi-dimensional aspects of the use of inputs and the impact of Starter Pack. It did not aim for high levels of precision, but looked for trends and orders of magnitude.

Our evaluation approach for TIP 2000-01 adopted the SP2 Evaluation approach. At the centre of this approach, is the idea that we can triangulate the results from different methods, which include:

- Year-to-year comparisons;
- Comparisons between TIP recipients and non-recipients (the control group); and
- Farmers' perception on the state of the crop and their experiences.

Poverty categories

Our study used a poverty index based on assets and reported income. The index was derived as outlined below.

The assets dimension

A combined assets index was calculated using the following information and corresponding weights shown in Box 2.

Box 2: Weights for assets used to calculate the poverty index

Abbreviation	Asset	Weight
a 1	Chicken (number)	2
a 2	Ducks (number)	2
a 3	Guinea fowls (number)	2
a 4	Doves (number)	2
a 5	Pigs (number)	15
a 6	Goats (number)	10
a 7	Cattle (number)	100
a 8	Radio ownership (yes = 1; no=0)	7
a 9	Bicycle ownership (yes = 1; no=0)	20
a10	Oxcart ownership (yes = 1; no=0)	100

The assets index was then calculated by multiplying the assets by their weights for each household and then calculating the sum of these products. The formula used is as shown below:

Assets index = (a1 + a2 + a3 + a4) * 2 + (a5 * 15) + (a6 * 10)+ (a7 * 100) + (a8 * 7) + (a9 * 20) + (a10 * 100).

This assets index was then split into four categories as shown in Box 3.

Box 3: Asset based categorisation of households

Assets index	Asset category	Category label
Less than 2	1	No assets
2 to 30	2	Few assets
31 to 70	3	Several assets
71 or higher	4	Many assets

The income dimension

The income index was calculated by taking into account the types of income shown in Box 4:

Box 4: Sources of income used to calculate the income index

Abbreviation Income	Income
i 1	All crops in the last 12 months
i 2	Small business in the last month
i 3	Crafts or artisan work in the last month
i 4	Livestock sales in the last month
i 5	Remittances in the last month
i 6	Pension in the last month
i 7	Ganyu in the last weeding season
i 8	Salary in the last month
i 9	Sale of fish in the last month
i10	Sale of charcoal or firewood (last month)
i11	Rent last month
i12	Other income last month

The income index was calculated using the following formula:

Income Index = i1/12 + i2 + i3 + i4 + i5 + i6 + i7 + i8 + i9 + i10 + i11 + i12

This income index was then split into four categories as shown in Box 5.

Box 5: Income based categorisation of households

Income index	Income category	Category label
0 to 100	1	Up to MK 100
>100 to 300	2	MK 101 to 300
>300 to 800	3	MK301 to 800
>800	4	MK 800 plus

Composite assets and income index

The poverty index was formed by combining the two categorised indices as shown in Box 6.

Box 6: Poverty index categories

	Assets index			
Income index	Less than 2	2 to 30	31 to 70	71 or higher
0 to 100	1	1	2	3
>100 to 300	1	2	3	4
>300 to 800	2	3	4	5
>800	3	4	5	5

The resulting categories were labelled as shown in Box 7.

Box 7: Labels for poverty categories

Category code	Category label
1	Category 1 (poorest)
2	Category 2
3	Category 3
4	Category 4
5	Category 5 (least poor)

It is important to note that the use of this poverty index allows us to compare the impact of TIP on rural households according to their *relative* level of wealth/poverty. We did not attempt to classify these households in relation to an *absolute* poverty line such as that used by the Integrated Household Survey.

Measurement of food security

There are three ways of defining food security. The first is to equate food security with access to maize (maize self-sufficiency). By this measure, certain parts of the country and certain segments of the population are chronically food insecure.

The second is to equate food security with household income levels; the lower the income, the higher the food insecurity. This way of defining food security is certainly superior to equating food security with access to maize, but it also fails to take into account the significant coping strategies used by households during the lean months of the year (January to March). The main coping strategy for rural households is ganyu. However, income from ganyu is not all necessarily spent on food. Other coping strategies include:

- Changing dietary patterns (i.e. fewer meals per day; use of cheap ingredients such as maize bran (gaga); eating vegetables only or mangoes which are plentiful during the lean months).

- Changing spending patterns (i.e. decreasing expenditures on other needed household items to buy food).

- Engaging in distress sales of property and indiscriminate sales of natural resources, e.g. firewood, charcoal, fish or wild animals.

The third approach is to define food security as a function of access, income levels and the use of coping strategies. Coping strategies, especially changing dietary patterns, should be viewed as a last resort measure to survive for rural households. All things being equal, a rural household that employs such last resort coping strategies should be viewed as food insecure. We believe that there is no better indicator of food insecurity at household level than this one.

Module 1 of the TIP 2000-01 Evaluation adopted the third definition of food security, and thus posed questions on the use of coping strategies, and when the household started employing the coping strategies. Any household indicating that they had employed any one of the coping strategies was classified as food insecure, and the number of months of food insecurity were calculated. The food security classification was also cross tabulated against poverty categories to show the relationship between food insecurity and poverty.

Finally, TIP 2000-01 Evaluation Module 1 has also attempted to characterize the districts which appeared to be food secure and those which appeared to be food insecure between the 2000 harvest and March-April 2001.

Results and discussion

Basic characteristics of the sample

Gender

Table 1: Gender of respondents

	TIP (%)	Non-TIP (%)
Male	63.1	72.4
Female	36.9	27.6
Total	100.0	100.0
No of responses	1427	1546

Out of the 1427 respondents in our sample who received the TIP pack, 63% of them were males and 37% of them were females. Among the non-recipients, 72% were males and 28% were females. These results indicate that around 9% more of the recipients were female, suggesting that there was some limited success in targeting TIP towards female-headed households. This is in agreement with the findings of the report of the Monitoring Component for TIP 2000-01, which found that around 8% more of the recipient households were female-headed[1].

Age structure

Table 2: Age of respondents

	TIP (%)	Non-TIP (%)
Children (less than 15 years)	1.1	1.0
Adult (15-49 years)	58.8	77.8
Elderly (aged 50 or over)	40.1	21.2
Total	100.0	100.0
No. of responses	1423	1545

The data in Table 2 show that there were more elderly respondents among TIP recipients (40%) than among the non-recipients (21%). This shows that there was some measure of success in targeting the elderly in the TIP programme. This is in agreement with the findings of the Monitoring Component, which showed that some 9% more of the TIP recipient household heads were elderly. In our sample, 19% more of the recipient respondents were elderly.

[1] Lawson, M., A. Cullen, B. Sibale, S. Ligomeka and F. Lwanda (March 2001), Targeted Inputs Programme (TIP); Findings of the Monitoring Component for TIP 2000-2001.

Marital status

Table 3: Marital status of respondents

	TIP (%)	Non-TIP (%)
Single	1.5	2.2
Married, spouse living at home	65.2	73.1
Married, spouse living elsewhere	3.0	4.1
Separated/divorced	9.8	7.8
Widow/Widower	17.0	9.5
Not stated	3.6	3.4
Total	100	100
No. of responses	1441	1566

Table 3 shows the marital status of household heads for TIP recipients and non-recipients. The data show that there were about 8% more widows/widowers among the recipient households than the non-recipient households. This is an indication that widows and widowers were, to some extent, successfully targeted. This observation is in agreement with the findings of the Monitoring Component report.

Household size

Table 4: Household size

Number of people in household	TIP (%)	Non-TIP (%)
1	3.3	3.4
2	10.9	12.9
3	18.1	21.7
4	22.5	21.7
5	18.2	18.1
6 or more	26.7	21.9
Missing data	0.2	0.2
Total	100.0	100.0
No. of responses	1243	1348

Table 5: Summary statistics for household size

	TIP	Non-TIP
Mean	5.0	4.7
Std. Dev.	2.4	2.2
Minimum	1	1
Maximum	19	16

Table 4 shows that there is no difference in the household size profile of TIP recipients and non-recipients. The summary statistics shown in Table 5 confirm that the two groups are very similar in household size. The average household size for TIP recipients is 5 persons with a standard deviation of 2.4, whereas the household size for non-recipients is 4.7 persons with a standard deviation of 2.2.

Languages

Table 6: Languages spoken by respondents

	TIP recipients (%)*	Non-recipient (%)
Chichewa	79.8	81.4
Tumbuka	13.5	16.2
Nyanja	4.2	3.7
Yao	17.0	16.6
Sena	6.5	6.2
Tonga	6.0	5.3
Nkhonde	1.9	2.5
Lambya	2.4	2.3
Lomwe	13.5	11.0
Other languages	3.1	1.6
No. of responses	1441	1566

*Percentages add up to more than 100% because respondents spoke more than one language.

Not surprisingly, there were more Chichewa speaking respondents among the TIP recipients (80%) and non-recipients (81%) than respondents who spoke other languages. Chichewa is the official vernacular language which is taught in primary schools across the country. Differences between recipients and non-recipients for each of the languages were minor and there was no observable trend.

Area cultivated and total area of land

Table 7: Area of land cultivated (acres)

	TIP				Non-TIP			
Region	**North**	**Centre**	**South**	**Likoma**	**North**	**Centre**	**South**	**Likoma**
Mean	2.4	2.7	2.2	0.6	2.6	2.8	2.0	0.4
Std. Dev	1.7	2.8	1.6	0.5	2.7	2.9	1.5	0.2
Min	0	0	0	0	0	0	0	0
Max	12	43	16	3	35	32	12	1
No of responses	253	440	679	60	293	504	698	57

Table 7 shows that there is no relationship between receipt of TIP and area of land cultivated. In addition, it can be seen that for both the TIP recipients and non-recipients, the area of land cultivated in the central region is the largest, whereas Likoma, as expected, has the smallest mean area of land cultivated[2].

[2] Likoma district comprises two small islands on Lake Malawi and the people there rely on the lake for their source of livelihood. Given that the land mass in Likoma is relatively small, it was felt necessary to analyse Likoma data separately in order to avoid possible skewing effects on the rest of the northern region data.

Table 8: Total area in the holding (acres)

	TIP				Non-TIP			
Region	**North**	**Centre**	**South**	**Likoma**	**North**	**Centre**	**South**	**Likoma**
Mean	4.0	4.2	3.1	1.4	4.4	3.6	2.9	0.9
Std	3.0	4.5	2.3	1.2	4.2	3.3	2.0	0.6
Min	0	0	0	0	1	0	0	0
Max	21	43	20	7	50	32	15	3
No. of responses	258	440	679	60	299	508	700	58

Table 8 shows that there is no relationship between receipt of TIP and total area of land owned. In terms of the total area of land owned by households, farmers in the northern region own larger pieces of land (mean of 4.2 acres) than farmers from the centre (mean = 3.9 acres) or from the south (mean = 3.0 acres). Farmers from Likoma Island, own the smallest pieces of land (mean = 1.1 acres).

Proportion of female-headed households

Table 9: Percentage of female headed households

Region	Total No. of households	Total No. of female-headed households	% of female-headed households
North	2443	659	27.0
Centre	3301	792	24.0
South	4668	1285	27.5
Total	10,412	2736	26.3

The summaries in Table 9 come from the data collected in the HLFs. Although estimating the proportion of female headed households is not part of the objectives of this survey, this information comes as a sub product of the work carried out to be able to select our sample. We collected information on the sex of head of household in 10,412 households, that is all households in villages visited. The estimated proportion of female headed households is twenty six percent (26%). This compares well with the results of the Profile of Poverty in Malawi, 1998 report which indicated that in Malawi, just under 25% of households are female-headed[3].

TIP distribution

This section provides information on the proportion of households in rural Malawi that received TIP packs, the poverty targeting process and TIP distribution.

Receipt of TIP packs

TIP was designed to reach 52% of rural households. The data in Table 10, which come from the HLFs, show that only 42% of the 10,412 rural households listed for our survey received TIP packs. It is evident, therefore, that the 2000-01 TIP campaign missed the target by 10%.

[3] Profile of Poverty in Malawi, 1998: Poverty Analysis of the Malawi Integrated Household Survey, 1997-98. National Economic Council, November 2000.

Table 10: Proportion of households receiving TIP

Region	Total No. of households in the sample	Total No. of households that received TIP	% of households that received TIP
North	2443	997	40.8
Centre	3301	1243	37.7
South	4668	2234	47.9
Total	10,412	4474	42.1

Looking at the data across regions, the south registered a higher percentage rate (48%) of households that received TIP packs than the north (41%) or the centre (38%).

Poverty targeting

Our study used a poverty index based on assets and reported income (see **Poverty categories** section in **Methodology**). Five levels of poverty were delineated.

Table 11: Poverty profiles of TIP recipients and non-recipients

	TIP recipients	**Non-recipients**
Poverty Category	%	%
Category 1 : Poorest	29.2	26.4
Category 2 :	18.3	13.6
Category 3 :	17.1	18.9
Category 4 :	14.0	16.6
Category 5 : Least Poor	21.4	24.5
Total	100.0	100.0
No. of responses	1441	1566

Poverty categories 1 to 3 represent the poorest segment of the sample of respondents, with few or no assets. As the data in Table 10 show, of those who did not receive a pack, 59% are in the poorest three categories. On the other hand, of those who did receive a pack, 35% are in the least poor two categories (P4 to P5).

What the data is showing is that the TIP campaign did not succeed in targeting the poorest categories. As Table 11 shows, the poverty profiles of recipients and non-recipients are very similar, with both the poorest and the least poor being TIP recipients and a substantial number of the poorest being non-recipients. This result coincides with the findings from the Monitoring Component.

Timing of distribution

In this section, data on the timing of the distribution of TIP inputs, the perception of respondents on the timing of distribution of TIP inputs, and data on the distance to TIP inputs collection points is presented and discussed.

Table 12: Start of the rains and TIP distribution

	Received TIP 2000/01	Start of rains 2000	Normal start of the rains	When would you like to receive inputs
Month	**%**	**%**	**%**	**%**
August	-	0.1	0.1	5.3
September	-	0.3	0.3	17.6
October	-	30.8	18.6	64.5
November	10.5	59.4	41.9	11.0
December	40.1	8.2	36.6	1.6
January	42.8	1.2	3.2	0.1
February	6.5	-	-	-
March	0.1	-	-	-
No of responses	1428	3018	3030	1429

A normal rainy season in Malawi begins with the start of rains in October in the southern region and then the rain belt moves up to the central region in late October to early November, and later to the northern region from mid-November to early December. In the 2000-01 agricultural season, the start of the rains was slightly early, with most areas receiving the first rains between October and December.

TIP input distribution in 2000-01 began in November – mostly in the centre (4%) and the south (13%) – picked up in December and January 2001 and tailed off in February and March. Evidently, the 2000-01 TIP distribution was done 2 months late and this greatly reduced the impact of TIP on maize production.

Column 5 of Table 12 shows that 82% of the farmers would prefer to receive inputs in September or October, which is a month before the start of a normal rainy season. This is the right time to distribute inputs to farmers as it would allow them sufficient time to plan for the season and prepare their gardens in time for planting.

Table 13 provides data on farmers' perceptions of the timing of TIP inputs distribution in the 2000-01 agricultural season.

Table 13: Farmer's perception of the timing of TIP distribution

	North	Centre	South
	%	**%**	**%**
Timely	5.4	12.6	2.6
Late but planted	82.0	59.8	60.2
Too late to plant	10.8	23.0	30.8
Missing data	1.9	4.5	6.4
No. of responses	316	443	683

These results emphasize the findings above that distribution of TIP inputs was done late. A big proportion of respondents in the north (82%), the centre (60%) and the south (60%) indicated that distribution of TIP inputs was done late but they decided to plant anyway. Eleven percent (11%) of the respondents in the north, 23% in the centre and 31% in the south did not bother to plant the seeds because it was too late in the season.

Cases of non-receipt of TIP packs

One of the most frequent observations made by the consultants when they visited villages during the survey was that TIP disrupted the social fabric in the rural areas. Most rural households did not understand that TIP was designed to target certain individuals in the community by virtue of their poverty status, households caring for orphans, old people or physically disabled people. They interpreted targeting as favouritism on the part of chiefs and local leaders.

A total of 10 villages out of the 108 villages visited did not receive TIP packs either because they refused to receive the packs or because they were missing from the register.

Villages refusing to receive TIP

Out of the 108 villages visited, four villages completely refused to receive TIP. Two villages in Mzimba and one village each in Salima and Dedza refused to receive TIP packs because of the targeted nature of TIP. In Aaron Hara village in Mzimba, the Village Headman returned all coupons because the majority of his subjects threatened never to participate in village development work if they did not receive TIP packs. In Ajibu village in Dedza, all the villagers including their chief agreed not to receive TIP packs because they did not want to see anyone discriminated against. This was the same reason for refusal of TIP packs in the other two villages.

Villages not registered

In other cases, people did not receive TIP packs because the whole village was not registered. A total of six villages out of 108 villages sampled were not registered. These villages are: Kuchingoli village in Dedza; Aeroni village in Nkhotakota, Sitima village in Nkhotakota; Antonia village in Mchinji; Akumwinje village in Balaka and Nkalapa village in Machinga.

Distance to collection point

The data shows that the average distance to the TIP pack collection points was 5.25 km with a standard deviation of 4.97. The minimum distance to a collection point was less than a kilometre and the maximum distance was 26 km. People from three out of the 108 villages had to walk 26 km to collect their TIP packs.

Contents of TIP packs

In this section, we present information on the contents of TIP packs, i.e. whether the inputs were inside the pack or not; whether the packs were complete or had missing items; the condition of the inputs and the quality of the contents.

Were the inputs inside the pack?

Table 14: Inputs found inside the TIP pack

Were inputs included in the TIP pack?	YES (%)
Maize	98.4
Legumes	86.3
Basal fertiliser	97.6
Top dressing fertiliser	97.5

In 98% of the instances, the maize and basal fertiliser were included in the packs. Top dressing fertiliser was included in the TIP packs in 97% of cases, whereas legumes bags were found inside the TIP pack in only 86% of cases.

Number of bags inside the TIP packs

Table 15: Number of bags inside the TIP packs

	%
Three items missing	1.2
Two items missing	1.5
One item missing	13.3
Complete bag	82.0
At least one item duplicated	2.1
Total	100.0
No. of responses	1452

Some 82% of the TIP packs contained a complete set of the 4 items of inputs, i.e. maize, legumes, basal fertiliser and top dressing fertiliser bags. Thirteen percent (13%) of the TIP packs had one of the items missing; 2% of the packs had at least one item duplicated; and 3% had two or three items missing.

Condition of the TIP pack inputs

Table 16: Condition of the TIP pack inputs

	Sealed	Open but OK	Open with missing or damaged item	No. of responses
	%	%	%	
Maize	80.8	15.6	3.6	1426
Legume	82.6	13.7	3.7	1157
Basal Fertiliser	80.8	14.5	4.8	1412
Top dressing Fertiliser	80.6	14.7	4.7	1408

About 4% each of the maize and legume bags were opened before they reached the recipient and the contents were either missing or in damaged condition. Five percent each of the basal and top dressing fertiliser bags were opened before reaching the recipient and the contents were either missing or in damaged condition. The rest of the bags were either sealed or open but the condition of the contents was OK.

Quality of the TIP pack inputs

Table 17: Perceived quality of TIP pack inputs

	Good	Poor	Unusable	
	%	%	%	No. of responses
Maize	95.4	4.4	0.3	1426
Legume	95.1	3.9	1.0	1177
Basal fertiliser	95.0	4.5	0.5	1410
Top dressing fertiliser	95.4	4.2	0.4	1407

The respondents rated the quality of the inputs as generally good. Only 4-5% of the respondents rated the maize, legume, basal fertiliser or top dressing fertiliser inputs poor or unusable.

Use of the TIP pack inputs

In the following section, we provide data on the questions posed to TIP recipients to find out how the respondents used the TIP inputs.

Use of TIP maize seed

Table 18: Use of TIP maize seed

	%
Planted all of it	65.0
Planted some of it	7.4
Ate it	2.1
Exchanged for food	0.5
Sold it	1.2
Stored it	0.1
Gave it away	23.3
Didn't receive	0.7
No. of responses	1453

Seventy two percent (72%) of the respondents indicated that they either planted all of the maize seed (65%) or some of it (7%). Twenty three percent (23%) indicated that they gave the seed away. The rest of the respondents either ate the seed (2%), exchanged for food (0.5%) sold the seed (1%), stored the seed (0.1%) or did not receive the maize seed (0.7%).

Table 19: How TIP maize seed was planted

	%*
Planted it together in one plot	87.6
Spread it out over a large area	6.2
Used to fill gaps	5.3
Not applicable i.e. did not plant	0.7
No. of responses	1053

*These % are calculated out of the number of farmers who planted all or some of the maize seed.

Most of the TIP recipients (88%) planted the maize seed together in one plot. A few of them spread it out over a large area (6%) or used the maize seed to fill gaps (5%).

Table 20: Why maize seed was not planted or only some was planted

	%*
Seed received too late in the season	77.6
No land left available for planting	10.2
Seed of poor quality	2.4
Did not like the variety	0.0
No. of responses	508

*These % are calculated excluding any farmers who planted all the maize seed.

Of those respondents who did not plant the maize seed or planted only some of it, 78% indicated that they did so because the seed was received too late in the season to plant. Ten percent (10%) said they had no land left available for planting, while 2% indicated that the seed was of poor quality.

Table 21: Contribution of TIP maize seed to the household maize seed

	%
All of it	12.2
More than half	7.8
Equal amounts	6.7
Around one quarter	12.4
Very little	38.7
None (did not plant)	20.6
Missing data	1.7
No. of responses	1429

Only 12% of the respondents indicated that TIP maize seed was all the seed they had in their households. This small group of respondents relied wholly on TIP maize seed. However, for 27% of households, TIP maize seed represented half or more of their total seed and another 12% said TIP's contribution to the household maize seed was about one quarter. These findings show that the amount of TIP maize seed is not large compared to the total maize seed planted. However, TIP maize seed is an important source of seed in so far as it brings fresh vigorous seed to the household.

Use of TIP legume seed

In this section, we explore (a) what the respondents used the legume seed for, (b) how the legumes were planted, (c) why some respondents did not plant the legume seeds or just planted some of it, and (d) the contribution of TIP legume seed in the household.

Table 22 shows that only 35% of respondents planted all the legume seeds they received, while 8% planted some of the seed. A fairly large proportion of respondents (32%) ate the legume seed and another 18% gave the seed away.

Table 22: Use of legume seed

	%
Planted all of it	35.1
Planted some of it	8.0
Ate it	31.8
Exchanged for food	0.3
Sold it	4.7
Stored it	0.6
Gave it away	18.4
Did not receive	0.6
No. of responses	1254

Note: This table includes only those respondents who received legume seed.

Table 23: How legume seeds were planted

	Yes (%)	No (%)	No reply recorded (%)	Number of respondents
Did you plant the legume seeds in one plot	58.4	33.6	8.0	464
Did you intercrop the maize and legume	38.2	53.2	8.6	464

Note: This table includes only those farmers who planted all the legume seeds.

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The two questions posed in Table 23 are, in fact, one and the same question, i.e. by implication, farmers can either plant in one plot or they intercrop. The data shows that respondents who planted the legumes in one plot were in the range of 53% - 58%, whereas respondents who intercrop the legumes were in the range of 34% - 38%. The rest of the respondents did not provide replies to the questions.

Table 24 presents information on why legume seeds were not planted or farmers only planted some of them. Farmers that planted all the seeds were excluded from this analysis.

Table 24: Why legume seeds were not planted or only some were planted

	%
Seed received too late	55.6
No land left available for planting	7.5
Seed of poor quality	3.1
Did not like the variety	2.1
Total	*68.3
No. of respondents	988

* Possible reasons for not planting were not exhausted.

Of the respondents who did not plant the legume seed or planted only some of it, 56% did so because the seed was received too late, and 7% because they had no land left available for planting. During the SP2 scheme, only 25% of respondents did not plant legumes due to late receipt of the input.

Table 25 presents data on the contribution of TIP legume seed to the household legume seed this season. All responses from farmers who received legume seed were included in the data analysis.

Table 25: Contribution of TIP legume seed to the household legume seed

	%
All of it	26.2
More than half	2.2
Equal amounts	2.2
Around one quarter	3.8
Very little	13.7
None (Did not plant)	44.8
Missing data	7.1
Total	100.0
No. of respondents	1254

Most of the respondents said TIP legume seed contributed very little or nothing at all to the legume seed in the household. However, 26% of respondents said that TIP legume seed was all the seed the household had for planting. This is the group of respondents who valued TIP legume seed most. TIP legume seed represented a much bigger proportion of total seed planted – for those who planted – than TIP maize seed.

Use of TIP fertilisers

In this section, we provide information on the use of TIP fertiliser, and information on other fertiliser-related questions that we posed.

Table 26 presents data on the use of basal and top dressing fertiliser. The analysis only includes those farmers who received either the basal or top dressing fertiliser.

Table 26: Use of TIP fertiliser

	Basal	Top dressing
	%	%
Applied to TIP maize	61.4	60.9
Applied to rest of the maize field	30.4	30.8
Applied it on other crops	2.8	2.5
Gave it away	0.7	0.7
Sold it	2.6	3.5
Stored it	4.4	4.4
It was stolen	0.2	0.2
No. of responses	1423	1415

*Percentages add up to more than 100% because multiple responses were allowed.

Sixty-one percent (61%) of respondents said that they applied the basal and the top dressing fertiliser to their TIP maize. Around 30% of respondents applied the basal and the top dressing fertiliser to the rest of their maize fields. Only 3% admitted to using the fertiliser on other crops, and a similar percentage admitted to selling it.

An important observation to make is that even when TIP inputs are distributed late, as happened under the TIP 2000-01 campaign, most of the farmers still make use of the fertiliser received.

Table 27 presents the reasons why some of the respondents did not apply the TIP fertiliser.

Table 27: Reasons for not applying TIP fertiliser

	%
My land does not need fertiliser	23.6
I only use organic fertiliser	4.3
I needed money, so I sold it	5.6
It came too late to use	35.7
No. of respondents	98

The main reason for not applying the TIP fertiliser was that it came too late to use (36% of the 98 respondents who said that they did not apply the fertiliser). The second most important reason was that the respondent's land does not need fertiliser (24%). These were all respondents from Chikwawa and Nsanje districts.

Table 28: How TIP fertiliser was applied to maize

	%
Basal separately	44.9
Top dressing separately	44.8
Basal and top mixed	53.3
No. of respondents	860

Note: only respondents who applied basal **and** top dressing fertiliser to maize are included.

About 45% of the respondents applied basal and top dressing fertiliser to maize separately, as is recommended. Fifty-three percent (53%) of respondents mixed the basal and top dressing fertiliser before applying it to their maize.

Table 29 presents data on application time for the basal fertiliser.

Table 29: Time when basal fertiliser was applied

	%
During planting	10.5
After 1 week but before 2 weeks after planting	70.3
Three to four weeks after planting	14.3
Missing data	4.9
Total	100.0
Number of respondents	468

About 70% of respondents applied the basal fertiliser after a week but before two weeks from planting. This is the recommended time for basal fertiliser application. Some 10% of respondents applied the basal fertiliser at planting, while 14% applied the basal fertiliser three to four weeks after planting.

Table 30 presents data on the application time for top dressing fertiliser.

Table 30: Application time for top dressing fertiliser

	%
During planting	0.4
After germination, before two weeks after planting	12.7
Three weeks after planting	45.5
Four weeks to tasseling	38.3
Missing	3.2
Total	100.0
Number of respondents	473

About 45% of the respondents applied the top dressing fertiliser three weeks after planting. This is the period which is within the recommended time for top dressing a maize crop. Another 38% of the respondents applied the top dressing fertiliser between four weeks and tasseling.

Table 31: Application time for mixed (basal + top dressing) fertiliser

	%
Within a week from planting	2.8
From germination to four weeks after planting	33.0
After first weeding but before tasseling	49.9
After tasseling	11.2
Missing	3.1
n	787

Fifty percent (50%) of the respondents that mixed the fertiliser applied it after first weeding but before tasseling. This time of application was fairly late in the cropping season and the maize crop may not have fully benefited from the fertiliser. Some 33% of those who applied mixed fertiliser did so between germination and four weeks after planting (including weeding). This was the correct time of application, and the maize crops may have used the fertiliser to the fullest advantage.

Table 32: Contribution of TIP fertiliser to household fertiliser

	%
All of it	72.4
More than half	2.1
Equal amounts	2.9
Around one quarter	5.6
Very little	16.1
None	1.0
Total	100.0
No. of respondents	1226

Seventy-two percent (72%) of the respondents indicated that the TIP fertiliser was all the fertiliser the household had. This underscores the importance of TIP fertiliser to farmers. Farmers are aware that poor soil fertility is a major impediment for them to ensure their food security, yet this input remains unaffordable to many of the rural farmers. Therefore, they value TIP fertiliser greatly.

A small proportion of respondents (16%) indicated that TIP fertiliser contributed very little to household fertiliser. It is our view that this group of respondents may have

been expressing the opinion that the quantity of TIP fertiliser was very little; too little to satisfy their fertiliser requirement in the household. Also, some of the respondents may be wealthier farmers who are able to buy fertiliser.

Other inputs used by TIP recipients

The purpose of this section is to compare TIP as a source of inputs with other sources of inputs use by TIP recipient farmers in 2000-01.

Non-TIP maize seed

Type of seed bought

We start by exploring the percentage of TIP recipient farmers that bought maize seed in the agricultural season 2000-01 and the type of seed that they bought. The main finding is that only 34.6% of farmers who received TIP bought maize. The rest relied on seed recycled from their fields and seed from TIP.

Table 33 shows the percentage of farmers that bought different types of seed.

Table 33: Type of seed bought by farmers

Type of seed bought	% with respect to number of farmers who bought seed	% with respect to total number of farmers
Local and hybrid	1.0	0.3
Local and unknown	0.4	0.1
Local only	46.9	16.2
Hybrid	49.3	17.1
Unknown	2.4	0.8
Total	100	100
Denominator for %	499	1442

It is clear that farmers buy one type of seed only. Those buying hybrid do not go for local seed and vice versa. We do not present a breakdown by poverty categories as there were no significant differences in the preferences of different poverty groups.

Amount of seed bought

Given that farmers would buy or recycle maize seed for planting, we posed questions to find out the total amount (kg) of seed bought and how much (MK) money was spent on the seed by poverty level. A breakdown of maize seed purchases by poverty category is presented in Table 34. The main conclusion from this table is that when farmers buy seed their poverty level does not affect the amount they buy, except for the wealthier farmers. Respondents from all poverty categories bought some maize seed for planting, including the poorest respondents. However, the least poor category (P5) on average bought more maize seed (19.2 kg) and spent more money (MK349) than the other poverty categories (P1 to P4).

Table 34: Total amount of seed bought and total amount of money spent on seed by poverty level

	Farmer bought seed		Amount of seed bought (kg)		Amount spent on seed (MK)	
Poverty level	**Frequency**	**%***	**Mean**	**Std Dev.**	**Mean**	**Std Dev.**
P1 (Poorest)	145	34.5	13.8	13.5	159	518
P2	83	31.4	15.5	11.1	150	155
P3	83	33.7	14.2	10.9	149	152
P4	75	37.1	13.4	10.2	163	211
P5 (Least poor)	113	36.5	19.2	20.8	349	741

* Percentage with respect to the whole sample of TIP recipients.

We also looked at the total amount of maize seed bought and the total amount of money spent on seed, by sex of the respondent. These data are presented in Table 35.

Table 35: Total amount of seed bought and total amount of money spent on seed by sex of respondent

	Farmer bought seed		Amount of seed bought (kg)		Amount spent on seed (MK)	
Sex of head of household	**Frequency**	**%***	**Mean**	**Std Dev.**	**Mean**	**Std Dev.**
Male	323	35.8	15.2	13.5	216	472
Female	170	32.2	15.5	16.4	173	477

* Percentage with respect to the whole sample of TIP recipients.

There is no difference between male and female respondents in the total amount of seed bought. However it seems that male respondents are paying more for the seed. Further analysis by type of seed bought shows that male respondents reported higher average prices for local and hybrid seed. Our study did not collect information that could explain this difference.

Table 36: Breakdown of local and hybrid maize seed bought by poverty level

Poverty categories	**Local maize seed bought**				**Hybrid maize seed bought**			
	No. of farmers	**%***	**Mean (kg)**	**Std Dev.**	**No. of farmers**	**%***	**Mean (kg)**	**Std Dev.**
P1	71	16.9	15.3	17.4	71	16.9	12.2	8.2
P2	41	15.5	14.5	7.0	42	15.9	16.5	14.1
P3	39	15.8	17.3	12.2	42	17.1	11.0	8.9
P4	42	20.8	13.4	10.0	33	16.3	13.0	9.7
P5	48	15.5	24.2	21.9	63	20.3	15.5	19.6

* Percentage with respect to the whole sample of TIP recipients.

Table 36 shows that the percentage of farmers buying seed (either local or hybrid) is between 15% and 20% for all poverty categories, without important differences between categories. The average volume of seed bought does not show a strong association with poverty categories either, except for the wealthiest farmers (P5).

Table 37: Breakdown of local and hybrid maize seed bought by sex of the respondent

	Local maize seed bought				Hybrid maize seed bought			
	No of farmers	**%***	**Mean (kg)**	**Std. Dev.**	**No of farmers**	**%***	**Mean (kg)**	**Std Dev.**
Male	158	17.5	17.3	15.6	164	18.2	12.9	10.7
Female	79	15.0	16.3	16.3	86	16.3	14.9	17.0

* Percentage with respect to the whole sample of TIP recipients.

The main conclusion from Table 37 is that there are no differences in the type of seed bought by male and female respondents.

Fertiliser

We needed to know how many respondents had only TIP fertiliser, and how many respondents had TIP fertiliser plus other fertiliser. For those who had other fertiliser, we also wanted to know the source of finance for this other fertiliser. The information is presented in Tables 38 and 39.

Table 38: Sources of fertiliser in 2000-01

	%
Only TIP fertiliser	72.5
TIP plus other source	27.5
No. of respondents	1227

About 73% of respondents had no other source of fertiliser except TIP. This large group of respondents relied solely on TIP fertiliser for their maize crop. Only 28% of the respondents had other sources of fertiliser.

Table 39: Sources of finance for non-TIP fertiliser

	% with respect to farmers that bought fertiliser			**% with respect to total number of farmers**	
	Basal	**Top dressing**		**Basal**	**Top dressing**
	%	**%**		**%**	**%**
Credit	15.1	19.8		3.5	4.6
Cash	46.7	65.4		11.0	15.3
Gifts	5.0	5.6		1.2	1.3
Bought from TIP recipient	7.1	7.1		1.7	1.7
Stored from SP2	1.2	1.5		0.3	0.3
Other sources	1.5	1.5		0.3	0.3

* Percentages do not add to 100% because a farmer reporting having bought fertiliser might have bought basal fertiliser or top dressing or both.

The main source of finance for fertiliser is farmers' own cash, followed by credit. However, a maximum of 15.3% of all farmers bought fertiliser for cash and less than 5% used credit facilities. Other sources of finance are negligible.

Table 40: Amount of fertiliser bought with cash or credit

	Basal		Top dressing	
Amount (kg)	**Credit (%)**	**Cash (%)**	**Credit (%)**	**Cash (%)**
1 to 5	17.6	20.9	14.9	15.8
5 to 20	17.6	17.7	11.9	14.5
20 to 50	49.0	44.9	64.2	48.4
Over 50 kg	15.7	16.5	9.0	21.3

Between 45% and 65% of purchases of fertiliser by TIP recipients were for amounts ranging between 20 and 50 kg. The proportion of purchases of more than 50 kg of fertiliser was at best 21%. Up to 38% were for amounts lower than 20 kg.

Tables 38 and 40 demonstrate that the proportion of farmers who bought fertiliser is small (27%) and also that amounts purchased are small. When farmers bought fertiliser, less than one-fifth bought more than 50 kg.

TIP leaflet and agricultural extension

The Module 1 study collected data about receipt of the agricultural communications messages and HIV/AIDS messages by TIP recipients. This information was designed to complement that collected by Module 3 of the 2000-01 TIP Evaluation, which looked in greater detail at agricultural communications messages and HIV/AIDS messages[4]. Out of 1451 respondents, 73% received the TIP leaflet which was enclosed in the TIP pack; 89% of those who received the TIP leaflet, received it in good condition. These findings indicate that we can be confident that 65% of the respondents received a readable leaflet with instructions about how to use the inputs.

Table 41 presents information on the percentage of respondents who followed maize planting instructions contained in the TIP leaflet. Only those farmers who received the TIP leaflet in good condition (956 respondents) were included in the analysis.

Table 41: Frequency and % of respondents who followed maize planting instructions

	Yes	No	No reply
	%	%	%
Maize ridges 85cm apart	55.4	38.8	5.8
Planting station 25cm apart	53.1	40.7	6.2
One plant per planting station	49.7	44.1	6.2

Out of 956 respondents, 55% said that they made ridges at 75cm apart, while 38% of the respondents said that they did not follow the instruction of making ridges at 75cm apart. For planting station instructions, only 53% of respondents claimed to have followed instructions of planting maize 25cm apart along the ridge. Fifty percent (50%) of respondents claimed to have followed the instruction of planting one maize seed per station.

[4] Christopher Dzimadzi, Blessings Chinsinga; Regson Chaweza and Patrick Kambewa: TIP 2000-01 Evaluation Module 3: Agricultural Communications, July 2001.

Table 42 presents information on whether the instructions were easy to follow or not. The table includes only those farmers that said they received the leaflet in good condition. Sixty percent (60%) of the respondents said they found the instructions easy to follow, whereas 26% said they found it difficult to follow the instructions.

Table 42: Were the instructions easy to follow?

	%
Yes	60.0
No	26.4
No reply recorded	13.5
Number of respondents	931

Table 43: Why instructions were not easy to follow

Reason	%
Don't know how to read	29.3
Did not understand the instructions	5.3
Instructions too tedious to follow	7.3
Did not want to follow instruction	3.3
No time to follow instructions	4.5
Instructions contrary to usual practice	4.5
No reply	53.7
No. of respondents	246

Table 43 explores the reasons why some of the respondents found the instructions difficult to follow. The most important reason given for not following instructions was not knowing how to read (29% of the respondents). Over half did not reply to this question, which suggests that they were unable or unwilling to say why the instructions were not easy to follow.

Farmers were also asked whether they were given instructions on how to plant the legumes[5]. Forty-one percent (41%) of the respondents indicated that they received the instructions while 38% of them said they did not receive the instructions. No replies were recorded from 21% of the respondents.

The survey also posed questions to find out how often the TIP recipient farmers met the agricultural extension officers in their area. Table 45 presents these data.

Table 44: How often do you meet an agricultural extension officer?

	%
Weekly	4.8
Fortnightly	2.7
Monthly	8.0
Very Irregular	19.2
Never	60.7
Not stated	4.7
No. of respondents	1431

[5] The TIP leaflet contained no instructions about how to plant legumes, so any such instructions would have come from other sources (see report of TIP Evaluation Module 3, op cit).

Sixty-one percent (61%) of the respondents have never met an agricultural extension worker. This is certainly a worrisome state of affairs, and it reflects the shortage of extension workers in rural areas which has come about by the high rate of attrition.

OPV maize

Unlike the SP1 and SP2 schemes which distributed seed of maize hybrids, the TIP 2000-01 programme distributed open pollinated varieties of maize (OPVs). The survey included a question to find out whether the farmer realized that the maize seed given out was different from last season's seed. If the answer to this question was yes, five structured answers were provided to enable us determine how the farmer know that the seed was different. Finally, we asked whether the farmer realized that the seed for this season could be recycled without loss of yield potential. If the farmer provided a negative response to either the first or last question, the enumerator was requested to provide factual information about OPV to the farmer.

Table 45: Farmer's awareness of OPVs

	Number of respondents	% replying "yes"
1. Do you realize that maize seed given out is different?	1429	69.8
2. Do you realize that maize seed given out can be recycled?	1166	58.5

Table 46: How did you know that maize seed was different?

	%
Flintness	71.9
From leaflet	12.8
From radio	6.5
From Field Assistant	4.9
Other sources	3.9
Number of responses	1215

Seventy percent (70%) of the 1429 respondents had realized that the maize seed was different from the seed issued under the SP1 and SP2 schemes. Most knew that the maize seed was different from the flint texture of the grain, as hybrids normally are of dent texture. Very few farmers got the information from the leaflet (13%), the radio (7%), the Field Assistant (5%) or from other sources (4%).

Fifty-eight percent (58%) of the 1166 respondents knew that the maize seed they received could be recycled without loss of yield potential. However, it is not clear whether this was because they knew about OPV maize or whether it was because the appearance of the seed was similar to local varieties which are recycled.

HIV/AIDS

As the TIP pack contained a leaflet on HIV/AIDS, the survey asked the following questions:

1. Whether the farmer received a leaflet on HIV/AIDS along with the TIP pack.
2. Whether the farmer thought it was a good idea to include information on HIV/AIDS in the pack.

Table 47: Farmers' responses to HIV/AIDS questions

	Number of respondents	% replying "yes"
Did you receive a leaflet on HIV/AIDS?	1435	49.1
Do you think it is good idea to include information?	1176*	78.7

* Only replies from the Chichewa version of the IQ, as the Tumbuka version missed out this question.

Half of the respondents received the leaflet on HIV/AIDS along with the TIP pack, and over three-quarters (among those who replied to the Chichewa version of the IQ) indicated that it was a good idea to include information on HIV/AIDS in the pack. This shows that the rural households are keen to obtain more information on the HIV/AIDS pandemic.

Food production

It is well known in Malawi that there are districts and pockets within districts that do not rely on maize only as their staple food. This survey, therefore, sought to find out the types of staple foods used by the households sampled. Multiple responses were allowed for this question in order to provide the opportunity to households to name types of staple foods they consume other than maize (see Table 48).

The main staple food consumed by the majority of households in the sample is maize. Cassava is the second most important staple (10.4%) followed by rice (7.1%) and sorghum (7.1%).

- Cassava is an important staple in Nkhotakota, Nkhata Bay, Mulanje, Chitipa, Karonga, Likoma and Chiradzulu.
- Rice is an important staple in Karonga, Nsanje, Phalombe, Machinga and Mangochi.
- Sorghum is an important staple in Nsanje, Mulanje and Chikwawa.
- Banana is an important staple in Chitipa, Thyolo and Mwanza.

Table 48 also shows that there are some districts which rely solely on maize (Mzimba, Mchinji, Ntchisi and Salima), or predominantly on maize (Rumphi, Dedza, Dowa, Kasungu, Lilongwe, Ntcheu, Balaka and Zomba).

Table 48: Staple food by district

	Maize %	Rice %	Millet %	Cassava %	Sorghum %	Banana %	Total Respondents
Chitipa	98	1	2	22	1	36	120
Karonga	58	45	0	21	0	0	120
Mzimba	100	0	0	0	0	0	90
Nkhata Bay	76	0	2	69	0	2	121
Rumphi	100	0	0	1	0	0	110
Dedza	100	0	0	2	1	0	90
Dowa	100	0	1	0	0	0	108
Kasungu	100	0	0	4	0	2	116
Lilongwe	100	0	0	3	0	1	119
Mchinji	100	0	0	0	0	0	102
Nkhotakota	75	2	0	86	0	0	88
Ntcheu	100	0	0	1	1	0	119
Ntchisi	100	0	0	0	0	0	108
Salima	100	0	0	0	0	0	85
Balaka	100	0	0	1	0	1	106
Blantyre	99	3	0	4	0	2	122
Chikwawa	99	3	25	0	41	3	119
Chiradzulu	100	1	0	17	3	0	118
Machinga	100	30	1	0	1	0	105
Mangochi	100	23	0	0	0	0	120
Mulanje	98	9	1	24	44	0	105
Mwanza	100	0	1	7	0	11	115
Nsanje	93	37	87	0	90	2	120
Phalombe	99	33	0	0	3	0	117
Thyolo	100	0	0	8	1	22	121
Zomba	100	1	0	2	0	0	117
Likoma	100	0	0	17	0	0	119
Total	96.1	7.1	4.7	10.4	7.1	3.2	3010

Crop production in 1999-2000 cropping season

Maize production

Table 49 presents data on maize production for 1999-2000 for SP2 recipients and non-recipients.

Table 49: Maize production in 1999-2000 by receipt of SP2

	SP2 recipients	Non-recipients
	Production 50-kg bags	Production 50-kg bags
Mean	9.0	7.6
Std Dev.	7.8	7.6
Number of farmers	1447	989

SP2 recipients produced 9.0 50-kg bags on average, while non-recipients of SP2 produced 7.6 bags of maize of 50 kg. The contribution of SP2 to the household maize

production on the basis of the comparison of recipients and non-recipients is therefore estimated to be 1.4 50-kg bags.

Another route to estimating the contribution of SP2 to the maize produced at the household level is to ask the farmer for his own perception of this contribution. Recipients of SP2 perceive that the free inputs programme contributed an average of 2.7 50-kg bags of maize to the household. This contrasts with farmer's *forecast* of the contribution of SP2 to their production during last year's Module 1 survey (before the 1999-2000 harvest), which was an average of 3.5 50-kg bags[6].

Thus, on average it can be said that SP2 contributed between 15% and 30% of the maize produced by those smallholder farmers that received the free inputs. The contribution is estimated at 1.4 bags (15%) by comparison with the control group or 2.7 bags (30%) according to farmers' perceptions.

Table 50 presents data on food security for SP2 recipients and non-recipients. The period referred to is from the maize harvest in 2000 up to the time of our survey in March-April 2001.

Table 50: Food secure and food insecure people by receipt of SP2

	SP2 (%)	**Non-SP2 (%)**
Food secure	32.8	33.8
Food insecure	67.2	66.2
No. of respondents	1615	1114

One-third of our sample was found to be food secure and two-thirds were found to be food insecure[7], as shown in Table 50. There is no difference in the percentages of SP2 recipients and non-recipients that were food insecure. This shows that even those who received SP2 needed to adopt coping strategies at some time between the SP2 harvest in 2000 and the next harvest in 2001. Although the amount of maize produced by SP2 recipients was larger than the amount produced by non-recipients, this additional maize was not sufficient to last through the whole of the lean period since around two-thirds of smallholder farmers in Malawi are starting from a basis of low production and extreme poverty.

[6] National Statistical Office, Government of Malawi (2000), Report of Starter Pack 1999-2000 agronomic survey (Module 1 of the 1999-2000 Starter Pack Evaluation).
[7] See definition of food security in **Measurement of Food Security** section in **Methodology**.

Table 51: Maize production in 1999-2000 by poverty category, receipt of SP2 and food security status of the households

	Food Secure		Food Insecure	
	SP2 recipient	**SP2 non-recipient**	**SP2 recipient**	**SP2 non-recipient**
Poverty category	Maize production (50-kg bags)	Maize production (50-kg bags)	Maize production (50-kg bags)	Maize production (50-kg bags)
P1	9.0	6.2	6.4	5.4
P2	10.5	8.7	7.6	5.7
P3	11.8	8.8	7.6	6.6
P4	10.1	8.0	9.2	7.7
P5	14.0	13.1	9.3	8.7

Table 51 shows that there is a clear increasing trend in maize production from the poorest category (P1) to the least poor (P5). It also shows that for the group of food secure households, SP2 appears to have made a bigger impact on food production than for the group of food insecure households, especially in the lower poverty categories. The data show that in the food secure group, SP2 recipients in P1-P4 produced between two and three bags more than non-recipients; whereas in the food insecure group, SP2 recipients in P1-P4 only produced one to two bags more than non-recipients in the same poverty categories. This may be because the food insecure group tends to produce less food whether or not they receive SP2 owing to constraints such as land and labour shortages. The food secure group probably has better conditions to take full advantage of the free inputs.

Legume production

Out of 3030 respondents, about 34% of them produced legumes in 1999-2000 while 66% of them did not. Out of the same group of 3030 respondents, 20% of them produced legumes in 2000-01 while 80% of them did not.

Table 52 presents data on legume production in 1999-2000, disaggregated by receipt of SP2 inputs.

Table 52: Legume production in 1999-2000 disaggregated by receipt of SP2 inputs

	SP2 recipients	**SP2 non-recipients**
	Production 50-kg bags	Production 50-kg bags
Mean	2.5	2.8
Standard deviation	2.6	2.3
No. of farmers	550	256

In the 1999-2000 season, the SP2 recipients produced on average 2.5 50-kg bags of legumes, as compared with non-recipients who produced 2.8 50-kg bags. It can be said that in 1999-2000 season, the Starter Pack inputs had little or no influence on mean legume production of those who produced legumes. However, among farmers who received SP2, 37% produced legumes while only 24% of non-recipients produced legumes. The effect of Starter Pack on legume production is reflected on the

increase of the proportion of farmers growing these crops, rather than the average production at household level.

Farmers' perception of the contribution of SP2 to the legume production (2.4 50-kg bags) almost coincides with their total legume production. This could be interpreted as a substitution effect for some farmers – those who planted the SP2 legumes but would have planted legumes even without SP2. However, there were 13% more farmers producing legumes among SP2 recipients compared with non-recipients, suggesting an addition to total production.

Production forecasts for 2000-01

Maize production

Comparison of TIP recipients and non-recipients

In this section, we present data on production forecasts for the 2000-01 maize harvest with or without TIP inputs. The data are based on farmers' perceptions.

Table 53 presents data on the expected maize production in 2000-01 harvest for both the TIP recipients and non-TIP recipients.

Table 53: Expected maize production in 2000-01

	TIP recipient	**TIP non-recipient**
	Production 50-kg bags	Production 50-kg bags
Mean	5.2	4.7
Standard deviation	6.1	6.3
No. of respondents	1239	1474

The average expected maize production per farmer who received TIP inputs is 5.2 50-kg bags in the 2000-01 season as compared with an average production figure of 9.0 bags for SP2 recipients in 1999-2000 season (see Table 49). For non-recipients of TIP, the average expected maize production figure is 4.7 50-kg bags, compared with 7.4 50-kg bags produced in 1999-2000. These results show the sharp decline in maize production this year, which farmers attribute mainly to two factors: too much rain or flooding and the late delivery of TIP.

On the basis of the comparison between TIP recipients and non-recipients (the control group), the forecast contribution to production in 2000-01 from TIP is 0.5 50-kg bags – around 10% of total production. This is lower than SP1 – when around one-quarter of production was estimated to come from Starter Pack[8] – and SP2.

Table 54 presents data on expected maize production in 2000-01 disaggregated by food security status and receipt of TIP.

Table 54: Expected maize production in 2000-01 by food security status

[8] Levy, S., C. Barahona and I. Wilson: *1999-2000 Starter Pack Evaluation Programme Main Report*, Statistical Services Centre, University of Reading, September 2000.

	Food Secure		Food Insecure	
	TIP recipient	**Non-recipient**	**TIP recipient**	**Non-recipient**
	Production 50-kg bags	Production 50-kg bags	Production 50-kg bags	Production 50-kg bags
Mean	6.8	6.3	4.3	3.9
Std Dev.	7.4	8	5.1	5.2
No. of respondents	404	475	783	945

The food secure respondents – irrespective of whether they received TIP inputs or not – expected to produce more maize than the food insecure respondents, by about 2.5 50-kg bags. The TIP recipients, among the food secure and food insecure groups, also expected to produce more maize in 2000-01 than the non-TIP recipients, by about 0.5 50-kg bags.

Farmers' perception of the contribution of TIP to maize production

According to farmers' perceptions, the contribution of TIP inputs to maize production was expected to be 2.2 50-kg bags of maize in 2000-01. This was lower than the forecast made last year for the contribution of SP2 (3.5 50-kg bags[9]). Nevertheless, it is high compared with the forecast based on the comparison between TIP recipients and the control group.

Legume production

Table 55: Expected legume production in 2000-01

	TIP recipient	**TIP non-recipient**
	Production 50-kg bags	Production 50-kg bags
Mean	2.7	2.7
Standard deviation	2.8	2.4
No. of respondents	304	203

The expected legume production in 2000-01 for TIP recipients was the same as for non-TIP recipients (2.7 bags of 50 kg each). This gives the impression that the TIP campaign is expected to have no impact at all on legume production in 2000-01. However, the percentage of TIP recipients that planted legumes is higher by some nine percentage points than the percentage of non-recipients that planted legumes: 23% and 14% respectively. Thus TIP will have had some impact on production of legumes in 2000-01, albeit less than in 1999-2000.

[9] National Statistical Office, Government of Malawi, (2000), *Report of Starter Pack 1999-2000 agronomic survey* (Module 1 of the 1999-2000 Starter Pack Evaluation).

Table 56 presents data on the expected legume production in 2000-01 disaggregated by poverty categories and by food security status.

Table 56: Expected legume production in 2000-01 disaggregated by poverty categories and by food security status

	Food secure	**Food insecure**
Poverty category	Production (50-kg bags)	Production (50-kg bags)
P1	2.2	2.2
P2	2.5	2.6
P3	2.4	2.5
P4	3.2	2.7
P5	3.3	3.2

There is no evidence of differences in legume production between food secure and food insecure households. A slight trend to increase production from the poorest to the least poor categories can be observed.

Farmers perception of the state of their TIP maize and legume crops

Table 57: Farmers perception of the state of their TIP maize and legume crops for the 2000-01 crop season

Do you expect a good harvest this year?	**Maize %**	**Legumes %**
Yes	9.5	6.1
No	62.2	31.7
Did not plant	24.2	51.5
No reply recorded	4.0	10.7
Total	100.0	100.0
No. of respondents	1440	1406

Sixty-two percent (62%) of the respondents did not expect a good maize harvest in 2000-01 crop season. Similarly, 32% of the respondents did not expect a good legume harvest in 2000-01 crop season. Over half of the respondents did not plant the TIP legumes. With this information in mind, we proceeded to find out the reasons why farmers did not expect good harvests of maize and legumes.

Table 58: Why don't you expect a good maize and legume harvest for the 2000-01 crop season?

	MAIZE	LEGUME
Reasons	%*	%*
Not enough fertiliser	13.8	5.2
TIP fertiliser received too late	17.8	6.7
Not enough seed	14.6	18.2
TIP seed received too late	46.0	41.4
Too much rain/flooding	69.8	59.6
Too little rain/drought	2.8	2.3
Pests and diseases	5.6	7.9
Didn't have enough help	0.7	0.9
I was sick	0.4	1.6
No. of respondents	896	445

* Multiple responses were allowed. Therefore, total % need not add up to 100%.

For maize, the most important reasons for not expecting a good harvest were:

1. Too much rain/flooding
2. TIP seed received too late
3. TIP fertiliser received too late
4. Not enough seed
5. Not enough fertiliser

For legumes, farmers cited the following reasons for expecting a poor harvest:

1. Too much rain/flooding
2. TIP seed received too late
3. Not enough seed
4. Pests and diseases
5. TIP fertiliser received too late

The farmers' replies support the conclusion that the TIP campaign was less successful than the SP1 or SP2 schemes because of late distribution of inputs as well as the heavy rains or floods experienced in the 2000-01 season.

Deficit in food from own production

The study looked at food self-sufficiency of smallholder farm households. The months of food self sufficiency were derived from questions about the month a respondent harvested maize in 1999-2000 and the month the maize run out. The number of months of food self sufficiency were subtracted from 12 (the number of months in a year) for each respondent to obtain the number of months that the household experienced a deficit of food from its own production (i.e. was not food self-sufficient)[10].

[10] 'Months of food deficit' is defined as the number of months that a household does not have food from their own harvest. Our survey only recorded data for maize; therefore, food is equivalent to maize, in our definition of months of food deficit. 'Months of food deficit' is derived from the difference between 12 and the number of months of maize self-sufficiency.

Table 59 presents data on deficit months for 1986 respondents. Data were filtered out for respondents where inconsistencies were found.

Table 59: Months of food deficit

Number of months of food deficit	%
0	4.8
1	10.0
2	12.8
3	15.8
4	12.6
5	11.7
6	9.0
7	7.2
8	6.3
9	4.3
10	3.3
11	1.4
12	0.9
Total	100.0
Number of farmers	1986

Out of 1986 respondents in our sample, only 5% of them produced enough maize to feed themselves twelve months in a year and therefore had zero months of food deficit. The other 95% had a food deficit: 72% of the households visited had 1-6 months of maize deficit in a year, while 23% had more than 6 months of maize deficit.

Table 60: Food deficit months disaggregated by receipt of SP2 (%)

Deficit months	SP2 recipients	SP2 non-recipients
0	5.2	4.3
1	10.3	9.4
2	13.1	12.3
3	15.0	16.9
4	13.4	11.3
5	11.5	12.1
6	8.2	10.2
7	7.2	7.1
8	5.9	7.0
9	4.8	3.4
10	3.1	3.6
11	1.3	1.7
12	1.1	0.6
Total	100.0	100.0
No. of respondents	1200	786

The data in Table 60 shows that there was no effect of SP2 inputs on the number of food deficit months for the 1986 respondents sampled. Further data analysis for the 1986 respondents showed that the SP2 recipients had on average 4.4 food deficit months against 4.5 food deficit months for SP2 non-recipients.

Disaggregating the same data from the 1986 respondents by food security status showed that the food secure respondents had fewer food deficit months on average (4.0 months) than the food insecure respondents (4.6 months).

Months of food security

As was shown in Table 59, only 5% of the 1986 respondents had no food deficit by the time of the survey in March-April 2001. The rest of the respondents experienced food deficits ranging from 1 month to 12 months. However, it does not necessarily mean that they were all food insecure, because some of them rely on other food crops than maize, or they can buy maize to supplement their own maize harvest.

We define 'months of food security' as the number of months a household has food of any type to eat, without resorting to use of coping strategies. The months of food security were calculated using the maize harvest month in 2000 as baseline compared with the month a household first employed any of the eight coping strategies listed in Questions E6 and E7 of our HQ. Households that did not employ any of the coping strategies by the time of the survey in March-April 2001 were considered to have a full compliment of 12 months of food security. As Table 50 showed, one-third of the 2847 respondents in the survey were found to be food secure, while two-thirds were food insecure.

Description of food secure and food insecure households

In this section, we describe the food secure and food insecure households by the sex of the respondent, by household size, by area of land cultivated, by receipt of TIP and by poverty categories.

Table 61: Percentage households by food security status and sex of respondent

	Food secure	**Food insecure**
	%	%
Male	68	68
Female	32	32
No. of respondents	893	1808

Table 62: Percentage households by food security status and household size

Household size	**Food secure**	**Food insecure**
	%	%
0-5 persons	63	65
> 5	37	35
No. of respondents	877	1757

Table 63: Percentage households by food security status and area cultivated

Area cultivated	**Food secure**	**Food insecure**
	%	%
1 acre or less	30	33
More than 1 acre	70	67
No. of respondents	960	1933

Table 64: Percentage households by food security status and receipt of TIP

	Food secure	Food insecure
	%	%
TIP recipients	47	48
Non-recipients	53	52
Number of respondents	965	1925

Table 65: Percentage households by food security status and poverty category

Poverty Category	Food secure	Food insecure
	%	%
Category 1: Poorest	20	32
Category 2:	15	17
Category 3:	17	18
Category 4:	18	14
Category 5: Least Poor	30	19
Number of respondents	968	1944

The tables show that the sex of the respondent, the household size (when categorised as up to 5 members and more then 5 members), area of land cultivated (1 acre or less and more than 1 acre) do not make a difference in whether a household is food secure or not. It is also clear that receiving TIP is not associated with food security status.

However, there is a distinction between the group of food secure and food insecure households in relation to their poverty profile. This can be seen in the fact that food insecure households have a larger percentage of the poorest households (32%) than the food secure (20%). At the other end of the poverty scale, a higher percentage of households in the least poor categories belong to the food secure group (30%) than to the food insecure group (19%).

It is interesting to note that we found food secure households in the poorest category and food insecure households in the least poor category. This goes to show that although maize production is a key part of food security at the household level, food security is not only determined by maize production but by other factors such as availability of other food crops and other sources of income.

Months of food security by district

Table 66 presents data on months of food security by district, and compares it with data on months of food deficit by district.

Likoma district had respondents with the highest number of months of food deficit (9 months)[11] followed by Mzimba district (5.9 months) and Zomba district (5.8 months). Respondents from Ntcheu district had the lowest number of months of food deficit (2.4 months) followed by respondents from Balaka and Machinga districts (2.8 months).

[11] It is not surprising that respondents from Likoma district registered many months of food deficit given that people on the island own very small pieces of land.

Table 66: Mean months of food deficit and months of food security by district

District	Food Deficit	Food Security	District	Food Deficit	Food Security
	Months	Months		Months	Months
Balaka	2.8	10.1	Mulanje	5.5	9.8
Blantyre	4.2	9.6	Mwanza	5.1	8.8
Chikwawa	4.1	10.0	Mzimba	5.9	7.7
Chiradzulu	3.9	9.8	Nkhata Bay	4.6	9.8
Chitipa	4.0	8.5	Nkhotakota	5.1	9.0
Dedza	4.5	8.5	Nsanje	5.1	9.0
Dowa	3.7	8.6	Ntcheu	2.4	9.5
Karonga	4.8	9.3	Ntchisi	4.7	8.1
Kasungu	3.9	9.0	Phalombe	3.7	9.4
Likoma	9.0	9.5	Rumphi	4.4	7.9
Lilongwe	4.5	9.0	Salima	4.9	8.7
Machinga	2.8	10.1	Thyolo	4.2	9.3
Mangochi	4.2	9.4	Zomba	5.8	8.8
Mchinji	3.9	9.0			

With regard to months of food security, there is not a single district in Malawi which registered a full 12 months of food security. The districts that registered the highest number of months of food security were Balaka (10.1 months), Machinga (10.1 months), Chikwawa (10.0 months), Mulanje, Nkhata Bay and Chiradzulu (9.8 months each). The districts that registered the lowest number of months of food security were Mzimba (7.7 months), Rumphi (7.9 months) and Ntchisi (8.1 months).

Sales and purchases of maize

Maize sales

Out of 2939 respondents, only 15% sold maize between the 2000 harvest and the time of our survey in March-April 2001, while 81% did not sell any maize during this period. No replies were recorded from 4% of the respondents.

Generally it is assumed that rural households would sell maize soon after harvest because they need cash. In addition to finding out the extent of maize sales, the survey wanted to find out whether those who sell their maize are more maize self-sufficient than those who do not sell their maize.

Table 67: Mean months of food deficit and months of food security for respondents that sold maize and respondents that did not sell maize

	Months of Food Deficit	Months of Food Security
Sold maize	3.8	9.3
Did not sell maize	4.6	9.1

The data in Table 67 show that those who sold maize had on average fewer months of food deficit (3.8 months) – implying a slightly higher level of maize self-sufficiency – than those who did not sell maize (4.6 months). They also had marginally more months of food security than the respondents who did not sell their maize (9.3 months versus 9.1 months).

Table 68: Percentage of farmers selling maize by receipt of SP2 (%)

	SP2 recipients	SP2 non-recipients
Sold their maize	16	12
Did not sell their maize	80	79
Number of respondents	985	281

Table 68 shows that there is no difference between SP2 recipients and non-recipients in terms of sales of maize.

Maize purchases

A total of 1821 respondents (60.5% of the sample), bought maize in the period between the 2000 harvest and our survey in March-April 2001. Table 69 presents data – disaggregated by months of food deficit – on the volume of maize purchases and the money spent on them by these respondents.

Table 69: Volume of maize purchases and money spent on the maize disaggregated by months of food deficit

Months of food deficit	Mean number of 50kg bags bought	Mean amount spent (MK)
0	2.3	640
1	1.8	424
2	2.0	689
3	2.9	679
4	2.9	783
5	3.2	811
6	3.1	857
7	2.9	822
8	4.1	1198
9	4.1	1289
10	3.7	1148
11	4.3	1686

The data in Table 69 show a trend for increasing number of bags bought as the number of months of food deficit increases from 0 to 11 months. There is also a corresponding increase in money spent on buying the maize from 0 to 11 months of food deficit. It is not surprising that respondents with higher number of months of food deficit had to buy more maize, given that they harvested less maize from own production.

Conclusions

- We estimate that the proportion of TIP recipients out of the total population of households in rural Malawi was 42%. This indicates that the 2000-01 TIP campaign missed the target by 10%.

- Community targeting did not succeed in targeting the poor. The poverty profiles of TIP recipients and non-recipients are similar. The wealth/poverty breakdown of the sample showed that 59% of respondents who did not receive TIP packs belonged to the poorest three categories. On the other hand, 35% of respondents who received TIP packs belonged to the wealthiest two categories.

  We found evidence that there was some preference for selecting households with the elderly, widows/widowers and female heads. These results coincide with the findings of the Monitoring Component.

- TIP distribution happened too late for farmers to make effective use of the inputs. Distribution was done mostly in December and January 2001. This translated into an average delay of 2 months in distribution of inputs. This late distribution of inputs adversely affected crop production. A majority of farmers (64%) indicated that they would prefer to receive inputs in September or October to give sufficient time to plan for the season and prepare their gardens.

- The TIP campaign disrupted the social fabric in rural areas. Most rural people did not understand that TIP was designed to target certain individuals in the community, by virtue of their poverty status or vulnerability (orphans, the aged or physically disabled). They interpreted targeting as favouritism on the part of chiefs or local leaders. Out of the 108 villages visited, four villages completely refused to receive TIP because of the problems targeting would cause in their communities.

- The average distance travelled by respondents to the TIP inputs collection point was 5.25 km. The minimum distance was less than a kilometre, while the maximum distance travelled was 26 kilometres.

- Some 82% of TIP recipients received complete packs containing all four inputs i.e. maize, legumes, basal fertiliser and top dressing fertiliser. About 81% of the maize, basal fertiliser and top-dressing fertiliser were received in sealed packs. For legumes, 83% of the bags were received sealed. Some 14-15% of input bags were received open but OK, while 4-5% were open with missing or damaged items.

- Sixty-five percent (65%) of TIP recipients planted all of the TIP maize seed; 7% of the respondents planted some of the maize seed, while 23% gave it away. The rest of the respondents (5%) either ate the seed, exchanged for food, sold it or stored it. Three-quarters of those who did not plant the TIP maize argued that the seed was received too late in the season to plant.

- Only 35% of TIP recipients planted all the legume seed that they received, while 32% ate the seed, 18% give it away and 8% planted only some of it. The rest of the respondents either sold the seed, exchanged it for food, or stored it. The most important reason for not planting the legume seeds was that the seed was received too late for planting. Some 58% of the respondents planted the legumes in one plot, while 38% intercropped the maize and legumes.

- Sixty-one percent (61%) of TIP recipients applied the basal and the top dressing fertiliser to their TIP maize. About 30% applied the fertiliser to the rest of their maize fields. Late receipt of fertiliser was the main reason for not applying fertiliser (36%), while 24% said their land does not need fertiliser.

- In terms of following instructions, about 45% of TIP recipients applied the basal and top dressing fertiliser to their maize crops separately, as recommended, while 53% mixed the basal and top dressing fertiliser before applying it to their maize.

- Of those who received TIP, 73% had no other source fertiliser except TIP fertiliser. Only 28% had other sources of fertiliser.

- Sixty-five percent (65%) of TIP recipients received the TIP leaflet which was included within the TIP pack in good condition. Of these, 60% said that they found the instructions easy to follow, while 26% said that they found the instructions difficult to follow. The main reason for finding the instructions difficult to follow was not knowing how to read. Sixty-one percent (61%) of the respondents have never met an agricultural extension worker in their area, while 19% meet their agricultural extension officer very irregularly.

- SP2 recipients produced 9.0 50-kg bags of maize on average in 1999-2000, while SP2 non-recipients produced 7.6 bags. The contribution of SP2 to the household maize production on the basis of the comparison of recipients and non-recipients is estimated to be 1.4 50-kg bags. Another route to estimating the contribution of SP2 to the maize produced at the household level is to ask the farmer for his own perception of the contribution. Recipients of SP2 perceive that the free inputs programme contributed an average of 2.7 50-kg bags of maize to the household.

- Expected maize production by TIP recipients in 2000-01 was 5.2 50-kg bags per household, while non-recipients expected to produce 4.7 bags. On this basis, TIP was forecast to contribute around 0.5 50-kg bags per household to total production. Late distribution of TIP inputs and the heavy rains were the main causal factors for the reduced yields compared with SP1 and SP2.

- Sixty-two percent (62%) of TIP recipients did not expect a good maize harvest in 2000-01. Similarly, 32% did not expect a good legume harvest in 2000-01. The main reasons for not expecting good maize and legume harvests in 2000-01 was that there was too much rain or flooding and that TIP seed was received too late.

- Only about 5% of the whole sample (TIP recipients and non-recipients) produced enough maize from their own gardens to feed themselves from the 2000 harvest to

March-April 2001. Some 72% of the households visited had maize deficits ranging from 1 to 6 months, while 23% had more than 6 months of maize deficit.

- Only 33% of the whole sample (TIP recipients and non-recipients) were food secure between the 2000 harvest and the time of the survey in March-April 2001, while 67% were food insecure. SP2 did not reduce the proportion of farmers that was food insecure during this time, as the additional maize produced was not enough to last through the whole of the lean period.

- Over 80% of the whole sample (TIP recipients and non-recipients) did not sell any maize from the 1999/2000 harvest, and there was no difference between SP2 recipients and non-recipients. However, 60% of the sample bought maize. The number of bags of maize purchased and the amounts spent increased in line with increasing months of food deficit.

Appendix 1: Household Listing Form

TIP 2000-2001 EVALUATION

CHITEDZE RESEARCH STATION
FOOD PRODUCTION AND SECURITY EVALUATION
MODULE 1

HOUSEHOLD LISTING FORM

CONFIDENTIAL AND ANONYMOUS

IDENTIFICATION PANEL

DISTRICT			

VILLAGE NAME	

VILLAGE CODE			

Total number of households	
Number of households that received TIP pack	
Number of household that did not receive TIP Pack	
Number of female headed households	
Number of male headed households	
Distance from distribution centre	km

Date of distribution (day/month/year) Month

Early ❑
Mid ❑
Late ❑

Was the day of distribution changed *Yes* ❑ *No* ❑

Control panel

	Name	Date
Enumerator		
Superviser		
Consultant		
Data entry clerk		

Households that received TIP Pack

		To be filled in after the list is complete	
Household number	Gender of head of household	Sequential number	Selected? Put an X if yes
	Male ❑ Female ❑		
	Male ❑ Female ❑		
	Male ❑ Female ❑	

Households that DID NOT received TIP Pack

		To be filled in after the list is complete	
Household number	Gender of head of household	Sequential number	Selected? Put an X if yes
	Male ❑ Female ❑		
	Male ❑ Female ❑		
	Male ❑ Female ❑	

Appendix 2: Questionnaires in English

For office use only.	Village code	Household code	Individual code

TIP 2000-2001 EVALUATION

FOOD PRODUCTION AND SECURITY EVALUATION
MODULE 1

HOUSEHOLD QUESTIONNAIRE

CHITEDZE RESEARCH STATION

CONFIDENTIAL AND ANONYMOUS

PART A
IDENTIFICATION PANEL

DISTRICT			
VILLAGE NAME			
VILLAGE CODE			
HOUSEHOLD NUMBER			

Household received a TIP Pack — *Yes* ❑1 *No* ❑2

Household used any TIP Pack contents even if you didn't receive a TIP Pack — *Yes* ❑1 *No* ❑2

When did the rains start this year **(Write down the month and tick the appropriate box)** — Month: ____ — Early ❑1 Mid ❑2 Late ❑3

When do the rains start normaly **(Write down the month and tick the appropriate box)** — Month: ____ — Early ❑1 Mid ❑2 Late ❑3

Control panel

	Name	Date
Enumerator		
Superviser		
Consultant		
Data entry clerk		

Before starting the interview read the following anonymity statement

We are working for Chitedze Research Station on behalf of the University of Reading in England. All the information collected is confidential and nobody will be able to identify you or use the information against you. To make sure of this, we will not write down your name so you can speak to us freely. Because we will not ask your name we will address you as Bambo or Mai.

B. Household characteristics

(To be asked to the head of household)

1. Inheritance tradition…….. Patrineal ❑1 Matrineal ❑2

2. Sex……..…… Male ❑1 Female ❑2

3. Age
If the respondent does not know his/her age, tick the appropriate box according to your own judgement

	years

Young ❑1
Middle aged ❑2
Old ❑3

4. Marital status

Single (never married) ❑1
Married with husband/ wife living in household ❑2
Married with husband/ wife temporarily living/working away ❑3
Divorced/separated ❑4
Widow/ widower ❑5

5. Household size (Number of people including children) ____

6. Are you the head of the household? (de facto) *Yes* ❑1 *No* ❑2

7. What language do you speak at home? (**Read out all the options, tick as many as necessary**)

Chichewa ❑1
Tumbuka ❑2
Nyanja ❑3
Yao ❑4
Sena ❑5
Tonga ❑6
Nkhonde ❑7
Lambya ❑8
Lomwe ❑9
Other ❑10

8. How much land is your household cultivating this season in total? ____ Acres

9. How much land is your household cultivating this season?
Please specify for each member of the household who cultivates a garden

Individual member number	Size of garden (acres)	Received a TIP pack this year?		Received a SP last year?	
		Yes ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
		Yes ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
		Yes ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
		Yes ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
		Yes ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2

11. How much land does your household have in total (including land not under cultivation at present)? ____ Acres

C. Wealth Indicators

Livestock

1. Does your household keep any livestock? *Yes* ❑ 1 *No* ❑ 2

2. How many of the following animals does your household own? (**Read out each type of animal in the list and note down the number against it. Put zero for none**).

Type	*Number*	*Type*	*Number*
Chicken		Pigs	
Doves		Goats	
Ducks		Cattle	
Guinea fowls		Oxen (pulling/cultivating)	

Other assets

3. Does your household have any of the following? **(Read out each option, tick as many as necessary)**

Plough/Ridger	*Yes* ❑1 *No* ❑2	Bicycle	*Yes* ❑1 *No* ❑2
Radio	*Yes* ❑1 *No* ❑2	Ox-cart	*Yes* ❑1 *No* ❑2

Sources of income and employment

4. What sources of cash income does your household have? **Read out all options so that the respondent is aware of them. Tick as many as necessary.**

Crops	❑ 1	Remittances	❑ 2
Small business	❑ 3	Pension	❑ 4
Artisan	❑ 5	Ganyu wages	❑ 6
Sale of livestock & livestock products	❑ 6	Salary from employment	❑ 8

5. Roughly how much income did you get from these sources in the time period mentioned (MK)? **Read out all the options. Write zero if none.**

Main staple food crop (last harvest)……..	
Main cash crop (last harvest)……	
Sale of dimba crop (last harvest)……	
Small business (last month)……	
Artisan (last month)……	
Sale of livestock and livestock products (last month)	
Remittances (last month)……	
Pension (last month)……...	
Ganyu wages (last weeding period)……..	
Salary from employment (last month)……	
Sale of fish (last month)……..	
Sale of charcoal and firewood (last month)……	
Rent (last month) ……	
Other income (last month)……	

D. Production

1. What is your main staple food crop? (**Multiple responses are allowed**)

Maize ❑ 1
Rice ❑ 2
Millet ❑ 3
Cassava ❑ 4
Sorghum ❑ 5
Banana ❑ 6

2. Did you receive a Starter Pack last season (1999-2000)? *Yes* ❑ 1 *No* ❑ 2

3. How much maize did you harvest in the following cropping seasons? (50 kg bags)

Cropping Season	Total Production	Contribution from Starter Pack/TIP Scheme	Don't know
1999 to 2000			❑ 1
2000 to 2001 expected			❑ 1

4. How much legumes did you harvest in the following cropping season? (50 kg bags)

Cropping Season	Total Production	Contribution from Starter Pack/TIP Scheme	Don't know
1999 to 2000			❑ 1
2000 to 2001 expected			❑ 1

E. Food Self-sufficiency and food security

If the main staple food is other than cassava, ask questions 1 to 3. If main staple is cassava, go to question 4.

1. When did you harvest your staple food last year (2000)?
Write N/A if staple food is cassava

Month | Year

2. Did you sell any staple food from last year's harvest (2000)? *Yes* ❑ 1 *No* ❑ 2
If no go to question 3

If yes,

How much (kg)?
How much income did you realise from these sales?

3. Has your staple food that you harvested last season run out? *Yes* ❑ 1 *No* ❑ 2
If no go to question 5

If yes,

In which month did it run out? Month | Year

If no,

How many more months will the food last? | |

4. If the main staple food is cassava, ask
How many months did you not have cassava to eat? | |

5. Over the current cropping season (2000/2001),
a) Did you buy any staple food at the market in 1999/2000? *Yes* ❑ 1 *No* ❑ 2

If yes,
i) How many 50 kg bags of maize (approx.). | |
ii) How much did you pay for food/maize in total MK? | |

b) Will you need to buy staple food at the market in this year? *Yes* ❑ 1 *No* ❑ 2

c) Did you receive any food through ganyu? *Yes* ❑ 1 *No* ❑ 2

d) Did you get any food from your friends or relatives? *Yes* ❑ 1 *No* ❑ 2

e) Did you give any food to your family or to friends? *Yes* ❑ 1 *No* ❑ 2

e) Did you receive any food from **(read out all the options)**

Food for Work programme	*Yes* ❑ 1	*No* ❑ 2
Under Five programme	*Yes* ❑ 1	*No* ❑ 2
Food aid	*Yes* ❑ 1	*No* ❑ 2
Other	*Yes* ❑ 1	*No* ❑ 2

6. Over the last year
Did you do any of these:

			When did you do it for the first time?			
			Month	Early	Mid	Late
Eat only one meal a day?	*Yes* ❑ 1	*No* ❑ 2		❑1	❑2	❑3
Eat nsima from green maize (chitubu)?	*Yes* ❑ 1	*No* ❑ 2		❑1	❑2	❑3
Eat madeya/gaga?	*Yes* ❑ 1	*No* ❑ 2		❑1	❑2	❑3
Eat fruit only (no nsima)?	*Yes* ❑ 1	*No* ❑ 2		❑1	❑2	❑3
Eat vegetables only (no nsima)?	*Yes* ❑ 1	*No* ❑ 2		❑1	❑2	❑3

7. Did you reach a point when you had to

			Month	Early	Mid	Late
Sell any one of your animals to buy food?	*Yes* ❑ 1	*No* ❑ 2		❑1	❑2	❑3
Sell any other possessions to buy food?	*Yes* ❑ 1	*No* ❑ 2		❑1	❑2	❑3
Rely on fruit (masuku), mushrooms, etc as a staple	*Yes* ❑ 1	*No* ❑ 2		❑1	❑2	❑3

Do you have any comments?

This is the end of the interview for households that didn't receive a TIP package.
If the household received TIP package start the individual now.

Remember to thank the respondent.

For office use only.	Village code	Household code	Individual code

TIP 2000-2001 EVALUATION

CHITEDZE RESEARCH STATION

INDIVIDUAL QUESTIONNAIRE

FOOD PRODUCTION AND SECURITY EVALUATION

MODULE 1

CONFIDENTIAL AND ANONYMOUS

PART A
IDENTIFICATION PANEL

DISTRICT			
VILLAGE NAME			
VILLAGE CODE			
HOUSEHOLD NUMBER			
INDIVIDUAL NUMBER			

Age of respondent
If the respondent does not know his/her age, tick the appropriate box according to your own judgement

years

Young ❑1
Middle aged ❑2
Old ❑3

Sex……..…… Male ❑1 Female ❑2

Control panel

	Name	Date
Enumerator		
Superviser		
Consultant		
Data entry clerk		

Before starting the interview read the following anonymity statement

We are working for Chitedze Research Station on behalf of the University of Reading in England. All the information collected is confidential and nobody will be able to identify you or use the information against you. To make sure of this, we will not write down your name so you can speak to us freely. Because we will not ask your name we will address you as Bambo or Mai.

B. TIMELINESS OF PACK DELIVERY

1. If you planted your own maize (not TIP) this year, when did you plant it? **(Write down the month and tick the appropriate box)**

Month

Early ❑1
Mid ❑2
Late ❑3

2. When did you receive the TIP pack **(Write down the month and tick the appropriate box)**

Month

Early ❑1
Mid ❑2
Late ❑3

3. If you planted TIP maize this year, when did you plant your TIP maize? **(Write down the month and tick the appropriate box, if not planted write N/A)**

Month

Early ❑1
Mid ❑2
Late ❑3

4.How did you rate the timeliness of distribution in relation to your normal time of planting?

Timely ❑1
Late but planted ❑2
Too late to plant ❑3

5.Which month would you like to receive the TIP pack?

Month

C. CONTENT OF THE PACK

1. How many bags did you receive of:

Maize		Soya beans	
Groundnuts		Fertiliser (basal - grey)	
Beans		Fertiliser (top dressing - white)	

2. What was the condition of the bags that you received **(tick the appropriate box)**

	Sealed	Open but contents OK	Open with missing or damaged contents	Didn't receive
Maize	❑1	❑2	❑3	❑4
Legumes	❑1	❑2	❑3	❑4
Fertilizer (basal - grey)	❑1	❑2	❑3	❑4
Fertilizer (top dressing - white)	❑1	❑2	❑3	❑4

3. Rate the quality of the contents: **(tick the appropriate box)**

	good	poor	unusable	N/A
Maize	❑1	❑2	❑3	❑4
Legumes	❑1	❑2	❑3	❑4
Fertilizer (basal - grey)	❑1	❑2	❑3	❑4
Fertilizer (top dressing - white)	❑1	❑2	❑3	❑4

D. USE OF THE INPUTS

I. MAIZE

1. How did you use the maize seed? **(Tick more than one if necessary**)

Planted all of it	❑1	Sold it	❑6
Planted some of it	❑2	Stored it	❑7
Ate it	❑3	Gave it away	❑8
Exchanged for food	❑4	Other, specify	_____
Didn't receive	❑5		_____

2. If not planted at all, or planted just part of it, why? **(Tick more than one if applicable)**

Seed received too late in the agricultural season	❑1
No land left available for planting	❑2
Seed of poor quality	❑3
Did not like the variety	❑4

3. What proportion of all maize seed that you planted came from the TIP pack this season? **(tick one box only)**

All of it	More than half	Equal amounts	Around $^1/_4$	Very little	None
❑1	❑2	❑3	❑4	❑5	❑6

4. How did you plant the TIP maize? Did you… (**Tick more than one if necessary)**

Plant it all together in one plot?	❑1
Spread it out over a larger area?	❑2
Use to fill gaps in your garden?	❑3
Not applicable	❑4

5. What is the origin of the other seed that you planted (non-TIP seed) this season?

a) Bought seed **(Tick more than one if necessary)**

		How much (kg)	How much (MK)
Local variety	❑1	_____	_____
Hybrid/Improved seed	❑2	_____	_____
Don't know	❑3	_____	_____
Didn't buy	❑4		

b) Recycled seed **(Tick more than one if necessary)**

		How much (kg)
Seed from last year's SP harvest	❑1	_____
Seed from SP2 which was not planted but stored to plant this year	❑2	_____
Local variety	❑3	_____
Last year's bought seed (not SP)	❑4	_____
Last year's seed received from agricultural programmes (not SP)	❑5	_____
Don't know	❑6	
Didn't recycle seed	❑7	

II. LEGUMES

1. How did you use the legume seed? (**tick more than one if necessary**)

Planted all of it	❑1	Sold it	❑6
Planted some of it	❑2	Stored it	❑7
Ate it	❑3	Gave it away	❑8
Exchanged for food	❑4	Other, specify	_____
Didn't receive	❑5		_____

➢ **If planted all of it go to question 3**

2. If not planted at all or planted just part of it, why? **(Tick more than one if applicable)**

Seed received too late in the agricultural season	❑1
No land left available for planting	❑2
Seed of poor quality	❑3
Did not like the type of legume	❑4

3. What proportion of all legume seed that you planted came from the TIP pack this season? **(Read out all options, tick only one)**

All of it	More than half	Equal amounts	Around $^1/_4$	Very little	None
❑1	❑2	❑3	❑4	❑5	❑6

4. Did you plant the legumes them all together in one plot?	*Yes* ❑1	*No* ❑2
5. Did you intercrop the maize and the legumes?	*Yes* ❑1	*No* ❑2

III. FERTILIZER

1. What did you do with the fertiliser? **(Tick more than one if necessary)**

	Basal (grey)		Top dressing (white)	
Applied it to TIP maize	*Yes* ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
Applied it to rest of the maize field	*Yes* ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
Used it on other crops	*Yes* ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
If yes, other crops, specify which crop or crops	_____		_____	
	_____		_____	

	Basal (grey)		Top dressing (white)	
Gave it away	*Yes* ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
Sold it	*Yes* ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
Stored it	*Yes* ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
It was stolen	*Yes* ❑1	*No* ❑2	*Yes* ❑1	*No* ❑2
Other, specify	_____		_____	
	_____		_____	

2. If you didn't apply any of the TIP fertiliser, why not? **(If applied, go to question 3)**

My land doesn't need fertiliser	*Yes* ❑1	*No* ❑2
I only use organic fertiliser	*Yes* ❑1	*No* ❑2
I needed the money, so I sold it	*Yes* ❑1	*No* ❑2
It came too late to use	*Yes* ❑1	*No* ❑2

Other (please specify) _____

3. If you applied fertiliser to the maize, how did you apply the fertiliser? **(Tick no more than two answers)**

Basal (grey) dressing separately ❑1
Top (white) dressing separately ❑2
Basal + Top dressing mixed ❑3

(If applied mixed fertiliser go to part c)

a) If you applied the basal to the maize, when did you apply the basal fertiliser?

During planting ❑1
After a week but before two weeks after planting ❑2
Three to four weeks after planting ❑3
Did not apply ❑4

b) If you applied the top dressing to the maize, when did you top dress?

During planting ❑1
After germination but 2 weeks after planting ❑2
3 weeks after planting ❑3
4 weeks to tasseling ❑4
After tasseling ❑5
Did not apply ❑6

c) If you applied the mixed fertiliser to the maize, when did you apply the mixed fertiliser?
(if the farmer did not mix fertiliser go to question 4)

Within a week from planting ❑1
From germination to 4 weeks after planting (including weeding) ❑2
After weeding but before tasseling ❑3
After tasseling ❑4
Did not apply ❑5

4. Apart from the fertiliser which you were given in your TIP, where else did you obtain fertiliser for your garden? **(Write zero if no other fertiliser was obtained)**

	basal	top dressing
Credit scheme	kg	kg
Own cash	kg	kg
Gifts from relatives	kg	kg
Bought fertiliser from TIP beneficiaries	kg	kg
Stored fertiliser from SP2	kg	kg
Others (please specify) _____	kg	kg

5. What proportion of all the fertiliser that you applied came from the TIP pack this season? **(Tick only one option)**

All of it	More than half	Equal amounts	Around $^1/_4$	Very little	None
❑1	❑2	❑3	❑4	❑5	❑6

E. OPEN POLLINATED VARIETY

1. Did you realise that the maize seed given out this season is different from last season? *Yes* ❑1 *No* ❑2

2. If yes, how did you know that the seed was different? **(Tick more than one box if necessary)**

It looks flint and poundable ❑1
The leaflet in the pack said it was different ❑2
I heard on the radio ❑3
The extension field assistant told me ❑4
Other ❑5

3. Do you realise that seed for this season can be recycled again without loss of yield potential? *Yes* ❑1 *No* ❑2

If answer to E1 or E3 is NO, then enumerator provides factual information on the difference between hybrid and OPV: This year the TIP pack provided maize seed from Open Pollinated Varieties, their yield is the same as hybrid in your plot, you don't have to buy fresh seed every year – you can use it again, and it is just as poundable as your local variety.

F. FARMERS' PERCEPTION

1. How far away is the garden where you used TIP inputs _____ km

Go with the farmer to his/her garden where the TIP inputs have been used and ask questions 2 to 8. In the exceptional case when it is impossible to go to the garden, make sure you still ask these questions at the farmer's house.

2. What is the size of your garden? _____ Acres

3. Do you expect a good harvest of maize this season? *Yes* ❑1 *No* ❑2 Didn't plant ❑3

(if yes go to question 8)

4. If no, why not? **(Tick as many responses as appropriate)**

Not enough fertiliser ❑1
TIP fertiliser received too late ❑2
Not enough seed ❑3
TIP seed received too late ❑4
Too much rain/flooding ❑5
Too little rain/drought ❑6
Pests/diseases ❑7
Didn't have enough help in the garden (lack of labour) ❑8
I was sick ❑9
Other, please specify _____ ❑10

5. Approximately how many 50 kg bags do you expect to harvest? ☐

Check here if Don't know ❑1

6. Do you expect a good harvest of legume this season? *Yes* ❑1 *No* ❑2 Didn't plant ❑3

(if yes go to question 8)

7. If no, why not? **(Tick as many responses as appropriate)**

Not enough fertiliser ❑1
TIP fertiliser received too late ❑2
Not enough seed ❑3
TIP seed received too late ❑4
Too much rain/flooding ❑5
Too little rain/drought ❑6
Pests/diseases ❑7
Didn't have enough help in the garden (lack of labour) ❑8
I was sick ❑9
Other, please specify _____ ❑10

8. Approximately how many 50 kg bags do you expect to harvest? ☐

Check here if Don't know ❑1

G. TIP LEAFLET & EXTENSION

1. Did you receive a leaflet with instructions on how to use TIP inputs? *Yes* ❑1 *No* ❑2

2. What was the condition of the leaflet?

Good ❑1
Damaged ❑2

3. Did you follow the instructions in the leaflet?
For maize:

Ridges are 75cm apart (approx.) *Yes* ❑1 *No* ❑2
Planting stations are 25cm apart (approx.) *Yes* ❑1 *No* ❑2
One plant per planting station *Yes* ❑1 *No* ❑2

4. Were you given instructions on how to plant the legumes? *Yes* ❑1 *No* ❑2

5. Did you find the instructions in the leaflet easy to follow? *Yes* ❑1 *No* ❑2
If yes go to question 14

6. If **NOT,** why? **(Tick as many as necessary)**

Don't know how to read ❑1
Did not understand the instructions ❑2
Instructions were too tedious to follow ❑3
Did not want to follow instructions ❑4
No time to follow instructions ❑5
Instructions contrary to my usual farming practice ❑6
Damaged leaflet ❑7
Other, please specify _____ ❑8

7. How often do you meet the extension field assistant? **(Tick only one option)**

Never ❑1
Very irregular ❑2
Weekly ❑3
Fortnightly ❑4
Monthly ❑5

8. Have you visited a starter pack demonstration plot this year? *Yes* ❑1 *No* ❑2

9. Did you receive any of these in your pack?

A leaflet on HIV/AIDS *Yes* ❑1 *No* ❑2
A Chishango *Yes* ❑1 *No* ❑2

10. Do you think it is a good idea to include information on HIV/AIDS in the pack? *Yes* ❑1 *No* ❑2

11. Do you think it is a good idea to include a Chishango in the pack? *Yes* ❑1 *No* ❑2

This is the end of the interview

Remember to thank the respondent

For the enumerator to fill in after the interview:

1 Do you visit the farmer's garden? *Yes* ❑1 *No* ❑2

2. If not, why not?

Appendix 3: Questionnaires in Chichewa and Tumbuka

TIP 2000-2001 EVALUATION

FOOD PRODUCTION AND SECURITY EVALUATION
MODULE 1

HOUSEHOLD QUESTIONNAIRE

CHITEDZE RESEARCH STATION

CONFIDENTIAL AND ANONYMOUS

PART A
IDENTIFICATION PANEL

DISTRICT			
VILLAGE NAME			
VILLAGE CODE			
HOUSEHOLD NUMBER			

Kodi munyumba muno munalandira TIP Pack *Eya* ❑1 *Ayi* ❑2

Kodi munagwiritsa ntchito zipangizo za TIP Pack ngakhale simunalandire nawo TIP Pack *Eya* ❑1 *Ayi*❑2

Kodi mvula inayamba liti kugwa chaka chatha **(Chongani mwezi ndi nthawi)**

Mwezi		
	mayambiro	❑1
	mkati	❑2
	mapeto	❑3

Kodi zaka zonse mvula imayamba mwezi wanji? **(Chongani mwezi ndi nthawi)**

Mwezi		
	mayambiro	❑1
	mkati	❑2
	mapeto	❑3

Control panel

	Name	Date
Enumerator		
Superviser		
Consultant		
Data entry clerk		

Musanayambe kucheza nawo alimi, awuzeni kuti zonse zimene anene, zikhala za chinsinsi.

Ife tachokera ku Chitedze Research Station ndipo tikugwira ntchito iyi m'malo mwa University of Reading, yaku Mangalande. Zonse zimene mutiuze pano zikhala za chinsinsi, ndiye mukhale omasuka ndipo musaope kuti tikawauza ena. Chifukwa cha ichi, pano sitikufunsani kuti mutiuze dzina lanu; tikamacheza pano tizingokutchulani kuti Bambo kapena Mayi.

B. M'mene banja liri.

(Mafunsowa funsani mkulu wapa banja)

1. Kodi kuno mwambo wanu ndi wa chikamwini kapena mumalowola? Chikamwini ❑1 Kulowola ❑2

2. Mwamuna kapena mkazi Mwamuna ❑1 Mkazi ❑2

3. Muli ndi zaka zingati? **Zaka**:..... Sindidziwa

Wamg'ono ❑1

Wamkulu ❑2

Nkhalamba ❑3

4. Ndinu wokwatiwa?

Sindinakwatilepo ❑1
Eya, Mwamuna/Mkazi wanga ali pompano ❑2
Eya, koma mwamuna/mkazi wanga anachokapo/akugwira ntchito kwina ❑3
Ayi, chikwati chinatha ❑4
Ayi, Bambo/Mayi anatisiya ❑5

5. Kuphatikiza ndi ana, kodi m'nyumba muno anthu mulipo angati?

6. Kodi ndinu wamkulu wa pa banja? *Eya* ❑1 *Ayi*❑2

7. Kodi ntchito yanu yeniyeni ndi chiani? (**Auzeni mayankho onse, koma chongani yankho limodzi**)

Mlimi ❑1
Ndimachita businesi ya ying'ono ❑2
Ndimagwira ntchito za luso ❑3
Ndimagwira ntchito ku boma ❑4
Ndimagwira ntchito pandekha ❑5
Ndimagwira ntchito pa Estate ❑6
Ndine Tenanti pa Estate ❑7
Sindigwira ntchito ❑8
Other ❑9

8. Kodi mumalankhula chinenero chanji? (**Auzeni mayankha onse, chongani zinenero zonse zimene amalankhula**)

Chichewa ❑1
Tumbuka ❑2
Nyanja ❑3
Yao ❑4
Sena ❑5
Tonga ❑1
Nkhonde ❑2
Lambya ❑3
Lomwe ❑4
zilankhulo zina ❑5

9. Kodi chaka chino, inu ndi onse a m'banja lanu, mwalima maekala angati?

Please specify for each member of the household who cultivates a garden

Individual member number	Size of garden (acres)	Received a TIP pack this year?		Received a SP last year?	
		Eya ❑1	*Ayi* ❑2	*Eya* ❑ 1	*Ayi* ❑ 2
		Eya ❑1	*Ayi* ❑2	*Eya* ❑ 1	*Ayi* ❑ 2
		Eya ❑1	*Ayi* ❑2	*Eya* ❑ 1	*Ayi* ❑ 2
		Eya ❑1	*Ayi* ❑2	*Eya* ❑ 1	*Ayi* ❑ 2
		Eya ❑1	*Ayi* ❑2	*Eya* ❑ 1	*Ayi* ❑ 2

10. Kuphatikizapo malo amene simunalime chaka chino, munda wanu ndi waukulu bwanji, maekala angati)?

Ekala

C. Kafukufuku wa chuma chimene ali nacho

Ziweto

1. Kodi pa banja pano mumasunga ziweto? Eya ❑ 1 Ayi ❑ 2

2. Kodi muli ndi ziweto zingati za mitundu iyi? (**Auzeni mitundu yonseyi ndipo lembani nambala ya ziweto zimene ali nazo**).

Type	*Number*	*Type*	*Number*
Nkhuku		Nkhumba	
Nkhunda		Mbuzi	
Abakha		Ng'ombe	
Nkhanga		Ng'ombe zokoka ngolo/ abulu)	

Chuma china

3. Kodi pa banja pano muli ndi zinthu izi? **(Auzeni mayankho onse, ndipo muchonge zonse zimene ali nazo)**

Pulawo/Rija	*Eya*❑1 *Ay*❑2	Njinga	*Eya* ❑1 *Ayi*❑2
Wailesi	*Eya*❑1 *Ayi* ❑2	Ngolo	*Eya*❑1 *Ayi*❑2

Kapezedwe ka ndalama

4. Kodi pa banja pano ndalama mumazipeza bwanji?
(**Auzeni mayankho onse, ndipo chongani m'mene apezera ndalama**)

Mbeu	❑ 1	Zonditumizira	❑ 2
Bizinesi yaing'ono	❑ 3	Pension	❑ 4
Zalunso	❑ 5	Ganyu	❑ 6
Kugulitsa ziweto ziweto	❑ 7	Ndalama za pa wenzi	❑ 8
Renti ya nyumba	❑ 9		

5. Kodi munapezapo ndalama zingati kuchokera ku ntchito izi?
(**Auzeni zonse ziri pansipa; lembani ziro (O) ngati sanapange ndalama kuchokera kumeneko**)

Kugulitsa chimanga(chaka chatha).....	MK
Kugulitsa zokolora zina, ngati fodya(chaka chatha)...	MK
Kuchokera ku bizinesi yaing'ono(mwezi watha).....	MK
Zochita-chita za luso(mwezi watha).....	MK
Kugulitsa za ku dimba(mwezi watha).....	MK
Kugulitsa ziweto (mwezi watha)…….....…	MK

Pensoni (mwezi watha).....	MK
Zotitumizira (mwezi watha)……	MK
Ganyu (mwezi watha)……...	MK
Ganyu wages (popalira)…….....	MK
Malipiro a pa mwezi (mwezi watha)…….....	MK

Kugulitsa nsomba (mwezi watha)……..	MK
Kugulitsa makala ndi nkhuni.(mwezi watha).....	MK
Renti (mwezi watha).....…….	MK
Ndi njira zina zopezera ndalana (mwazi watha)....	MK

D. Kakololedwe ka Mbeu

1.Chakudya cheni-cheni pa banja pano ndi chiyani?(**Multiple responses are allowed**)

Chimanga	❑ 1
Mpunga	❑ 2
Mawere	❑ 3
Chinagwa	❑ 4
Mapira	❑ 5
Nthochi	❑ 6

2. Kodi munalandira Starter Pack (1999-2000)? *Eya* ❑ 1 *Ayi* ❑ 2

3. Kodi munakolora matumba angati a 50 kg a chimanga?

Cropping Season	Zonse pamodzi	Za Starter Pack/TIP Scheme	Sindi-dziwa
1999 to 2000			❑ 1
2000 to 2001(Chiyembekezo)			❑ 1

4. Kodi mbeu ya soya kapena mtedza, munakolora matumba angati a 50 kg?

Cropping Season	Zonse pamodzi	Za Starter Pack/TIP Scheme	Sindi-dziwa
1999 to 2000			❑ 1
2000 to 2001(Chiyembekezo)			❑ 1

E. Kakwaniridwe ka chakudya pa banja

(Ngati chakudya cheni-cheni pa banja, sichinangwa, funsani mafunso 1 mpaka 3. Ngati chakudya ndi chinangwa, funsani funso 4).

1. Kodi chaka chathachi munakolora liti chakudya chanu? (Write N/A if staple food is cassava)

Mwezi	Chaka

2. Kodi munagulitsapo zokolora zanu za chaka chatha? *Eya* ❑ 1 Ayi ❑ 2

Ngati yankho ndi Ayi, funsani funso 3)

Ngati munagulitsapo,

Munagulitsa ma kilogramu angati?	
Munapeza ndalama zingati?	

3. Kodi chimanga chanu chimene munakolora chilipo kapena chinatha? *Chilipo* ❑ 1 *Chinatha* ❑ 2

Ngati chinatha, chinatha mwezi uti?

Mwezi	Chaka

Ngati chilipo, mukuyembekeza kuti patsala miyezi ingati kuti chithe?

4. Ngati chakudya chanu pakhomo pano ndi chinagwa, panali miyezi ingati imene simunadye chinagwa?

5. Muchaka chino cha (2000/2001),

a) Munagulapo chakudya ku msika? *Eya* ❑ 1 Ayi ❑ 2

Ngati munagulapo,

i) Munagulapo ma kilogramu angati? (moyerekeza).

ii) Munalipira ndalama zingati MK?

b) Mukuganiza kuti chaka chino mugulanso chakudya pa msika? *Eya* ❑ 1 *Ayi* ❑ 2

c) Mukachita ganyu, amakupatsani chakudya monga ufa? *Eya* ❑ 1 *Ayi* ❑ 2

d) Munalandira chimanga kuchokera kwa achibale/abwenzi anu? *Eya* ❑ 1 *Ayi* ❑ 2

e) Kodi munawagawirapo chakudya kwa a chibale kapena abwenzi anu? *Eya* ❑ 1 *Ayi* ❑ 2

f) Munalandilapo chakudya kuchokera ku ma bungwe awa? *Eya* ❑ 1 *Ayi* ❑ 2

Food for Work programme *Eya* ❑ 1 *Ayi* ❑ 2

Under Five programme *Eya* ❑ 1 *Ayi* ❑ 2

Food aid *Eya* ❑ 1 *Ayi* ❑ 2

Other *Eya* ❑ 1 *Ayi* ❑ 2

6. Kodi mu chaka chathachi, kapena kumayambiliro a chaka chino, zinthu zinafika poyipa kuti munachitapo zina mwa izi?:

			Mwezi uti?			
			Mwezi	Mayambiliro	Mkati	Kothera
Kudya kamodzi pa tsiku?	*Eya* ❑ 1	*Ayi* ❑ 2		❑1	❑2	❑3
Kudya nsima ya (chitibu)?	*Eya* ❑ 1	*Ayi* ❑ 2		❑1	❑2	❑3
Kudya madeya/gaga?	*Eya* ❑ 1	*Ayi* ❑ 2		❑1	❑2	❑3
Kudya zipatso basi (osadya nsima)?	*Eya* ❑ 1	*Ayi* ❑ 2		❑1	❑2	❑3
Kudya masamba okha (osadya nsima)?	*Eya* ❑ 1	*Ayi* ❑ 2		❑1	❑2	❑3

7. Zinthu zinafika poyipitsitsa kuti munachitapo izi?

			Mwezi	Mayambiliro	Mkati	Kothera
Kugulitsa ziweto kuti mugule chakudya?	*Eya* ❑ 1	*Ayi* ❑ 2		❑1	❑2	❑3
Kugulitsa katundu wa panyumba kuti mugule chakudya?	*Eya* ❑ 1	*Ayi* ❑ 2		❑1	❑2	❑3
Kungodalira masuku, mango kapena bowa?	*Eya* ❑ 1	*Ayi* ❑ 2		❑1	❑2	❑3

Kodi muli ndi zakukhosi pa nkhani ya Stata Paki zoti mungatiuze?

Apa ndipothera kucheza ndi mlimi amene sanalandile TIP Pack. Ngati mlimi analandira TIP Pack, yambani kucheza naye pofunsa mafunso a mu Individual Questionnaire.

Kumbukilani kuthokoza mlimi amene munacheza naye.

TIP 2000-2001 EVALUATION

FOOD PRODUCTION AND SECURITY EVALUATION
MODULE 1

HOUSEHOLD QUESTIONNAIRE

CHITEDZE RESEARCH STATION

CONFIDENTIAL AND ANONYMOUS

PART A
IDENTIFICATION PANEL

DISTRICT			
VILLAGE NAME			
VILLAGE CODE			
HOUSEHOLD NUMBER			

Kasi banja likapokera sitata paki *Enya* ❑1 *Yayi* ❑2

Kasi banja likagwirisa nelute sitata paki naga uli likapokera yayi? *Enya* ❑1 *Yayi* ❑2

Kasi vula yakupandila vingoma yikafika mwezi nguni?
(Lembani mwezi wake ndipo chongani kabokosi kamoza kakwenerera)

Mwezi		
	Pakwamba	❑1
	Pakati	❑2
	Kuumaliro	❑3

Kasi nyengo zose vula yakupandila yikwamba mwezi uli?
(Lembani mwezi wake ndipo chongani kabokosi kamoza kakwenerera)

Mwezi		
	Pakwamba	❑1
	Pakati	❑2
	Kuumaliro	❑3

Control panel

	Name	Date
Enumerator		
Superviser		
Consultant		
Data entry clerk		

Pambere mundayambe kuchezga na walime, muwazge mazgo agha:

Ise tikugwira nchito ku Chitedze Research Station mumalo mwa wanyithu wa ku Univerite ya Reading ku Mangalande. vyose ivyo tidumbiskanenge pano, vyatekha-tekha, nakuti ise tamuyowoyaso na munthu munyake chara, panji ku runura zina linu nanyengo na yimoza yayi. Ichi ndicho chifukwa chake tikhumbenge kuti mutiphalire zina lino yayi. Vyose ivyo tiyowoyenge vya chisisi pera.

B. VINTHU IVYO VILI PANYUMBA YA MULIMI

(Agha nimafumbo ghakufumba mulala ndipo mwenecho wa banja lose)

1. Mwenecho wakatundu pa banja — Kuchama lume ❑1 Kuchanakazi ❑2

2. Kasi banalume panji mwanakazi? — Mwanalune ❑1 Mwanakazi ❑2

3. Kasi mwene banja wakawa pa uli?
(Pala mwene banja wakuvimanya yayi virimika vyake, chongani tumabokosi kwakuyaniskane na umo mwene banja walili)

Virinuka	
	Munyamaya ❑1
	Doda ❑2
	Mudala ❑3

4. Umoliliri banja la mwene banja

Waliyekha (ndipo wandatolepo panji kutengwapo) ❑1
Ngwakutora panji kutengwa ndipo wakukhala pa nyumba ❑2
Ngwakutora panji kutengwa, ndipo mwanalume panji mwanakazi wakukhala kunyake ❑3
thengwa yili kumala panji wali kulekana waka ❑4
Chokolo ❑5

5. Kasi wanthu mbalinga mu banja ili? ____

6. Kasi imwe ndimwe wenecho wanyumba ndipo mukukhala penepano? *Enya* ❑1 *Yayi* ❑2

7. Kasi munyumba mwinu muno mukuyowoya chiyowoyero uli? (**Zunulani viyowoyero vyose, ndipo chongani vyose ivyo vikuyowoyeka)**

Chichewa ❑1
Tumbuka ❑2
Nyanja ❑3
Yao ❑4
Sena ❑5
Tonga ❑6
Nkhonde ❑7
Lambya ❑8
Lomwe ❑9
Chinyake ndiyo woyerouli inco mukumanya ❑10

8. Kasi banja lino lose chaka chino likulima ma ekala ghalinha? ____ Ekala

9. Kasi munthu wali yole mu banja mwinu umu wakulima ma ekala ghalinga?
(Yezgani kukumbuka ma ekala ghose agho wanthu wamunyumba mwinu walima chaka chino)

Nambala ya wanthu	Ukulu wake wa munda	Kasi mukapokera sitata paki chaka chino?		Kasi mukapokera sitata paki chaka chino?	
1	Ekala	*Enya* ❑1	*Yayi* ❑2	*Enya* ❑ 1	*Yayi* ❑ 2
2	Ekala	*Enya* ❑1	*Yayi* ❑2	*Enya* ❑ 1	*Yayi* ❑ 2
3	Ekala	*Enya* ❑1	*Yayi* ❑2	*Enya* ❑ 1	*Yayi* ❑ 2
4	Ekala	*Enya* ❑1	*yayi* ❑2	*Enya* ❑ 1	*Yayi* ❑ 2
5	Ekala	*Enya* ❑1	*yayi* ❑2	*Enya* ❑ 1	*Yayi* ❑ 2

10. Kasi banja linu lina malo ghakulu uli? (**Apatikusazgako na agha mundapandepo vinthu)**

Ekala

C. VINTHU VYA VUWONESKA KUTI MUNTHU NIMUSAMBAZI

Viweto

1. Kasi mukusunga viweto pa nyumba pano? *Enya* ❑ 1 *Yayi* ❑ 2

2. Pala mukusunga viweto, tiphalireni unandi wake wa viweto vyo ivyo vikusungika pa nyumba yinu? (**Wazgano mutundu uli wose wa viweto uvo talemba, ndipo lembani unandi wake wa viweto. Lembani zero pala chiweto chamunthu uwo palije)**.

Mtundu	*Unandi*	*Mtundu*	*Undandi*
Nkhuku		Nkhumba	
Nkhunda		Mbuzi	
Va baka		Ng'ombe	
Nkhanga		Nkhambako	

Katundu munyake pa nyumba

3. Kasi pa nyumba yinu pa kusangika chimoza panji vyese ivi niyowoyenge apa? **(Chongani vyose ivyo mulimi wa zumulenge)**

Majamba ghakulimira ng'ombe	*Enya* ❑1	*Yayi* ❑2	Njinga	*Enya* ❑1	Yayi ❑2
Radio	*Enya* ❑1	Yayi ❑2	Chikochikari	*Enya* ❑1	Yayi ❑2

Kusanga ndarama pa nyumba na malo ghakugwirako nchito

4. Kasi ndarama pa nyumba panji banja linu pano ndarama mukuzisanga uli? (Werengani vyose ivi talembe apa kuti mulime wasankhapo ntowa zose izi wakusangila ndarama pa nyumba)

Mbuto panji mbeu	❑ 1	Kupokera makopala kufuma ku wa bale wa pa nchito	❑ 2
Kabisinesi kachoka	❑ 3	Penshoni	❑ 4
Twakupanga-panga	❑ 5	Kulima ganyu	❑ 7
Kugulisa viweto, mkaka, vikumba panji nyama ya viweto	❑ 6	Kufuma ku nchito iyo munthu wakugwira	❑ 8
Nanga vinyake vilipo?	❑ 9	Renti ya nyumba	❑ 10

5. Pala mungakumbuka makora, mukugomezga kuti mu kasangapo ndarama zilinga pa vinthu ivyo ni zunulenga apa (MK)? **(Werengani nthawi zose izo munthu wangasangila ndarama ndipo nulemba ndarama izo wakasanga chaka chamala, panji mwezi wamala).**

Kugulisa mbuto yaya chakurya (vingoma panji mayao, chaka chamala)	MK
Kugulisa mbuti yakusangilapo ndarama para ngati foja, tea, coffee, skaura chaka chamala	MK
Kugulisa mbeti za kumadimba chaka chamala	MK
Kufuma ku ka bizinesi kachoko mwezi wa mala uwu	MK

Kufuma ku tunthu twakupanga-panga pa nyumba	MK
Kuguliska viweto, na myama panji mukana na vikumba vyawo mwezi wamala	MK
Kupokera ndarama kufuma kuwabale awo wakugwira nchito mwezi wamala	MK
Kufuma ku penishoni yinu mwezi wamala	MK
Kufuma ku ganyu mwezi wa mala	MK

Kufuma ku nchito iyo mukugwira mwezi wamala	
Kufuma kwa kugulisa somba mwezi wamala	
Kufuma kwa kugulisa mikala mwezi wamala	
Kufuma ku Renti ya nyumba mwezi wamala	
Nanga kunyake uku wakasangila ndarama mwezi wamala ni nkhu, ndipo ndarama zilinga	

D. KAGAWIRO NA KAPOKERERO KA SITATA PAKI

1. Kasi nimbeu uli iyo mukulima iyo ndiyo ya chakurya chino cha zuwa-mazuwa? (**Werengani vyose ndipo munthu wa ngazigora kwa kuyaniskana na umo wakuryera pa nyumba yake na banja lose**)

Vingoma ❑ 1
Mpunga ❑ 2
Lipoko ❑ 3
Vinkhawo ❑ 4
Mapira ❑ 5
Matochi ❑ 6

2. Kasi mukapokera sitata paki chaka chamala (1999-2000)? *Enya* ❑ 1 *Yayi* ❑ 2

3. Kasi mukasangapo viuna yinandi uli ya vingoma chaka chamala, ndipo chaka chino mukugomezga kuti musangenge vuna ya uli unandi wake?(**Lembani mathumba gha 50 kg bags)**

Chirimika	Vuna yose yavingoma	Kasi pa vuna iyo mukasanga ni mathumba ghalinga ghakafuma ku sitata paki	Nkuma-nyachara
Chaka chamala (1999 to 2000)			❑ 1
Chaka chino 2000 to 2001			❑ 1

4. Kasi mukasanga vuna yinandi uli ya nchunga nasoya chaka chamala, ndipo chaka chinu mukugomezga kuti musange vuna ya uli unandi wake? (Lembani mathumba gha 50 kg bags)

Chirimika	Vuna yose yavingoma	Kasi pa vuna iyo mukasanga ni mathumba ghalinga ghakafuma ku sitata paki	Nkuma-nyachara
Chaka chamala (1999 to 2000)			❑ 1
Chaka chino 2000 to 2001			❑ 1

E. UNANDI NA KU KWANIRA KWA VYA KURYA PA NYUMBA

Pala chakuraya cha zuwa na zuwa ni vingoma, Lipoko, mupunga, mapira panji matochi, wazgore mafumbo namala 1 mupaka 3. Pala chakurya zazawa nazuwa ai vinkhawo, lutani ku fumbo nambala 4.

1. Kasi chakurya chinu icho mukugomezga pano pa nyumba, mukakolola pa uli chaka chamala (2000)?
(Lembanipo N/A pala chakurya icho ni vinkhawo)

Mwezi	Chaka

Enya ❑ 1 *Yayi* ❑ 2

2. Kasi mukagulisapo chakurya chino chaka chamala (2000)?
Pala zgoro ni Yayi, lutani ku fumbo la chitatu

Pala zgoro ni Eya,

Mukasangapo unandi uli wa vuna (kg)?	
Nanga ndarama mukasangapo zilinga?	

3. Kasi chakurya chino cha zuwa na zuwa icho mukakolola chaka chamala chili kumala sono? *Eya* ❑ 1 *Yayi* ❑ 2
(Pala chindamale lutani ku fumbo nambala 5)

Pala enya,

Chakurya ichi chikamala mwezi nkuni?

Mwezi	Chaka

Pala enya,

Pala chakurya ichi chindamale, kwakhala mwezi yilinga kuti chakurya ichi chimalirethu? | |

4. Pala chakurya chinu cha zuwa na zuwa in vinkhawo, kasi ni mwezi yilinga iyo imwe mulikukhalopo kwa mbula kurya sima ya vinkhawo vya mu munda winu?

5. Muchaka chino chavula ya sono (2000/2001),

a) Muli kugulapo chakurya cha zuwa na zuwa kufuma ku wanthu panji kumareketa mu chaka chamala (1999/2000)? *Enya* ❑ 1 *Yayi* ❑ 2

Pala Enya,

i) Muli kugulapo ma thumba ghalinga gha vingoma gha 50 kg?

ii) Kasi kuti mugule vya kurya muli kusakazapo ndarama zilinga (MK)?

b) Kasi mukogomezga kuti mugulenge chakurya cha zuwa na zuwa chaka chino? *Enya* ❑ 1 *Yayi* ❑ 2

c) Kasi muli kuchitapo ganyu kuti musange chakurya ? *Enya* ❑ 1 *Yayi* ❑ 2

d) Kasi imwe muli kupokerapo chakurya kufuma kwa wabale panji kuwabweziwinu? *Enya* ❑ 1 *Yayi* ❑ 2

e) Kasi imwe muli kuwapapo chakurya wabale winu panji wabwezi winu? *Enya* ❑ 1 *Yayi* ❑ 2

f). Kasi muli kupokerapo vya kurya ku fuma uku? **(Werengani ndipo mulime wasankhepo uko wali kupokerako chakurya)**

Kugwira nchito kuti upokerepo chakurya	*Enya* ❑ 1	*Yayi* ❑ 2
Ku purogiramu ya wane wachoko awo vyaka vyawo vindakwane 5	*Enya* ❑ 1	*Yayi* ❑ 2
Kufuma ku vya kurya ivyo wakupeleka wa boma panji tuma bungwe twakupambana-pambana	*Enya* ❑ 1	*Yayi* ❑ 2
Kasi kulipo kunyake uko muli kupokerako chakurya	*Enya* ❑ 1	*Yayi* ❑ 2

6. Kasi kuyambira chaka chamala, muli kuchitapo chimoza cha ivi?

			Mpauli apo muka yambila ivi?			
			Mwezi	Kukwamba	Pakati	Kuumaliro
Kurya sima kamoza pa zuwa,?	*Enya* ❑ 1	*Yayi* ❑ 2		❑1	❑2	❑3
Muli kuryapo chithibu?	*Enya* ❑ 1	*Yayi* ❑ 2		❑1	❑2	❑3
Muli kuryapo gaga?	*Enya* ❑ 1	*Yayi* ❑ 2		❑1	❑2	❑3
Muli kuryapo vipaso pera mwambule sima)?	*Enya* ❑ 1	*Yayi* ❑ 2		❑1	❑2	❑3
Muli kuryapo mphangwe kwambula sima)?	*Enya* ❑ 1	*Yayi* ❑ 2		❑1	❑2	❑3

7. Kasi yikafipo nyengo ya kuti

			Mwezi	Pakwamba	Pakati	Paumaliro
Mukagulisapo viweto kuti mugule cha kurya?	*Enya* ❑ 1	*Yayi* ❑ 2		❑1	❑2	❑3
Muli kugulisapo katundu wali yose kuti mugule chakurya?	*Enya* ❑ 1	*Yayi* ❑ 2		❑1	❑2	❑3
Panji apo njala yikazozopa mukuryapo vipaso (ngati masuku), nkhowane panji vinyake vili vyose	*Enya* ❑ 1	*Yayi* ❑ 2		❑1	❑2	❑3

Sono tifika kufupi na kumaliro kwa kuchezga kwithu, kasi mungawa na timakani twakuti muyowoyepo?

Umu ndiwo umaliro wa kuchezga kwa mlimi uyo wakaleka kupokera sitata paki. Pala mulimi wakapokera sitata paki, lutiririani kufumba ma fumbo gha pa Individual Questionaire

Pa umaliro penecho, muwongeni mulimi uyo mwa chezga naye.

TIP 2000-2001 EVALUATION

CHITEDZE RESEARCH STATION

INDIVIDUAL QUESTIONNAIRE

FOOD PRODUCTION AND SECURITY EVALUATION

MODULE 1

CONFIDENTIAL AND ANONYMOUS

PART A
IDENTIFICATION PANEL

DISTRICT			
VILLAGE NAME			
VILLAGE CODE			
HOUSEHOLD NUMBER			
INDIVIDUAL NUMBER			

Kodi muli ndi zaka zingati?
Ngati mulimi sadziwa chaka chake chobwadwira, chongani mu kabosi kali kumanjaku molingana ndi m'mene mukumuonera msinkhu wache

Zaka

Mwana ❑1
Wamkulu ❑2
Wokalamba ❑3

Mwamuna kapena mkazi?.....…… Mwamuna ❑1 Mkazi ❑2

Control panel

	Name	Date
Enumerator		
Superviser		
Consultant		
Data entry clerk		

Musanayambe kucheza nawo alimi, awuzeni kuti zonse zimene anene, zikhala za chinsinsi.

Ife tachokera ku Chitedze Research Station ndipo tikugwira ntchito iyi m'malo mwa University of Reading, yaku Mangalande. Zonse zimene mutiuze pano zikhala za chinsinsi, ndiye mukhale omasuka ndipo musaope kuti tikawauza ena. Chifukwa cha ichi, pano sitikufunsani kuti mutiuze dzina lanu; tikamacheza pano tizingokutchulani kuti Bambo kapena Mayi.

B. NTHAWI YOLANDIRA STATA PAKI

1. Kodi munabzala liti chimanga chanu (osati cha Stata Paki)? **(Lembani mwezi ndi kuchonga mukabosika)**

Mwezi

Koyamba ❑1
Mkati mapeto ❑2 ❑3

2. Kodi munalandira liti Stata Paki ? **(Lembani mwezi ndi kuchonga mukabosika)**

Mwezi

Koyamba ❑1
Mkati mapeto ❑2 ❑3

3. Kodi chimanga cha Stata Paki munabzala mwezi uti? **(Lembani mwezi ndi kuchonga mukabosika)**

Mwezi

Koyamba ❑1
mkati mapeto ❑2 ❑3

4. M'mene mukuonera inu, mukuganiza kuti Stata Paki munalandira nthawi yabwino poyerekeza ndi nthawi yobzalira?

Nthawi ya bwino ❑1
Mochedwa, koma tinabzala ❑2
Mochedwa ndipo sitinabzale ❑3

5.Tchulani mwezi umene mufuna kuti muzilandira Stata Paki.

Mwezi

C. MAFUNSO OKHUDZA ZA STATA PAKI

1. Kodi munalandira matumba angati?:

Chimanga		Soyabean	
Mtedza		Feteleza (woyambira)	
Nyemba		Fetileza (wobeleketsa)	

2. Kodi matumba a Stata Paki munalandira akuoneka bwanji? **(chongani mkabokosika)**

	Osatsegula	Otsegulidwa koma zonse zili bwino	Otsegulidwa koma zina zitabedwa kapena kuonongeka	Sindinala-ndire
Chimanga	❑1	❑2	❑3	❑4
Soyabean	❑1	❑2	❑3	❑4
Feteleza (wakuda)	❑1	❑2	❑3	❑4
Feteleza (woyera)	❑1	❑2	❑3	❑4

3. Kodi nanga “Kolite” yake inali bwanji?: **(chongani mkabokosika)**

	Yabwino	Yoyipa	Yoti sungagwiritse ntchito
Chimanga	❑1	❑1	❑1
Soyabean	❑2	❑2	❑2
Feteleza (wakuda)	❑3	❑3	❑3
Feteleza (woyera)	❑4	❑4	❑4

D. KAGWILITSIDWE NTCHITO KA STATA PAKI

I. CHIMANGA

1. Kodi chimanga munachita nacho chiyani? **(Chongani mumabokosi amene munatero)**

Ndinabzala chonse	❑1	Ndinachigulitsa	❑6
Ndinabzalako pang’ono	❑2	Ndinasunga	❑7
Ndinadya	❑3	Ndinampatsa wina	❑8
Ndinasinthitsa ndi chakudya	❑4	(Other, specify)	_____
Sindinalandire	❑5		_____

2. Ngati simunabzale, kapena munabzala pang’ono pokha, chifukwa chiani? **(Ngati munatero chongani mukabokosika)**

Ndinalandira mochedwa	❑1
Ndinalibe malo oti nkubzalapo	❑2
Mbeu yake inali yowonongeka	❑3
Mtundu wake wa mbeu sindinaufune	❑4

3. Poyerekeza chimanga chonse chimene mwabzala chaka chino, chimanga cha Stata Paki chinali chochuluka bwanji? **(Chongani kabokosi kamodzi basi)**

Chonse	Kupitilira theka	Theka ndi theka	Chokwanila 1/4 yokha	Pang’ono kweni-kweni	Sindinabzalepo
❑1	❑2	❑3	❑4	❑5	❑6

4. Munabzala bwanji chimanga chanu cha Stata Paki? (**chongani mabokosi oyenera)**

Chonse ndinabzala malo amodzi?	❑1
Ndinabzala patali patali?	❑2
Ndinapakiza?	❑3
Not applicable	❑4

5. Kodi chimanga chanu (**osati cha Stata Paki**) munachipeza kuti?

a) Ndinachita chogula **(Chongani kabokosi kamodzi basi)**

		Makilogramu angati (kg)	Ndalama zingati (MK)
Chimanga cha makolo	❑1		
Chimanga chogula ku msika	❑2		
Sindikudziwa	❑3		
Sindinagule	❑4		

b) Ndinasankha ku Nkhokwe **(Chongani mabokosi oyenera)**

		Makilogramu angati (kg)
Chimanga cha Stata Paki wa chaka chatha	❑1	
Chimanga cha Stata Paki chimene ndinasunga	❑2	
Chimanga cha makolo	❑3	
Chimanga chimene ndinagula chaka chatha	❑4	
Chimanga chimene ndinalandira ku APIPI	❑5	
Sindidziwa	❑6	
Sindinasankhe cha munkhokwe	❑7	

II. MTEDZA KAPENA SOYABEANS

1. Kodi mbeu ya mtedza/soyabean munayigwiritsa ntchito bwanji? (**Chongani mabokosi oyenera**)

Ndinabzala zonse	❑1	Ndinagulitsa	❑6
Ndinabzala pang'ono	❑2	Ndinasunga	❑7
Ndinadya	❑3	Ndinampatsa wina	❑8
Ndinasinthitsa ndi chakudya	❑4	Other, specify	
Sindinalandire	❑5		

➢ **Ngati munabzala zonse, yankhani funso No. 3**

2. Ngati simunabzale kapena munabzala pang'ono pokha, ndi chifukwa chiani munatero? **(Chongani mabokosi oyenera)**

Ndinalandira mbeu mochedwa	❑1
Malo onse anali atatha	❑2
Mbeu yake inali yowonongeka	❑3
Mtundu wa mbeu yake sindinayifune	❑4

3. Poyerekeza ndi mbeu zina za soya kapena nyemba zimene mwabzala chaka chino, mbeu yanu ya soya/mtedza inali yochuluka bwanji? **(Werengani zonse koma chongani bokosi limodzi)**

Yonse	Kuposa theka	Theka ndi theka	Yokwanira $^1/_4$ yokha	Pang'ono kweni-kweni	Sindinabzale
❑1	❑2	❑3	❑4	❑5	❑6

4. Kodi soya/mtedza munabzala malo amodzi? *Eya* ❑1 *Ayi* ❑2

5. Kodi soya/mtedza munabzala muchimanga? *Eya* ❑1 *Ayi* ❑2

III. FETELEZA

1. Kodi feteleza munagwiritsa ntchito yanji?**(Chongani mabokosi oyenera)**

	Wokulitsa (wakuda)		Wobeleketsa (woyera)	
Ndinathira ku chimanga cha Stata Paki	*Eya*❑1	*Ayi* ❑2	*Eya* ❑1	*Ayi* ❑2
Ndinathira ku chimanga changa china	*Eya*❑1	*Ayi* ❑2	*Eya* ❑1	*Ayi* ❑2
Ndinathira mu mbeu zina, monga fodya, thonje etc.	*Eya* ❑1	*Ayi* ❑2	*Eya* ❑1	*Ayi* ❑2
	_____		_____	
	_____		_____	

	Wokulitsa (wakuda)		Wobeleketsa (woyera)	
Ndinawapatsa anthu ena	*Eya* ❑1	*Ayi* ❑2	*Eya* ❑1	*Ayi* ❑2
Ndinagulitsa	*Eya* ❑1	*Ayi* ❑2	*Eya* ❑1	*Ayi* ❑2
Ndinasunga	*Eya* ❑1	*Ayi* ❑2	*Eya* ❑1	*Ayi* ❑2
Anandibela	*Eya* ❑1	*Ayi* ❑2	*Eya* ❑1	*Ayi* ❑2
Other, specify				
	_____		_____	
	_____		_____	

2. Ngati simunagwilitse ntchito feteleza wanu, chifukwa chiani? (**Ngati munagwilitsa ntchito yankhani funso No.3)**

Nthaka yanga siyifuna feteleza	*Eya*❑1	*Ayi* ❑2
Ndinagwilitsa ntchito manyowa	*Eya*❑1	*Ayi* ❑2
Ndinagulitsa kuti ndipeze ndalama	*Eya*❑1	*Ayi* ❑2
Ndinalandira mochedwa	*Eya* ❑1	*Ayi* ❑2

Other (please specify) _____

3. Ngati munathira feteleza ku chimanga, munathila bwanji? **(Chongani mabokosi osapitilira awiri)**

Wokulitsa (wakuda) ndinathira payekha ❑1
Wobeleketsa (woyera) ndinathira payekha ❑2
Ndinasakaniza woyera ndi wakuda ndikukathila ❑3

(Ngati munaphatikiza feteleza, yankhani funso No. 3c)

a) Ngati munathila woyambilira ku chimanga payekha, munathila liti?

Pobzala ❑1
Pasanathe milungu iwiri kuchokera pobzala ❑2
Patatha milungu inayi kuchokera pobzala ❑3
Sindinathile ❑4

b) Ngati munathila feteleza wobeleketsa ku chimanga payekha, munathila liti?

Pobzala ❑1
Patatha milungu iwiri chimanga chitamera ❑2
Patatha milungu itatu chimanga chitamera ❑3
Pakati pa milungu inayi ndi nthawi imene ngayaye zimatuluka ❑4
Ngayaye zitatuluka kale ❑5
Sindinathile ❑6

c) Ngati munasakaniza feteleza pothira ku chimanga, munathila nthawi yanji?

❑1
Patatha mulungu umodzi kuchokera pobzala
Patatha milungu inayi kuchokera pobzala ❑2
Mutapalila kamodzi koma ngayaye zisanatuluke ❑3
Ngayaye zitatuluka ❑4
Sindinathile ❑5

4. Kupatulako feteleza amene munalandira mu Stata Paki, kodi feteleza wina amene munathira m'munda mwanu munampeza kuti? (Lembani ziro ngati simunapeze feteleza wina)

	Wokulitsa	Wobeleketsa
Ngongole	kg	kg
Munagula nokha	kg	kg
Anakupatsani achibale	kg	kg

Munagula kwa ena amene analandira feteleza wa Stata Paki	kg	kg
Munagwiritsa ntchito feteleza amene munasunga	kg	kg
Others (please specify) _____	kg	kg

5. Poyerekeza feteleza yense amene munathila m'munda mwanu chaka chino, feteleza wa Stata Paki anali wochuluka bwanji? **(Chongani kabokosi kamodzi basi)**

Yense	Kuposa theka	Theka ndi theka	Pafupi-fupi 1/4	Pang'ono chabe	Sindinathire
❑1	❑2	❑3	❑4	❑5	❑6

E. MBEU ZIMENE MWALANDIRA CHAKA CHINO

1. Kodi munazindikira kuti mbeu yimene mwalandira chaka chino ndiyosiyana ndi mbeu ya chimanaga imene munalandira mbuyomu? *Eya* ❑1 *Ayi* ❑2

2. Ngati munazindikira, munadziwa bwanji kuti ndi yosiyana?**(Chongani mabokosimu oyenera) ndi choncho)**

Chikuoneka kuti ndichokonoka ❑1
Kapepala kananena kuti ndichosiyana ❑2
Ndinamva pa Wailesi ❑3
Anandiuza Mulangizi ❑4
Other ❑5

3. Kodi mukudziwa kuti mbeuyi mutha kubzala zaka zingapo koma ikubeleka bwino lomwe? *Eya* ❑1 *Ayi* ❑2

Ngati yankho la E1 kapena E3 lili ayi, enumerator amuuze mlimi kuti mbeuyi ndi ya OPV; imene imabeleka zokolola ngati mbeu ya hybrid; ndipo mlimi atha kuibzala zaka zingapo isanathe mphamvu yobeleketsa, ndiponso ndi yokonoka.

F. MALINGALIRO A MULIMI

Mumufunse mulimi kuti akutengeleni ku munda wake. Muli kumundako, mufunseni mafunso awa:

km

1. Kodi munda wanu uli potalika bwanji ?

(Pitani ndi mlimi kumunda kwache kumene wabzala Stata Paki, ndiye mumufunse mafunso kuchokera No. 2 mpaka No. 8. Pokhapokhapo ngati nkosatheka kupita naye kumunda mufunseni mlimi mafunsowa pa nyumba pake.)

2. Kodi munda wanu umene mwabzala Stata Paki ndi waukulu bwanji? Maekala

3. Pa mundawu, mukuyembekeza kukolora zochuluka chaka chino? *Eya* ❑1 *Ayi* ❑2 Sindinabzale ❑3

(Ngati akuyembekezera kukolora zambiri, funsani funso No. 8)

4. Ngati sakuyembekeza kukolora zambiri, chifukwa chiani?

Feteleza anali wochepa ❑1
Tinalandira feteleza mochedwa ❑2
Mbeu inali yochepa ❑3
Tinalandira mbeu ya Stata Paki mochedwa ❑4
Mvula inachuluka chaka chino ❑5
Mvula inachepa chaka chino ❑6
Matenda achuluka ❑7
Ndinalibe munthu woti ndikundithandiza kulima ❑8
Ndimadwala ❑9
Other, please specify _____ ❑10

5. M'mene tikuonela chimanga chanu cha Stata Paki, mukuganiza kuti zokolora zake zingalingane ndi za hybrid? ☐

Chongani mukabokosika aka ngati simukudziwa ❑1

6. Mukuyembekeza kukolora soya/mtedza wambiri chaka chino? *Eya* ❑1 *Ayi* ❑2 Didn't plant ❑3

(Ngati ndi tero pitani pafunso No. 8)

7. Ngati sitero, ndi chifukwa chiyani zinthu zili choncho ? **(Chongani mabokosi oyenera)**

Feleteleza anali wochepa ❑1
Feteleza wa Stata Paki ndinalandila mochedwa ❑2
Mbeu inali yochepa ❑3
Mbeu ya Stata Paki ndinalandira mochedwa ❑4
Mvula inali yambiri ❑5
Mvula inali yochepa ❑6
Matenda ochuluka ❑7
Ndinalibe wondithandiza kulima m'munda) ❑8
Ndimadwala ❑9
Other, please specify _____ ❑10

8. Mukuyembekeza kukolola matumba angati a 50 kg a soya/mtedza ☐

Chongani bokosi ili ngati simudziwa ❑1

G. MAFUNSO A KAPEPALA NDI ULANGIZI WA ULIMI

1. Munalandira ka pepala kokuuzani umo mugwilitsire ntchito zimene mwalandira mu Stata paki *Eya* ❑1 *Ayi* ❑2

2. Kodi kapepala kamene munalandira kanali bwino-bwino kapena kanali kowononge ka? *Kabwino* ❑1 *Kowonongeka* ❑2

3. Kodi munatsatira malangizo a mupapelawa?

Chimanga:

Mizere yotalikna 75cm (Pafupi-fupi.)	*Eya*❑1	*Ayi* ❑1
Mapando otalikirana 25cm (pafupi-fupi.)	*Eya* ❑2	*Ayi* ❑2
Mbeu imodzi pa phando	*Eya* ❑3	*Ayi* ❑3

Mtedza/soyabean

4. Kodi panali malangizo obzalira mbeu ya mtedza/soya? *Eya* ❑1 *Ayi* ❑2

5. Kodi malangizowo anali osabvuta powatsatira? *Eya* ❑1 *Ayi* ❑2
(Ngati anali osabvuta pitani ku funso No. 9)

6. Ngati anali obvuta powatsatira, ndi chifukwa chiani? **(Chongani mabokosi oyenera)**

Sindidziwa kuwelenga ❑1
Sindidziwa zimene malangizo amafuna kunena ❑2
Malangizo ake anali obvuta kuti ndiwatsatire ❑3
Sindinafune kuti nditsate malamulowo ❑4
Ndinalibe nthawi yotsatira malamulowo ❑5
Malamulowo sangwilizana ndi zimene ndimachita masiku onse ❑6
Kapepala kanali kowonongeka ❑7
Other, please specify _____ ❑8

7. Kodi mumakumana kangati ndi alangizi anu a zaulimi? **(Chongani kabokosi kamodzi)**
Sindinakumane nawo ❑1
Timakumana pa kanthawi ❑2
Timakumana kamodzi pa mulungu ❑3
Timakumana kamodzi pakatha milungu iwiri ❑4
Timakumana kamodzi pakatha mwezi ❑5

8. Kodi chaka chino mwauonapo munda wa chitsanzo wa Stata Paki? *Eya* ❑1 *Ayi* ❑2

9. Kodi munalandirapo zinthu izi mu Stata Paki yanu?
Kapepala konena nkhani ya HIV/AIDS *Eya* ❑1 *Ayi* ❑2
Kondomu ya Chishango *Eya* ❑1 *Ayi* ❑2

10. Kodi ndi bwino kuti azipeleka timapepala tonena nkhani ya Edzi mu Stata Paki? *Eya* ❑1 *Ayi* ❑2

11. Kodi ndi bwino kuti azipeleka kondomu ya chishango mu Stata Paki? *Eya*❑1 *Ayi* ❑2

Apa ndi pothera pocheza ndi mlimi

Kumbukilani kumuthokoza mulimi

Mafunso oyankhidwa ndi Enumerator akatsiliza kucheza ndi mlimi:

1 Kodi munakafikako kumunda wa mulimi? *Eya* ❑1 *Ayi* ❑2

2. Ngati simunapiteko, chifukwa chiani?

TIP 2000-2001 EVALUATION

CHITEDZE RESEARCH STATION

INDIVIDUAL QUESTIONNAIRE

FOOD PRODUCTION AND SECURITY EVALUATION

MODULE 1

CONFIDENTIAL AND ANONYMOUS

PART A
IDENTIFICATION PANEL

DISTRICT			
VILLAGE NAME			
VILLAGE CODE			
HOUSEHOLD NUMBER			
INDIVIDUAL NUMBER			

Kasi mukawa pa uli?
(Pala awo mukuwafumba wakumanya yayi virimika vyawo, mushonge tu ma bokosi kwakuyaniskana naumo munga-ghanaghara umo walili)

Vyaka

Munyamata ❑ 1

Doda ❑ 2

Mudala ❑ 3

Kasi nimwanakazi panja mwanalume?

Mwanalume ❑1 Mwanakazi ❑2

Control panel

	Name	Date
Enumerator		
Superviser		
Consultant		
Data entry clerk		

Pambere mundayambe kuchezga na walime, muwazge mazgo agha:

Ise tikugwira nchito ku Chitedze Research Station mumalo mwa wanyithu wa ku Univerite ya Reading ku Mangalande. vyose ivyo tidumbiskanenge pano, vyatekha-tekha, nakuti ise tamuyowoyaso na munthu munyake chara, panji ku runura zina linu nanyengo na yimoza yayi. Ichi ndicho chifukwa chake tikhumbenge kuti mutiphalire zina lino yayi. Vyose ivyo tiyowoyenge vya chisisi pera.

B. MAFIKIRO GHA SITATA PAKI

1. Kasi vingoma vinu na vinu, vya imwe mwawene, muliku pandapo? Pala muli kupanda, mukapanda pa uli? **(Lembani mwezi, ndipo muchonge kuti kasi mpa kwamba, pakuti, panji kuumaliro wa mwezi)**

Mwezi	
	Kukwamba ❑1
	Pakati ❑2
	Kuumaliro ❑3

2. Kasi Sitata Paki mukapokera pa uli? **(Lembani mwizi, ndipo muchonge kuti kasi mpha kwamba, pakati panja pa umaliro wa mwezi)**

Mwezi	
	Pakwamba ❑1
	Pakati ❑2
	Kuumaliro ❑3

3. Kasi mukapokera Sitata Paki chaka chino? Pala mukapokera, mukapanda pa uli?**(Lembani mwezi, ndipo muchonge kuti kasi mpakwamba, pakati panji pa umaliro wa mwezi)**

Mwezi	
	Pakwamba ❑1
	Pakati ❑2
	Kuumaliro ❑3

4. Kasi Sitata Paki yikiza uli pa kulinganizga na umo mukupandira vingoma nyengo zose mwawenecho?

Yakiza pa nyengo ❑1
Yikachedwa kweni nili kupanda ❑2
Yikachedwe chomeni ndipo nindaponde ❑3

5. Nanga mpha mwezi uli umo mukughana ghana imwe kuti wamupileninge Sitata Paki?

Mwezi

C. CONTENT OF THE PACK

1. Kasi mukapokera tuma bagi tumalinga twa mbeu na feteleza ivyo vikawa mu thumba likulu la Sitata Paki.

Vingoma		Soya)	
Skawa		Feteleza wakwamba wakukuliska)	
Nchunga		Feteleza wakubakiska)	

2. Kasi tumabag tuchokotuchoko uli mukapokera tukawa uli?**(Chongani mutumabosi twa kwenerera)**

	Kakujalika	Kakujulika ndipo vyamu kati ikamwa makora	Kakujulika ndipo vyamukati vyakwana panjo kusowa	Nkumanga chara
Vingoma	❑1	❑2	❑3	❑4
Skawa panji soya	❑1	❑2	❑3	❑4
Feteleza wakukuliska)	❑1	❑2	❑3	❑4
Feteleza wakubabiska	❑1	❑2	❑3	❑4

3. Pakughana ghana kwa imwe, kasi vinthu ivyo vikawa mu sitata paki vikawone kanga uli? **(Chongani kabokosi ka kwenerera)**

	Vikawa makora	Vikawa makora viwi yayi	Vyakwa-nangika	Vikuni-nkhwaska yayi
Vingoma	❑1	❑2	❑3	❑4
Nchunga panji soya	❑1	❑2	❑3	❑4
Feteleza waku kuliska	❑1	❑2	❑3	❑4
Feteleza wakubabiska	❑1	❑2	❑3	❑4

D. KAGWIRISKIRO NCHITO KA SITATA PAKI

I. VINGOMA

1. Kasi mbeu ya vingoma mukachita nayo vichi? **(Chonganipo ivyo vikachitika**)

Mukapanda vyose	❑1	Mukagulisa	❑6
Muli kupandapo mbeu zinyake	❑2	Muli kusunga	❑7
Muri kunja	❑3	Muli kupa wanthu wanyake	❑8
Mukusinthiska na vyakurya	❑4	Panji muli kuchita nayo uli?	_____
Mukapokera yayi	❑5		_____

2. Pala mbeu ya vingoma vya sitata paki mundapande, panji muli kupandapo yichoko waka, tiphalireni chifukwa chake? **(Munga chonga tunandi kwa ku yaniskana na umo wazgorera mulimi)**

Mbeu yikiza mwa kuchedwa chomeni ❑1
Malo ghakulimapo nilije ❑2
Mbeu yikawa yakwanangike ❑3
Mtundu wake wa mbeu nikautemwa yayi ❑4

3. Kasi unandi wake wa mbeu vingoma mu ya sitata paki ukawa uli pa ku yaniskana na mbeu iyo mukapanda imwe mwawenecho? **(Chongani ba bokosi kamoza pera)**

Yose yikara ya sitata paki	Kujumpha hafu	Vyakuyane wake	panji kota $^{1}/_{4}$	Pachoko chomene	Nkapoka sitata paki yayi
❑1	❑2	❑3	❑4	❑5	❑6

4. Kasi vingoma vya sitata paki mukavipanda uli?(**Chongani kwa kuyaniskana na umo wa zgorera munthu)**

Nkapanda vyose mbeu ya sitata paki pa puloti limozi ❑1
Nkapanda pa malo ghakulu kujumpha ghala wakayowoya wa sambizgi ? ❑2
Nkapanda mumunda wose umo vingoma vyane vikafwamo? ❑3

Panji, ivi kuti vikuninkhwaska yayi ❑4

5. Kasi mbeu ya vingoma iyo mukapanda yinu na yinu, mukayitolankhu?

a) Pala mukagula **(Chongani ngati niumo wa zgoerea)**

		Unandi wake (kg)	Mutenfo (MK)
Vingoma vya lokolo	❑1		
Vingoma vyakuchita gula ku musika, nget Hybrid, composite	❑2		
Nkhumanya chara	❑3		
Nkhagula yayi	❑4		

b) Vingoma vya nyengo zose **(Chongani kwa kuyane sikana na umo wazgorera munthu)**

		Hou mudi (kg)
Napanda vingoma vya sitata paki wa chaka chamala	❑1	
Napanda sitata paki uyo nkasunga wachaka chamala	❑2	
Napanda vingoma ma vyane mavyane va lokolo	❑3	
Napanda vingoma vyane na vyane ivyo nikasunga chaka chamala	❑4	
Napanda vingoma ivyo nikagula ku ADMARC	❑5	
Napanda vingoma vya chaka chamala ivyo nikapoka ku maprogiramu ghanyake, negeti ni APIP nkumanya chara	❑6	
Nkupanda vingoma vyane yayi, chifukwi chakuti nkhugula vingoma vya mbeu chaka na chaka	❑7	

II. NCHUNGA NA SOYA

1. Kasi mbeu ya nchunga na soya muli kuyigwiriska uli nchito? (**Chongani na umo wazgorera munthu)**

Mukapanda vyose	❑1	Mukagulisa	❑6
Muli kupandapo mbeu zinyake	❑2	Muli kusunga	❑7
Muri kurya	❑3	Muli kupa wanthu wanyake	❑8
Mukusinthiska na vyakurya	❑4	Panji muli kuchita nayo uli?	
Mukapokera yayi	❑5		

- **Pala munthu wakapanda vyose nchunga na soya, bwenu lutani ku fumbo la namabla 3. Pala yayi lutani ku nambala 2.**

2. Pala mbeu ya Sitata paki ya nchunga na soya mundapande, panji muli mukupandape pachoko waka, mutiphalire chifukwa chake.? **(Chongani kwa kuyaniskana na umo wazgorera munthu)**

Mbeu yikiza mwa kuchedwa chomene ❑1
Malo ghakulimapo nilije ❑2
Mbeu yikawa yakwanangike ❑3

Mtundu wake wambue nikautemwa yayi ❑4

3. Kasi unandi wake wa mbeu ya nchunga na soya mu Sitata Paki ukawa uli pakuya niskama nambeu iyo mukapanda, mukapanda imwe mwa wenecho? ? **(Wazgani mazyose ghose, kweni chongani kamoza pera)**

Yose yikawa ya Sitata Paki	Kujumpha hafu	Vyakuyane waka	Panji kota $^{1}/_{4}$	Pachoko chomeni	Nkapoka Sitata Paki yayi
❑1	❑2	❑3	❑4	❑5	❑6

4. Kasi nchunga na soya mukapanda mamalo ghamoza ugeti ni umo wakayowoyera wa sambizgi wa vya ulimi? *Enya* ❑1 *Yayi* ❑2

5. Kasi nchunga na soya mukapanda pamoza na vingoma? *Enya* ❑1 *Yayi* ❑2

III. FETELEZA

1. Kasi feteleza uyo mukapokera, muli kuchita nayo vichi? **(Chongani kwakuyaniskane na umo wazgorera munthu)**

	Feteleza wakukuliska		Feteleza wakubabiska	
Nkathira yose kuvingoma vya sitata paki	*Enya* ❑1	*Yayi* ❑2	*Enya* ❑1	*Yayi* ❑2
Nkhathira ku vingoma vinyake ivyo nikapanda mumunda wane	*Enya* ❑1	*Yayi* ❑2	*Enya* ❑1	*Yayi* ❑2
Nkhathira ku mbuto zinyake za mumunda wane	*Enya* ❑1	*Yayi* ❑2	*Enya* ❑1	*Yayi* ❑2
(**Pala zgoro ndakuti mukhothira ku mbuto zinyake, mbuto izi ni vichi)**?				

	Feteleza wakukuliska		Feteleza wakubabiska	
Nkapeleka kuwanthu	*Enya* ❑1	*Yayi* ❑2	*Enya* ❑1	*Yayi* ❑2
Nkagulisa	*Enya* ❑1	*Yayi* ❑2	*Enya* ❑1	*Yayi* ❑2
Nkasunga	*Enay* ❑1	*Yayi* ❑2	*Enya* ❑1	*Yayi* ❑2
Wanthu wakanibera	*Enya* ❑1	*Yayi* ❑2	*Enay* ❑1	*Yayi* ❑2
Panji nthawi zinyake izo mukachita nayo feteleza ni vichi?				

2. Pala mukaleka kuthira feteleza wa sitata paki, mukachitachi nayo?(**Pala munthu uyu wakathire feteleza, lutani ku fumbo nambala 3)**

Munda wane uli na vundira kale	*Enya* ❑1	*Yayi* ❑2
Mumunda wane nkhuthiramo manyowa pera	*Enya* ❑1	*Yayi* ❑2
Nkakhumbanga ndarama, soni nili kugulisa	*Enya* ❑1	*Yayi* ❑2
Feteleza waka chedwa chomene sononindagwiriske nchito	*Enya* ❑1	*Yayi* ❑2

Vilipo vinyake ivyo muli kuchita nayo feteleza _____

3. Pala mukathira feteleza kuvingoma, feteleza uyu mukathira uli? **(Chongani zgon limoza panji ghawiri pera)**

Nkathira wakukuliska vingoma pa yekha ❑1
Nkathira wakubabiska vingoma pa yekha ❑2
Mkasazga wakakuliska na wakubabiska ❑3

(Pala munthu uyu wakathira feteleza wakusazga, lutani ku chigawa chachitatu,c)

a) Pala mukathira feteleza wakukuliska ku vingoma, mukathira uli?

Nkhathira panyengo yakupandira vingoma ❑1
Pakati pa sabata yimoza na ziwili zakupandira ❑2
Pakati pa jumpha ma sabata ghatatu panji ghanayi kufuma apo nkapandira ❑3
Nkhathira yayi feteleza wane ❑4

b) Pala mukathira feteleza wakubabiskira ku vingoma, mkathira nyengo uli?

Nyengo ya ku panda vingoma ❑1
Vingoma vyati vyamera ndipo pa kumpha masbata ghawiri ❑2
Poti pajumpha masabata ghatatu na umo nikapandira vingoma ❑3
Apo kukati kwa khala masabata ghanayi kuti vingoma vinda fume ❑4
Vingoma vya fuma ❑5
Nhathira yayi ❑6

c) Pala mukathira feteleza akusazga ku vingoma, mukathira nyengo nji?
(Pala mulimi wa kaskazga yayi feteleza, lutani ku fumbo nambala 4)

Sbata yimoza yindamale kufuma apo nkapandira ❑1
Pakati pakumera nama sabata ghanayi fufuma apo nikapandira panyengo yake hata(kupalira) ❑2
Apo nikati namala kuhata (kupalira) kweni pambere vinda fume vingoma ❑3
Ndipo vingoma vya fuma ❑4
Nkhathira yayi fetleza ❑5

4. Kasi feteleza munyake, pa chanya pa feteleza wa Sitata Paki, mukagulaposo? Pala mukagulapa, mukakagula nkhuni. (Mulembepo ziro pala munthu wakagulaposo feteleza munyake yayi)

	Wakukulliska	Wakubasiska
Pa ngongole	kg	kg
Ndarama zane	kg	kg
Wakanipa wabale	kg	kg

Nkhagula ku wanthu awa wakapokera sitata paki	kg	kg
Wakawe feteleza uyo nkhasunga wa sitata paki ya chaka chamala	kg	kg
(Munyake waka fuma nkhuni) _____	kg	kg

5. Kasi unandi wake wa feteleza uyo muli kuthira wa sitata paki wakawa uli pa kuyaniskana na feteleza yose uyo muli kuthira mumunda winu? **(Chongani kamoza pera)**

Yose yikari ya sitata paki	Kujumpha hafu	Vyakuyane wake	Panji kota $^1/_4$	pachoko chomeni	Nkapoka sitata paki yayi
❑1	❑2	❑3	❑4	❑5	❑6

E. MBEU YAKU TCHOKOLEKA YA VINGOMA

1. Kasi muli kuwonapo mphambano pakati pa mbuto ya mbeu ya chaka chino na chaka chamala? *Enya* ❑1 *Yayi* ❑2

2. Pala mphambano mukayiwona, chivichi icho chikamumanyiskani kuti pali mphambano?
(Chongani mabokosi kwakuyaniskane na umo wazgoerea munthu)

Chikuwoneka kuti ngati nchakotchokoleka ❑1
Nkhamanya chifukwa chakuti ndivyo vikalembeka pakapela ako kakawa mukati ❑2
Nkapulika pa radiyo ❑3
Wasambizgi withu wa vya ulimi wakaniphalira ❑4
Kasi chifukwa chinyake chilipo icho mukamanyira kuti mbuto zakupambana ❑5

3. Kasi mukumanya kuti mbuto ya sitata paki yachaka chino yikukozgana na ya lokolo ? *Enay* ❑1 *Yayi* ❑2

Pala mazgoro kumafumbo ghapachanya ndakuti yayi, imwe mukufumba mafumbo mulime mulongosoloerni mulimi kupambana kwa hayibulidi na mbeyu sono ya sitata paki iyo yikukozgana nalokolo. Mulongosole kuti mbuto ya vingoma ya chaka chino yikukozgona na lokolo, kweni yikupambika mwakuyana na hayibulidi, ndipo munthu kuti wakugula mbeu chaka na chaka yayi ngati niumo tikachitira na hayibulidi, ndipo mbuto yake nga kutchokorera ngeti vingoma vya lokolo.

F. UMO WAKUWONERA MBUTO KUMUNDA WALIMI

1. Kasi pala mamayilosi ghalinga apo muli ku panda mbuto ya sitata paki? _____ km

Pala kumunda uko wali ku panda mbeu ya sitata paki mpafuki, lutani kwene kuko kumunda ndipo mulime mukamufumbire ma fumbo nambala 2 - 8 kwenekuko kumunda. Pala kumunda nkutali, fumbani ma fumbo apgha panyumba penepapa.

2. Kasi munda winu uli na ma ekala ghalinga?? _____ Ekala

3. Kasi mukugomezga kuti mukololenge vingoma vinandi chaka chino panji yayi? *Enya* ❑1 *Yayi* ❑2 nkhumanya yayi ❑3

(Pala mulimi wazgora kuti Enya, mbwenu lutani ku fumbo namabla 8).

Pala yayi lutani ku fumbo nambala 4.

4. Pala yayi, chifukwa uli? **(Chongani tose kuyaniskana na umo wazgorera mulimi)**

Feteleza yose wakawa wakuchepa ❑1
Feteleza wa sitata paki wakachedwa kwiza ❑2
Mbeu yose yikawa ya kuchepa ❑3
Mbeu ya sitata paki yikachedwa ❑4
Vula yikawa yinandi chomene ❑5
Vula yikawa ya kuchepa ❑6
Chifukwa cha vibenene na matenda ❑7
Nkhongono zikawa za kuchepa tawanthu tiri wachoko ❑8
Nkaluwalonga ❑9
Yowoyani vifukwa vinyake _____ ❑10

5. Kasi mukughanaghana kuti mukolorenge ma thumba ghalinga vingoma gha 50kg? [ ]

Pala mulimi wakumanya yayi, changani apa ❑1

6. Kasi mukugomezga kuti mukolorenge makora mbuto yinu ya nchunga na soya chaka chino? *Enya* ❑1 *Yayi* ❑2 Nkhumanya yayi ❑3

(Pala mulimi wakumanya lutani ku fumbo nambala 8. Pala yayi, lutani fumbo nambala 7)

7. Pala yayi, chifukwa uli? **(Chonani vyose ivyo wazumula mulimi)**

Feteleza yose wakawa wakuchepa ❑1
Feteleza wa sitata paki wakachedwa kwiza ❑2
Mbeu yose yikawa ya kuchepa ❑3
Mbeu ya sitata paki yi kachedwa ❑4
Vula yikawa yinandi chomene ❑5
Vula yikawa yakuchepa ❑6
Chifukwa cha vibenene na matenda ❑7
Nkhongono zikawa za kuchepa tawanthu tiri wachoko) ❑8
Nkaluwalanga ❑9
Yowoyani vifukwa vinyake _____ ❑10

8. Kasi mukuzomerga kuti mukolorenge ma thumba ghalonga gha 50kg gha nchunga na sota chaka chino? [ ]

Pala mulimi wakumanya yayi, chongani apa ❑1

G. TUMAPEPALA TWAKULONGOSOLA VYA MUKATI MWASITATAT PAKI

1. Kasi kapepala kakulongosola umo mupandirenge mbeu ya sitata paki mukapokera? *Enya* ❑1 *Yayi* ❑2

2. Kasi timapepala utu tukawonekanga uli?

Tukawa makora ❑1

Tukawa twakukeluke ❑2

3. Kasi mafumbo mukaghalondezga makora na umo wakafumbira pa kachipepala?
Kupanda vingoma wakati:

Mizere yiwe 75 centimitala kufuma pa unyake kufika pa unyake)	*Enya* ❑1	*Yayi* ❑2
Mabawa ghakupanda limoza kufika panyake	*Enya* ❑1	*Yayi* ❑2
Chingowe chimoza pa bawu limoza	*Enya* ❑1	*Yayi* ❑2

4. Kasi kachipepala ka kulongosola umo mungapandira nchunga na soya kakawamo? *Enya* ❑1 *Yayi* ❑2

5. Kasi mukachisanga chipusu kulondezga ivyo wakalemba pakapepala? *Yes* ❑1 *No* ❑2

(Pala Enya, lutani kufumbo namabla 9. pala yayi lutani ku fumbo nambala 6)

6. Pala yayi, chifukwa? **(Chongani kwakuyaniskana na umo wazgorera mulimi)**

Nkhumanya yayi kuwazga	❑1
Nkhalondezga makora yayi vyo vikalembeka	❑2
Ivyo vikalembeka vikawa vinandi nakuti vikawa vya kuvuska	❑3
Nkakhumba yayi kulondezga ivyo vikalembeka	❑4
Nyengo nkawavye yakuwazgira kapepala	❑5
Ivyo vikalembeka vikupambana na ivyo wasambizi withu wali kutisambizga	❑6
Kachipepala kakawa kakukeluka	❑7
Pala chifukwa chiyani chilipo, ni vichi? _____	❑8

7. Kasi wa sambizgiwa ugiri kacala mukukumana nawo kalinga? **(Chongani kamoza pela)**

Tikukumana nawo yayi	❑1
Panyengo-panyengo	❑2
Kamoza pa sabata	❑3
Kamoza pa masabata ghawiri	❑4
Kamoza pa mwezi	❑5

8. Kasi muli kuwonapo ka munda ka chiwoneskero umo mukwenera ku pandira mbeu za sitata paki? *Enya* ❑1 *Yayi* ❑2

9. Kasi mukapokerapo kamoza ka ivi?

Kapepala ka kulongosola za HIV/AIDS	*Enya* ❑1	*Yayi* ❑2
Chishango	*Enya* ❑1	*Yayi* ❑2

10. Kasi nchiweni panji yayi kuti mu sitata paki wacwikengemo malingizgo gha za HIV/AIDS? *Enya* ❑1 *Yayi*❑2

Uwu ndiwo umaliro wkuchezga kwithu kumbukirani kuwonga mulimi uyo mwa chezganga nayo

Pala enumerator wamala kuchezga namulimi, wazgore yekha mafumbo agha

1 Kasi mwanguluta ku munda uko mulimi wakalima mbeu ya sitata paki? *Enya* ❑1 *Yayi* ❑2

2. Pala yayi, chifukwa ni vichi?

Appendix 4: Terms of Reference

ANNEX 1 : TERMS OF REFERENCE

CONTACT NAME: 2000-01 TIP Evaluation Module 1: Food Production and Security.
CONTRACT NUMBER: MAL/ 2001

APPENDIX 1: The Services

Under the Contract for Module 1 Consultants shall provide the services outlined in the following Terms of Reference to the Lilongwe office of the Department for International Development (DFID) of the United Kingdom.

Basic Information

Module 1: Food Production and Security is part of the Evaluation Programme for the 2000-01 Targeted Inputs Programme (TIP). The Statistical Services Centre (SSC) of the University of Reading, United Kingdom, is managing the 2000-01 TIP Evaluation for DFID-Lilongwe.

Background

The 2000-01 TIP, a component of Malawi's National Safety Net Strategy, intended to provide 1.5 million rural smallholder households with one Starter Pack containing 0.1 ha-worth of fertiliser, open pollinated variety maize seed and legume seed in the time of start of the rains. The TIP campaign follows on from the Starter Pack (SP) campaigns in 1998-99 and 1999-2000.

A key objective of the TIP campaign is to increase household food security amongst rural smallholders in Malawi. The 1998-99 and 1999-2000 SP campaigns (SP1 and SP2) were designed to cover all rural smallholder households, providing 2.86 million packs. This year's TIP targeted roughly half this number of beneficiaries. TIP 2000-01 is envisaged as a programme for transferring resources to poor households.

The 1999-2000 Starter Pack Evaluation Module 1 survey set out to assess the contribution of Starter pack to staple food production in 1998-99. It also examined farmers' use of Starter pack inputs in the 1999-2000 season. In the 1999-2000 Starter pack Evaluation, Module 2 contained similar questions to the Module 1 study on staple food production in 1998-99 and included farmers' production forecasts for 1999-2000. In addition, last year's Module 2 survey measured months household food security in 1998-99.

Overall Objectives

Module 1: Food Production and Security will provide forecasts for the TIP's contribution to national food production, as well as showing how the inputs contained in the TIP packs were used. It will also estimate the contribution of SP2 to household food security. In view of the targeted nature of the TIP, the module will compare the expected food production of recipients with that of non-recipients in different poverty categories.

Scope of Work

The Food Production and Security module will comprise a nation-wide survey of pack recipients and non-recipients focusing on national food production in SP2 and TIP 2000-01 and on household food security inSP2. the food security section of the household questionnaire will include a series of questions designed to throw light on the difference between months of household food self-sufficiency (attributable to Starter Pack inputs and other own-farm production) and total months of household food security/insecurity.

The SP1 Evaluation set out to measure 'incremental yield' from Starter Pack plots by comparing plots on which Starter Pack seed been planted according to instructions with adjacent non-Starter Pack plot. The SP2 Evaluation adopted a different approach, based on the view that the comparison between the perfect Starter pack plot and a perfect 'control' plot was an artificial construct, since farmers had in fact used the Starter Pack inputs in different ways, often spread them beyond the 0.1ha SP1 suggested that many farmers used fertilizer from other sources on their (non-starter Pack) maize crops. Thus, an

attempted to measure the incremental yield attributable to Starter Pack as if under experimental conditions would not be accurate enough to merit the high cost of the exercise.

4.3 Instead, the SP2 Evaluation decided to accept the multi-dimensional aspects of the use of inputs and impact of Starter Pack. It did not aim for high levels of precision, but looked for trends and others of magnitude. The consultants for Module 1 of the 2000-01 TIP Evaluation will use the SP2 Evaluation approach. At the center of this approach is the idea that we should triangulate the results from different methods. The different methods to be used are:

- year-to-year comparisons
- comparisons between recipients and non-recipients (the' control group')
- farmers' perceptions and experience.

The 2000-01 TIP is distributing open pollinating variety (OPV) maize seed. This has the advantage that the seed can be saved and planted in future season. The Food Production and Security module will include questions to establish whether the farmers are aware of the different properties of this types of seed, and whether this affects their production forecasts for 2000-01.

Methodology/Approach

The work for Module 1 will be carried out as stipulated in the Schedule of Activities agreed with the SSC (see Appendix 2) and according to the Budget (see Appendix 3). The work will consist of the phases:

Phase 1 will comprise questionnaire design, pre-testing and finalisation sampling to select sites for the main fieldwork phase; and recruitment and training of field personnel. As part of preparation for training, the Consultants will translate the questionnaires into Chichewa and Tumbuka and will prepare a field manual with clear instructions for field supervisors and enumerators sampling procedures and questionnaire administration.

Phase 2 (the main fieldwork phase) will take the form of a survey to be carried out in 108 sites, which will be selected by agreement between the Consultants and the SSC. Four sites will be selected at random within each of the 27 districts of Malawi. In each case site, the Consultants' team will interview the heads of 30 households, selected at random, and any other member of the household who receive a TIP. A strict system of supervision will be implemented by the Consultant to ensure the quality of the fieldwork results.

Phase 3 will comprise data entry, analysis and writing up of the final report ("the Report"), as well as presentation of results at the final workshop of the 2000-01 TIP Evaluation, to be held shortly after the end of the project.

The questionnaires will be modified versions parts of the 1999-2000 starter Pack Evaluation Module 1 household and individual questionnaires and of the Module 2 household questionnaire. They will include sections designed to collect data on livelihood assets, landholdings size and area cultivated. Parts of last year's Module 1 and Module 2 questionnaires will not need to be repeated, while others be altered to reflect the nature of the TIP, in particular, its poverty targeting objective and the use of OPV maize seed.

As the 2000-01 TIP Evaluation comprises a set of modules, the Consultants for Module 1 may be required to coordinate with consultants from other modules. Such Coordination will be facilitated by the SSC. The Consultants may be asked to incorporate questions of interest to other modules, and they should attempt to accommodate such requests wherever possible.

The Consultants will play a leading role in carrying out the study and presenting the results, but should accept reasonable advice and guidance from the SSC on methodological issues.

Personnel

The Consultants for Module 1 are: Dr Pickford K. Sibale (the Team Leader, Dr A.M. Chirembo, Dr A.R. Saka and Mr V.O. Lungu.

The Consultants will recruit and manage 9 supervisors and 27 enumerators for the main fieldwork phase. Each supervisor will be responsible for 3 enumerators and 12 sites. Since supervisors will require motorbikes to carry out their work in an efficient and timely manner, access to a motorbike will be a condition of their recruitment (except in areas where public transport provides an adequate alternative). The Consultants will train the supervisors and enumerators to a high standard and supervise them closely. For the fieldwork phase, the Team Leader and two other Consultants will form a team of three Field Coordinators. Each of the three Field Coordinators will be responsible for supervising group of three supervisors and nine enumerators to ensure that their work is of good quality.

For data entry, Consultants will recruit ten qualified data entry clerk and a data entry supervisor. The Consultants will manage the data entry personnel to ensure a high standard of performance.

Expected Outcome and Deliverables

The study will provide evidence on:

- Staple food production in 1999-2000 and production forecasts for 2000-01.
- Months household food self-sufficiency and food security in 1999-2000.
- How and where the maize and legume seeds were planted in 2000-01 and how the fertilizer was used (usage of TIP inputs).
- Whether farmers received the leaflets accompanying the pack, and whether they understood them.
- If farmers did not use the packs as instructed, why?
- What proportion of the farmers' gardens received TIP inputs compared with inputs from other sources?
- How was the use of the Starter Pack affected by the delivery of the packs, especially its timing?
- How was the use of the Starter Packs affected by the content of the packs?
- Farmers' perceptions of the state of their maize and legume crops, including the perceived reasons for the state of these crops.

Results should be presented at national and regional levels, with breakdowns at sub-regional levels where appropriate. The data from Modules 1 and 2 of the 1999-2000 starter Pack Evaluation Programme should be used as a baseline, and comparisons should be made where relevant.

Since the sample will not be proportional to population size, the Consultants will use a weighting system (using census information on population by district) to scale up the results to give regional and national estimates.

The analysis of TIP recipient and non-recipients groups will be carried out for different categories of household according to size of household, poverty level, gender of household head, landholding size and area cultivated. The SSC has developed a
livelihood assets-based poverty index for rural Malawi from the work undertaken for the 1999-2000 Starter Pack Evaluation. This index should be used by the Consultants for Module 1 of the 2000-01 TIP Evaluation to show their results by poverty categories.

The main outcome of the work will be the Report. This should be around 20,000 words long and must be submitted to Dr H. Potter, DFID, British High commission, P.O. Box 30042 Lilongwe 3. Malawi on diskette and had copy by 6 July 2001, with copies to the SSC. In the Report, the Consultants will analyse the interpret the information collected and suggested possible conclusion, setting out clearly their assumptions and arguing whether the evidence collected can be used to confirm or reject these assumptions. The Consultants should differentiate between conclusive and suggestive evidence.

Primary data gathered under the Contract must be computerized and full, clean copies of these raw data files, with a detailed explanation of their contents, must be delivered to the SSC on diskette by 6 July 2001. Full copies of questionnaires and other data collection tools must also be provided.

The final installment of payment under the Contract will be payable on acceptane by the SSC of the Report. Should the SSC require any reasonable amendments or additions to the Report in order that the Report shall meet the required professional standards for acceptance, the Consultants will carry out such work at no extra charge by 31 July 2001.

The Consultants will incur financial penalties for the late delivery of the 5% of the Consultants' fee will be deducted if the Report is received by DFID after 6th July 2001, rising to 15% if the Report is received by DFID after 13th July 2001 and 30% if the Report is received by DFID after 20th July 2001.

The Team Leader will submit brief progress reports and accounts of expenditure to the SSC on 19th March, 20th April and 18th May 2001, and will present final accounts on 6th July 2001. The accounts of expenditure should be presented according to the stipulated in Appendix 4.

Appendix 5: List of villages visited

	VILLAGE	SECTION	EPA	DISTRICT	RDP
1	Mpalaskaba	Kopakopa	Chitipa South	Chitipa	Chitipa
2	Adam Kamene	Damasika	Chitipa North	Chitipa	Chitipa
3	Adam	Sokola	Misuku	Chitipa	Chitipa
4	Amon	Kakomo	Misuku	Chitipa	Chitipa
5	Mwakikome	Ngana	Kaporo North	Karonga	Karonga
6	Amos Mwenechilanga	Wiliro	Karonga Centre	Karonga	Karonga
7	Benjamin Chawinga	Ujiji	Kaporo North	Karonga	Karonga
8	Bunganilo 1	Nyungwe 2	Karonga South	Karonga	Karonga
9	Amosi Jere	Emfeni	Emfeni	Mzimba	South Mzimba
10	Aaron Mvula	Engucwini	Bwengu	Mzimba	Rumphi North Mzimba
11	Aaron Hara	Njoka	Manyamula	Mzimba	Central Mzimba
12	Aaron Nqumayo	Emtiyani	Njuyu	Mzimba	Central Mzimba
13	Mkuonda	Chituka	Chintheche	Nkhata Bay	Nkhata Bay
14	Berewa	Chombe	Nkhata Bay	Nkhata Bay	Nkhata Bay
15	Bulukutu	Kalwe	Mpamba	Nkhata Bay	Nkhata Bay
16	Bwanthuwa	Thanula	Mpamba	Nkhata Bay	Nkhata Bay
17	Matendevu	Bata	Bolero	Rumphi	Rumphi North Mzimba
18	Baghaya	Ng'onga South	Muhuju	Rumphi	Rumphi North Mzimba
19	Bingo	Mphompha A	Mphompha	Rumphi	Rumphi North Mzimba
20	Bingo	Chimyanga	Muhuju	Rumphi	Rumphi North Mzimba
21	Kuchingoli	Makwinja	Kaphuka	Dedza	Dedza Hills
22	Abraham	Bolera	Mtakataka	Dedza	Bwanje Valley
23	Ajibu	Monje	Mayani	Dedza	Dedza Hills
24	Aliberito 1	Kamenyagwaza	Bembeke	Dedza	Dedza Hills
25	Goma	Mtengowanthenga	Chibvala	Dowa	Dowa East
26	Bakali	Matekwe	Mponela	Dowa	Dowa West
27	Banga	Mbangala	Chisepo	Dowa	Dowa West
28	Bazale	Kumphela	Mndolera	Dowa	Dowa West
29	Katchembere	Chipala	Chipala	Kasungu	Kasungu
30	Adam Mphonde	Mkhota A	Santhe	Kasungu	Kasungu
31	Amoni	Chaima North	Santhe	Kasungu	Kasungu
32	Aramu	Kaluluma Central	Kaluluma	Kasungu	Kasungu
33	Kalamula	Mlezi	Chigonthi	Lilongwe	Lilongwe East
34	Abrahamu	Kalima	Mpingu	Lilongwe	Lilongwe West
35	Akaleamadziwana	Mthilira	Thawale	Lilongwe	Lilongwe West
36	Amidu	Malangalanga	Ming'ongo	Lilongwe	Lilongwe West
37	Chiluzi	Kapiri South	Kalulu	Mchinji	Mchinji
38	Abiyuti	Kamwendo East	Chioshya	Mchinji	Mchinji
39	Abulamu	Zali	Mikundi	Mchinji	Mchinji
40	Amtonia	Nkhwazi North	Msitu	Mchinji	Mchinji
41	Sitima	Mphandamadzi	Mwansambo	Nkhotakota	Nkhotakota
42	Aaroni	Msenjere	Nkhunga	Nkhotakota	Nkhotakota
43	Ali Kanyenda	Sasani	Linga	Nkhotakota	Nkhotakota
44	Ambali	Chisoti	Linga	Nkhotakota	Nkhotakota
45	Chimkwandala	Tchauya	Kandeu	Ntcheu	Ntcheu
46	Adamu	Bawi	Manjawira	Ntcheu	Ntcheu
47	Agabu	Sharpevale	Sharpe Valley	Ntcheu	Bwanje Valley
48	Akubilila 2	Mwalawoyera	Bilila	Ntcheu	Bwanje Valley
49	Kamtchere	Chenje	Kalira	Ntchisi	Ntchisi
50	Akimu	Tsabvu West	Chipuka	Ntchisi	Ntchisi

	VILLAGE	SECTION	EPA	DISTRICT	RDP
51	Amoni	Amoni	Chipuka	Ntchisi	Ntchisi
52	Banja	Mtsiro	Chikwatula	Ntchisi	Ntchisi
53	Namilaza	Matenje West	Khombedza	Salima	Salima
54	Abrahimu	Kasache	Khombedza	Salima	Salima
55	Akumzizima	Ngodzi East	Chipoka	Salima	Salima
56	Amini	Makioni East	Khombedza	Salima	Salima
57	Makoloje	Nkaya	Utale	Balaka	Balaka
58	Abudu	Mbela	Bazale	Balaka	Balaka
59	Akumwinje	Mbaza	Mpilisi	Balaka	Balaka
60	Alli	Mgomwa	Utale	Balaka	Balaka
61	Kaponya	Matindi East	Chipande	Blantyre	Shire Highlands
62	Amosi	Chigumula South	Ntonda	Blantyre	Shire Highlands
63	Bakili	Dziwe	Kunthembwe	Blantyre	Shire Highlands
64	Bakili	Soche South	Ntonda	Blantyre	Shire Highlands
65	John	Changa	Mitole	Chikwawa	Chikwawa
66	Agusu	Thapa	Livunzu	Chikwawa	Chikwawa
67	Alindiamawo	Mitsumwa	Dolo	Chikwawa	Chikwawa
68	Alkuleti	Nyamikuyu	Dolo	Chikwawa	Chikwawa
69	Mtembo	Chitera South	Mombezi	Chiradzulu	Shire Highlands
70	Anderson	Chisombezi West	Mombezi	Chiradzulu	Shire Highlands
71	Augustine	Nyungwe	Mombezi	Chiradzulu	Shire Highlands
72	Balala	Nalanda	Thumbwe	Chiradzulu	Shire Highlands
73	Nkalapa	Chilemba	Mbonechera	Machinga	Kawinga
74	Adamson	Chidothe	Chikweo	Machinga	Kawinga
75	Adamu	Bakali	Chikweo	Machinga	Kawinga
76	Afuleki	Nampeya	Nampeya	Machinga	Kawinga
77	Chikowi	Makoli	Maiwa	Mangochi	Mangochi
78	Abasi	Makoli	Maiwa	Mangochi	Mangochi
79	Afiki	Masakasa	Chilipa	Mangochi	Bwanje Valley
80	Ailoni	Ngapani	Katuli	Mangochi	Namwera
81	Naveya	Kunselema	Kamwendo	Mulanje	Mulanje
82	Beni	Thuchila East	Thuchila	Mulanje	Mulanje
83	Bodole	M'motola 1	Milonde	Mulanje	Mulanje
84	Bokosi	Misanjo	Mulanje Boma	Mulanje	Mulanje
85	Mulongoti	Kambale	Neno	Mwanza	Mwanza
86	Amosi	Kunenekude	Mwanza	Mwanza	Mwanza
87	Benalita	Kunenekude	Mwanza	Mwanza	Mwanza
88	Biliwili	Chiwembu	Mwanza	Mwanza	Mwanza
89	Kasume	Nyachikadza	Nyachilenda	Nsanje	Nsanje
90	Akina	Njiza	Nyachilenda	Nsanje	Nsanje
91	Alindamawo	Tsanya B	Magoti	Nsanje	Nsanje
92	Alufazema	Mpembamoyo	Makhanga	Nsanje	Nsanje
93	Bandawe	Wowo	Nkhulambe	Phalombe	Phalombe
94	Bokosi	Phalombe	Naminjiwa	Phalombe	Phalombe
95	Bona 2	Chigumukire	Tamani	Phalombe	Phalombe
96	Bwanali	Mnyambwa	Nkhulambe	Phalombe	Phalombe
97	Jarason	Muonekera	Matapwata	Thyolo	Thyolo
98	Andinyaza	Mangwalala	Masambanjati	Thyolo	Thyolo
99	Bandawe	Mikolongwe	Matapwata	Thyolo	Thyolo
100	Bwanali	Mikolongwe	Matapwata	Thyolo	Thyolo

	VILLAGE	SECTION	EPA	DISTRICT	RDP
101	Mpheula	Sumani	Malosa	Zomba	Zomba
102	Achilaga	Potani	Thondwe	Zomba	Zomba
103	Adamu	Potani	Thondwe	Zomba	Zomba
104	Adimu	Mikunga	Malosa	Zomba	Zomba
105	Chalunda			Likoma	
106	Chilongola			Likoma	
107	Kachere			Likoma	
108	Munyanje			Likoma	