1999-2000 Starter Pack Evaluation Programme

Main Report

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September 2000

List of Contents

LIST OF CONTENTS **2**

ACKNOWLEDGEMENTS **1**

STRUCTURE OF THE REPORT **2**

LIST OF ACRONYMS **3**

CHAPTER 1: OBJECTIVES AND SCOPE OF THE EVALUATION PROGRAMME **4**

OBJECTIVES 4
WHAT WE DID NOT SET OUT TO DO 5
SCOPE OF THE PROGRAMME 6
BRITISH-MALAWIAN PARTNERSHIP 6

CHAPTER 2: METHODOLOGY **8**

MODULAR DESIGN 8
MEASURING THE NET IMPACT OF STARTER PACK 9
SAMPLING 11
TECHNIQUES FOR INFORMATION COLLECTION 12

CHAPTER 3: POVERTY TARGETING **14**

LIVELIHOODS ASSETS-BASED POVERTY INDICES 14
POVERTY CATEGORIES 15
THE PROBLEM OF HOUSING TYPE 17
SHORT-TERM IMPLICATIONS FOR TARGETING 17

CHAPTER 4: PRODUCTION **19**

STARTER PACK CONTRIBUTION TO MAIZE PRODUCTION 19
USE OF STARTER PACK CONTENTS 19
FOLLOWING INSTRUCTIONS 20

CHAPTER 5: FOOD SECURITY **21**

MONTHS OF HOUSEHOLD FOOD SECURITY 21
BENEFITS FOR POORER FARMERS 22

CHAPTER 6: GENDER AND INTRA-HOUSEHOLD FOOD DISTRIBUTION **23**

GENDER ISSUES 23
RECEIPT OF THE PACK 24

INTRA-HOUSEHOLD FOOD DISTRIBUTION 24

CHAPTER 7: SUSTAINABLE AGRICULTURE AND PACK COMPOSITION 26

FARMERS' VIEWS ON SUSTAINABLE FARMING 26
STARTER PACK AND SUSTAINABLE FARMING 27
PACK COMPOSITION 27

CHAPTER 8: WILLINGNESS TO PAY 29

VALUING THE PACK 30
STARTER PACK-FOR-WORK PROGRAMME 30

CHAPTER 9: RURAL ECONOMY 32

INCOME 32
GANYU 32

CHAPTER 10: EXTENSION 34

CHAPTER 11: STARTER PACK REGISTRATION AND POPULATION ESTIMATES 35

POPULATION ESTIMATES AND THE SPLU DATABASE 35
NUMBERS REGISTERING FOR AND RECEIVING STARTER PACK 37
IS THE HOUSEHOLD AN APPROPRIATE UNIT FOR STARTER PACK REGISTRATION? 38
DELETIONS 39

CHAPTER 12: CONCLUSIONS AND RECOMMENDATIONS 40

APPENDIX 1: CHARACTERISTICS OF MODULES AND TERMS OF REFERENCE 42

APPENDIX 2: PRINCIPLES OF SAMPLING APPLIED TO PRA WORK 63

APPENDIX 3: MAPS 65

APPENDIX 4: INFORMATION AVAILABLE ON CD 69

APPENDIX 5: THE FINAL WORKSHOP 70

APPENDIX 6: THE BINGO GAME (MODULE 3) 73

APPENDIX 7: ARTICLE FROM THE NATION 74

Acknowledgements

Sarah Levy, Carlos Barahona and Ian Wilson (the SSC team) would like to express their thanks to all those who made the 1999-2000 Starter Pack Evaluation Programme possible. To all the module team members, for their patience, hard work and dedication to making a success of the exercise. To Harry Potter, for agreeing to try out the modular programme design and for helping us with tough decisions. To Cecilia Cruz, for not giving up in the face of major contractual complexities. To Catherine Hara, for providing coordination support. To Toby, for looking after us at the DFID guesthouse in Lilongwe. To our colleagues at the SSC: Lorna Turner, Cathy Garlick, James Gallagher, Alessandro Leidi, Joan Knock, Kellie Watkins and Matt Sapiano for dropping everything at crucial moments to assist us. To Zakeyo Kamanga at the MoAI for keeping an eye on us. And to the thousands of Malawian farmers who shared their experiences and thoughts with us so that their government and the donor community might learn useful lessons for the future.

Structure of the Report

In Chapter 1 we discuss the objectives and scope of the 1999-2000 Evaluation Programme, noting that the programme focused on four key objectives of the Starter Pack Scheme and on learning lessons which would inform policy decisions for future Starter Pack interventions. We describe what was and what was not included in this year's evaluation, and we outline the roles of the SSC and the module teams in the evaluation programme.

Chapter 2 explores methodological issues. We describe the modular design of the 1999-2000 Evaluation Programme and outline its advantages. We discuss the difficulty of measuring the net impact of Starter Pack and how we attempted to do so by triangulating different approaches. We also raise the question of precision and orders of magnitude and outline our approach to sampling. We describe the techniques used for information collection, in particular the innovative work carried out by Modules 3 and 4 using PRA techniques in a large number of sites with a degree of standardisation.

Chapter 3 looks at the thorny issue of poverty targeting. We explain how we developed two livelihoods assets-based poverty indices which would not only allow us to show the effects of Starter Pack on households in different poverty categories but would also inform the design of a poverty index for future information collection exercises. We find that there are no simple proxy 'markers' for poverty in Malawi, such as housing type. In the light of this difficulty, we discuss the short-term implications for poverty targeting.

Chapters 4-11 focus on the key findings and lessons learnt from the 1999-2000 Starter Pack Evaluation Programme. In Chapter 4 we look at production of Starter Pack maize and legumes. In Chapter 5 we examine the impact of the pack on months of household food security - including the relative benefits for rich and poor farmers. Chapter 6 examines gender differences, including allocation of the pack in terms of sex of household head; we also report our findings on intra-household food distribution. Chapter 7 examines farmers' own views on sustainable farming practices and asks whether the composition of the pack could be improved. In Chapter 8, we look at the question of whether farmers would be willing to pay for a Starter Pack in cash, with credit or by participating in a public works programme. Chapter 9 presents results which shed some light on the impact of Starter Pack on farmers' incomes and the labour market, while Chapter 10 looks at extension issues. In Chapter 11, we report on the findings of Module 5, which estimated the rural population of Malawi and looked at Starter Pack registration processes.

Finally, in Chapter 12, we present our main conclusions and recommendations.

List of Acronyms

ADD	Agricultural Development Division
DFID	Department for International Development of the UK
EA	Enumeration Area
EPA	Extension Planning Area
EU	European Union
FEWS	Famine Early Warning System
GoM	Government of Malawi
GTIS	Ground Truth Investigation Study
MoAI	Ministry of Agriculture and Irrigation
M1-M5	Modules 1-5 of the 1999-2000 Starter Pack Evaluation Programme
NSO	National Statistical Office
ODI	Overseas Development Institute, UK
PRA	Participatory Rural Appraisal
RDP	Rural Development Project
SP	Starter Pack
SPS	Starter Pack Scheme
SP1, SP2 & SP3	1st, 2nd and 3rd years of the SPS
SPLU	Starter Pack Logistics Unit
SSC	Statistical Services Centre, University of Reading, UK

Chapter 1: Objectives and Scope of the Evaluation Programme

The 1999-2000 Starter Pack Evaluation Programme was designed to evaluate selected aspects of the first and second years of the Starter Pack Scheme (SPS). It was an evaluation exercise in the sense that it attempted a one-off assessment of the SPS to try to determine whether it achieved the intended objectives. We attempted to judge the 'merit or worth' of Starter Pack as an intervention[1]. In order to do this, we needed to establish what where the expected outcomes from the SPS (the key objectives).

Objectives

The task of determining what were the key objectives of the SPS was not an easy one. As a number of different stakeholders were involved in the scheme, there were a variety of objectives[2]. For the purposes of the 1999-2000 Evaluation Programme, the Statistical Services Centre (SSC) of Reading University, as the programme manager, decided to focus on four key objectives of the SPS:

1. Increasing national food production, in particular for maize;
2. Reducing household food insecurity, particularly for the poorest farm families;
3. Provision of legume crops to improve soil fertility and diet; and
4. Promoting the use of chemical fertiliser and hybrid maize by smallholder farmers.

The modular design of the 1999-2000 Evaluation Programme (see Chapter 2) was intended to ensure that outcomes of the SPS were assessed against these objectives. Module 1 would focus on food production and use of Starter Pack inputs, attempting to assess the pack's contribution to food production and the uptake of the 'best-bet technologies' associated with the pack. Module 2 would focus on household food self-sufficiency, particularly for the poorest farm families. Module 3 would also focus on household food self-sufficiency, but from the angle of gender and intra-household distribution; additionally, Module 3 would explore the question of diet. Module 4 would examine the use of the pack in the context of promoting sustainable farming practices (including issues of soil fertility and the promotion of chemical fertiliser/hybrid maize technologies).

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[1] J Abbot and I Guijt: Changing views on change: participatory approaches to monitoring the environment, SARL Discussion Paper No.2, July 1998.

[2] See Chapter 7 of C Longley, J Coulter and R Thompson: Malawi Rural Livelihoods Starter Pack Scheme 1998-99: Evaluation Report, August 1999.

The 1999-2000 Evaluation Programme management team also set out to learn lessons from SP1 and SP2 which could to used to help improve future SPSs. Module 5 looked at the problem of Starter Pack registration, with the intention that lessons learnt about rural population, households and receipt of the pack would be taken into account in future Starter Pack registration processes. Modules 2 and 3 examined the problem of measuring poverty and targeting the poorest farm families. Module 2 attempted to assess farmers' willingness to pay for Starter Packs, including the self-targeting option of a Starter Pack-for-work scheme. Finally, Module 4 looked at how the composition of the pack might be changed to make it more user-friendly.

What we did not set out to do

It is important to note also what the 1999-2000 Evaluation Programme did not set out to do. The programme did not attempt to:

- monitor or evaluate the distribution of the packs;
- assess the impact of Starter Pack at a macroeconomic level; or
- carry out a crop measurement survey.

The distribution and macroeconomic aspects were deliberately not prioritised by the programme managers due to limited resources and the late start of the 1999-2000 Evaluation Programme. However, we are aware that these aspects merit study and we suggest that they might be included in SP3 monitoring and evaluation modules. The decision not to include a crop measurement element (based on crop-cutting) in our agronomic survey was largely due to reservations about the effectiveness of such a methodology within our resource constraints for assessing the impact of Starter Pack (see Chapter 2). However, the EU Food Security Unit funded a crop-cutting exercise to estimate national production in the 1999-2000 season[3].

The one gap in the 1999-2000 Evaluation Programme which was not a deliberate part of the design was the lack of a module dedicated to the educational effect of the SPS, looking in particular at the effectiveness of the Ministry of Agriculture's extension services in relation to Starter Pack. Such a module was not included because we received no proposals for it when we advertised for consultants to carry out the work.

[3] Bunda College of Agriculture (Agricultural Policy Research Unit): National Pilot Crop Production Survey - 2000: Crop Production Survey (draft report), June 2000.

Scope of the programme

The 1999-2000 Evaluation Programme was made up of five modules, each managed by a different consultant, institution or consortium (see Appendix 1):

Module 1 Agronomic Survey

Module 2 Microeconomic Impact and Willingness to Pay

Module 3 Poverty/Livelihoods, Gender and Intra-household distribution

Module 4 Sustainable Agriculture and Biodiversity

Module 5 Ground Truth Study for Starter Pack Logistics Unit (SPLU) Register

By deploying five 'module teams', the 1999-2000 Evaluation Programme was able to draw on different sources of individual expertise and institutional know-how. It was also able to achieve national coverage and to visit 452 villages or Enumeration Areas. Moreover, the combination of 'quantitative and qualitative' methodologies (household surveys and participatory focus groups) allowed us to record responses from an larger number of households and individuals than is usual for this type of project.

British-Malawian partnership

The design of the 1999-2000 Evaluation Programme was intended to mark a change from the 1998-99 evaluation by establishing a partnership between British and Malawian teams. The Statistical Services Centre of Reading University (UK) was responsible for the management of the 1999-2000 Evaluation Programme, including:

- overall design of the programme;
- liaison with DFID-Lilongwe to organise a competitive public bidding process, select the consultants and refine their draft proposals;
- coordination of sampling strategies of the modules to ensure representative results and generalisable conclusions;
- quality control for fieldwork, information management and analysis;
- provision of help to module teams in structuring and writing final reports; and
- facilitation of the end-of-programme workshop in August 2000.

The module teams were predominantly Malawian, providing the programme with vital inputs of local expertise. For all the Malawian consultants, this was their first experience of winning a contract through competitive public bidding. In addition to the development of technical skills, they acquired project management expertise including budgeting and financial

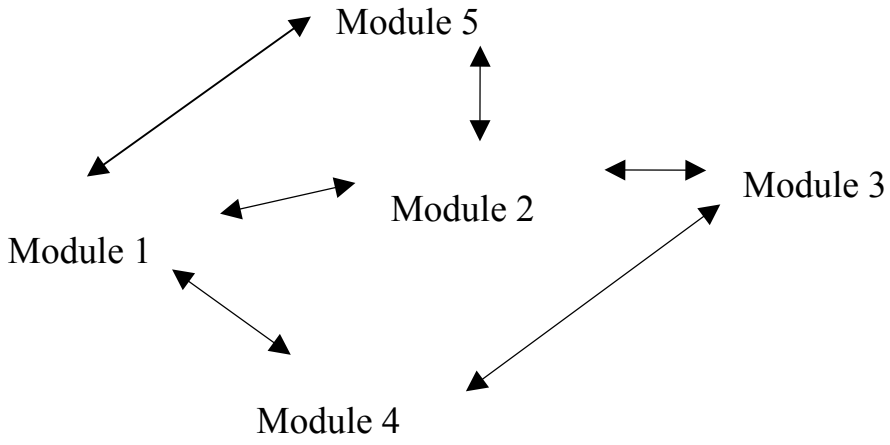
management skills. In the case of Module 4 - a consortium of consultants from the UK Overseas Development Institute (ODI), Chancellor College Zomba, Chitedze Agricultural Research Station and two Malawi-based NGOs - a rich exchange of experiences and skills was achieved within the module as well as between the module team and the 1999-2000 Evaluation Programme managers.

Chapter 2: Methodology

Modular design

The questionnaire used in the 1998-99 Starter Pack evaluation[4] was largely agronomic in its orientation. A single household survey asked the same (large) set of questions of almost 1800 respondents in about 90 Extension Planning Areas (EPAs), while a much smaller number (360 respondents) were involved in a crop measurement study.

For the 1999-2000 Starter Pack Evaluation Programme, the SSC recommended a different approach based on 'modularisation'. This divided the evaluation programme into a series of modules run by different teams with different areas of specialisation.



This design was felt to be superior to that used in SP1, for the following reasons:

- the fieldwork, data management and analysis would be more manageable if the information to be collected was split between different module teams;
- a combination of 'quantitative' and 'qualitative' methods could be used;
- the questions asked of respondents by each module team would be fewer, so that no survey respondent would be subjected to a very lengthy questionnaire (boring the respondent and probably eroding the quality of information collected);

[4] See C Longley, J Coulter and R Thompson: Malawi Rural Livelihoods Starter Pack Scheme 1998-99: Evaluation Report, August 1999.

- since each module would conduct its work independently and the design of the whole would include overlaps between some modules, some of the key findings could be compared and should reinforce each other;
- the evaluation could achieve greater coverage for the resources available (it visited 452 villages or Enumeration Areas and recorded responses from 13,726 households and an even larger number of individuals[5]).

Measuring the net impact of Starter Pack

The SP1 evaluation 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. Maize yield and production would be the key indicator of the net impact of Starter Pack.

The SP1 crop measurement exercise was expensive and involved a number of assumptions. In the end, the analysis "attempted to post-stratify the sampled households into those applying fertiliser on starter pack plots and comparative plots and those not applying fertiliser". Incremental yield was then calculated using the 94 cases in which households applied fertiliser to the Starter Pack plot but not to a comparative plot. In these cases the comparative plot was estimated to yield 1033.2 kg/ha on average and the Starter Pack plot was estimated to yield 1903.7 kg/ha, translating into an estimated incremental yield of 870.5 kg/ha and estimated incremental production of 86.0 kg attributable to the 0.1 ha Starter Pack plot.

The SP2 evaluation adopted a different approach. This was based on the view that the comparison between the perfect Starter Pack plot and a perfect 'control' plot was rather an artificial construct, since farmers had in fact used the Starter Pack inputs in different ways, often spreading them beyond the 0.1 ha recommended plot. Also, there was no perfect counterfactual, as 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 rather than complex field 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 and impact of Starter Pack. We would attempt to obtain estimates of production and months of food security per household for 1998-99 and forecasts of production for 1999-2000 (since the

[5] Module 1 interviewed 2,992 household heads and 3,527 individuals. Module 2 interviewed 1,200 household heads. Module 3 interviewed 476 household heads and collected information from 1,850 individual focus group participants. Module 4's focus group workshops recorded information about 2,924 households. The Module 5 census covered 6,134 households and 25,281 individuals.

surveys were carried out before the harvest). We would not aim for high levels of precision, but would look for trends and orders of magnitude. Owing to the large number of respondents in our samples, we would be able to analyse the variations in the size of the effects observed by farmer characteristics such as wealth, sex of household head and location (region, ADD).

At the centre of the SP2 evaluation's approach was the idea that we should triangulate the results from different methods. In addition, we would compare the results obtained by each independent module. The different methods used were:

- Year-to-year comparisons, comparing SP1 and SP2 years with 1997/98 (the year before the SPS was introduced)
- Recipients of Starter Pack versus non-recipients (the 'control group')
- Farmers' perceptions and experience

Each of these methods has its drawbacks. Year-to-year comparisons are affected by the weather, so 1997/98 cannot be seen as a proper 'baseline'. There was no control group of non-recipients included by design in the SPS because the objective of the Starter Pack Scheme was to target all rural smallholder households; but although all households were eligible, a significant percentage of households were found not to have received a pack[6]. However, some care must be taken in comparing recipients and non-recipients because non-recipients were found to be slightly poorer on average and to include a larger proportion of female household heads than recipients.

Using farmers' perceptions and experience may also have its drawbacks. Farmers may have incentives to make answers either more optimistic or more pessimistic than the reality (given that the farmer may expect benefits from exaggerating or understating the impact of Starter Pack). However, the questions were asked in such as way as to minimise the possibility of such biases. Moreover, field supervisors found that farmers had a good idea of maize production and food security associated with SP1, since the Starter Pack maize crop was harvested and eaten first because it was less good for storage than other varieties. On the other hand, farmers' pre-harvest production forecasts for SP2 should be treated with caution, since forecasts are difficult to make even without incentives to exaggerate or underestimate.

As a reflection of our focus on trends and orders of magnitude, the results of questions designed to assess the net impact of Starter Pack on production and food security using the three methods outlined above are expressed in terms of numbers of 50-kg bags of maize

[6] Module 2 put the percentage of non-recipients at around 16% of households in both Starter Pack years, while Module 3 estimated that 17% and 11% of male heads did not receive the pack in SP1 and SP2 respectively, compared with 20% and 23% for female heads.

produced per household and months of household food security. We do not express the results in kilograms of production or days of extra food security.

Sampling

The final report for each module contains an outline of the sampling strategy for that module. The following general principles were shared by the modules, including those which were exclusively or partly 'qualitative' (i.e. based on structured participatory research methods rather than surveys collecting 'quantitative' data)[7]:

1. Random selection of villages and households within villages
2. Stratification - by FEWS poverty and food deficiency indices (M2), FEWS food deficiency index (M3) and FEWS sphere of influence clusters (M4)
3. The largest number of sites possible were selected within the resources available

Elements 1 and 3 make it possible to claim that the sample is 'representative' and allow us to reach generalisable conclusions. Including a large number of sites allows us to capture as much variability as possible and would improve the precision of our generalisations. We can also compare variations between regions, poverty categories, farming practice groups, male and female household heads, etc.

The teams for Modules 3 and 4, which were envisaged as traditional PRA-type studies, did not initially see why the managers wanted to carry out the research in as large a number of sites as possible (48 sites for Module 3 and 30 for Module 4). Module 4, in particular, proposed to carry out in-depth studies in only 3 locations. However, the managers explained that they wanted to reach conclusions which depicted the situation in the country as a whole, rather than a producing a small number of case studies. There would be a trade-off in terms of losing some of the richness of local detail which in-depth case studies provide.

Stratification means grouping sampling units in sets that are relatively homogeneous on the basis of relevant criteria with the purpose of improving the efficiency of the sampling design. Being able to stratify depends on having information about the elements of a population that allows the study team to identify such homogeneous groups, such as the FEWS categories for poverty, food deficiency and spheres of influence. The main benefit of stratification is that it allows the design of sampling schemes which maximise the information that is collected for the resources available.

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[7] An extract adapted from a recent report by Calibre Consultants (UK) and the SSC for DFID's Forestry Research Programme is reproduced in Appendix 2. This discusses our approach to sampling for PRA work, such as that applied in Modules 3 and 4, in greater detail.

It should be noted that - with the exception of Module 1 (NSO) - all the sampling was carried out by the Evaluation Programme managers. Maps showing the sample EPAs selected for Modules 2, 3, 4 and 5 are shown in Appendix 3. The sampling skills of the module team members were weak. A course in sampling methods for MoAI staff and outside contractors or potential contractors might help address this deficiency.

Techniques for information collection

As we wanted to combine results from a number of sample locations, the methodology used had to be standardised at all locations. This is easy to achieve through standard surveys but it is more difficult with PRA-type studies.

The techniques normally used in PRAs had to be adapted into more 'structured' versions because of the need to produce information which could be analysed in a comparable manner between sites and to produce generalisable conclusions. For Module 3, the programme managers envisaged that it would be difficult to analyse large amounts of 'qualitative' information from 48 sites. Therefore we recommended that Module 3 use a structured data collection instrument which would record information from individual participants in addition to taking notes of the focus group discussions. The Bingo Game with its accompanying Focus Group Discussion Guide was developed for this purpose - the aim being to make sure that comparable information was collected using a standardised procedure in each site.

A similar approach was used for the main study phase of Module 4. Information was collected and recorded in 30 sites using standardised participatory procedures based on a Field Facilitators Manual and Debriefing Document. These evolved from the preliminary study phase in three villages in which a set of 15 Sustainability Indicators (indicators of sustainable farming practices mentioned consistently across villages) was identified and different participatory techniques or 'games' were explored. Since the emphasis was on collecting information which could be used to make comparisons and generalisations, the same set of indicators was ranked in all sites and we measured farmers' responses to the indicators using absolute scales rather than relative ones. Also, some of the 'qualitative' outcomes were converted into numerical values. Thus, when writing up the final report, many of the results recorded in the Debriefing Document could be summarised in simple Excel tables and charts.

The common strand in the thinking behind this approach is that standardised information collection instruments allow systematisation of results, while non-standardised approaches produce 'case study' type or 'qualitative' information that is hard to analyse in a comparable manner across a large number of sites. However, the disadvantage of fully standardised approaches is that they run the risk of missing important elements by asking the wrong

questions or an incomplete set of questions. Therefore the design of Modules 2, 3 and 4 comprised:

a) a preliminary design phase in which flexible participatory methods were used to explore and understand the issues, informing the design of standardised instruments for use in the main phase; and

b) a main phase in which standardised instruments were used to collect comparable information - whether in the form of a standard household survey questionnaire (M2); a combination of a standard household survey questionnaire and the focus group Bingo Game (M3); or a systematic recording of participatory focus group responses focusing on 15 Sustainability Indicators and standardised 'games' (M4).

We did not plan such preliminary phases for Modules 1 and 5 because field testing of questionnaires should have been sufficient to refine what were (in these cases) relatively simple information collection instruments. However, this proved less effective than the Module 2, 3, and 4 approaches, since the contractors in charge of Module 1 and Phase 1 of Module 5 found it difficult to learn the lessons of field testing and modify questionnaire design accordingly[8].

[8] In the case of Module 5, this problem was remedied between Phases 1 and 2, when the questionnaire was improved on the basis of problems encountered during Phase 1.

Chapter 3: Poverty Targeting

There has been much debate about the feasibility of targeting the poor in Malawi in the context of a national safety net strategy which might or might not include the Starter Pack programme. The main problem, as noted in a recent World Bank report[9], is that the poor are "too large and undifferentiated a group". There is relatively little information about poverty in Malawi, and certainly no database of households or individuals which would allow a targeting scheme to be put into practice. As the December 1999 World Bank report states: "the data base does not allow the authorities to identify particular groups or households".

We believe that the 1999-2000 Starter Pack Evaluation Programme made an important contribution to this debate. It tested various methods of measuring poverty with a view to finding a practical way of identifying 'the poor' for the purposes of Starter Pack registration. It found that livelihoods assets-based composite indices are useful in estimating the numbers of people in different poverty categories at national, regional and local levels. However, there is *no simple indicator* which can be used to place households or individuals in poverty categories. In this chapter we describe our findings on poverty in Malawi and consider the implications for interventions hoping to target the poor.

Livelihoods assets-based poverty indices

The 1999-2000 Starter Pack Evaluation Programme management team based its approach to collecting information about poverty on the livelihood assets framework in preference to monetary definitions of poverty using income or expenditure data. There were two main reasons for this: firstly, many Malawian farmers live in a predominantly subsistence economy with little cash income; secondly, income and expenditure data are much more complicated to collect than information about asset ownership. The second consideration is a highly practical one: although income/expenditure methods may be useful for estimating numbers below a poverty line at national level, they would be useless as a basis for large-scale data collection designed to provide a database of information about individual candidates for targeting.

Modules 2 and 3 set out to collect information about ownership of different livelihoods assets identified by participants in focus group discussions during the preliminary phases of these modules. The Module 2 team decided to focus on livestock assets, on the grounds that

[9] W. J. Smith et al: Malawi - A Safety Net Strategy for the Poorest, World Bank, December 8, 1999.

animals are key assets for farmers[10] and number of livestock assets owned was found to be a widely accepted indicator of wealth. In their household survey, they set out to record information about 11 types of livestock owned, including numbers of animals owned by each respondent[11]. The Module 3 team opted to measure a broader range of livelihood assets, but the method chosen (the Bingo Game) only allowed the recording of a 'yes/no' answer to ownership of an asset, so that the number of animals or other assets owned was not recorded.

Poverty categories

The 1999-2000 Starter Pack Evaluation Programme management team was aware that there is no single solution when building a composite poverty index, and that good judgement must be used in determining the weighted scoring systems. This is particularly true in a country like Malawi where even the relatively wealthy are poor in an absolute sense, so that the differences in asset ownership between poverty categories are small. Our aim was not to provide a 'definitive' answer, but to experiment with different methods which could be tested and compared with each other. This would inform the design of a livelihoods assets poverty index for Malawi which could be used in future information collection exercises.

Table 1 Module 2 sample distribution by poverty index

Category	Score	Category Number	Category Description	Number	%
No livestock	0-1	1	Very poor	302	25.2
Up to 4 chicken	2-9	2	Poor	203	16.9
Small number of chicken and/or goats	9-29	3	Moderately poor	280	23.3
Larger number of chicken and/or goats	30-99	4	Wealthier	287	23.9
Cattle and/or large number of goats and/or chicken	100+	5	Wealthiest	128	10.7
Total				1200	100

Module 2's 'livestock assets-based poverty index' was based on chicken, goats and cattle, which were found to be the most common livestock assets owned. A score was given to each household reflecting numbers of animals owned multiplied by the weights given to each animal: chicken 2; goats 10; cattle 100. The resulting continuous line (scores of 0 to 2,232

[10] Livestock assets are part of rural households' strategies for coping with food shortages or crises, as they can be eaten or sold in an emergency.

[11] The Module 2 household questionnaire also included a section on farm implements (hoes, oxcarts and plough/ridgers), but these were not included in the final poverty index as they were found to represent only the extremes of poverty and wealth.

excluding outliers) was then divided into 5 categories. The intention was to put households into categories which reflected meaningful divisions in terms of assets-based wealth.

Module 3's poverty index was based on the Bingo Game (see Appendix 6), which allowed the team to record the assets of individuals participating in focus group discussions. This innovative approach meant that we could combine qualitative information from participatory discussions with information about the poverty level (and other key characteristics) of each individual participant in the discussions.

Of the 14 assets on the Bingo Game, the following were chosen for the Module 3 poverty index: chicken (weight=2); good clothing (5); radio (7); goats (9); bicycle (12); oxcart (20). These were felt to give a sufficient range of options. Adding further assets did not improve the definition of the index. Assets which might vary for socio-cultural, religious and region-specific reasons - such as cattle and pigs - were excluded. The resulting scores - on a continuous line from 0 to 55 - were divided into four categories. As with Module 2, the divisions between categories are based on the idea that certain score ranges put households into meaningful asset-owning groups.

Table 2 Module 3 sample distribution by poverty index

Category	Score	Category Number	Number	%
No assets - poorest	0	1	344	29.5
Few assets	1-11	2	387	33.1
Some assets	12-25	3	292	25.0
Many assets - rich	26+	4	145	12.4
Total			1,168	100

In our view, the composite poverty indices developed by Modules 2 and 3 are both effective as measures of poverty. This is because:

- they correlate well with landholding size and with degree of food self-sufficiency, which are generally thought to be good indicators of poverty/wealth;
- both indices agree that 63-65% of the population are 'poor' - below a 'poverty line' defined by having few or no assets (M2 categories 1-3 and M3 categories 1-2);
- both indices show a 'wealthiest' category with large numbers of assets representing some 11-12% of the population and 'poorest' category with no assets at all representing 25-30% of the population.

The problem of housing type

The Starter Pack Evaluation Programme management set out to test the hypothesis that housing type might be used as a simple indicator of poverty in Malawi. This was based on the idea that a simple indicator was needed to allow government officials (e.g. MoAI Field Assistants engaged in Starter Pack registration) to identify households' poverty levels for the purpose of targeting. When discussing 'administrative targeting', the December 1999 World Bank report notes: "One possibility is to develop proxy 'markers' for poverty, identifying characteristics such as type of housing, or household composition, for example, which are highly correlated with poverty status". The Starter Pack Evaluation Programme therefore included housing type as a proxy for poverty in the household questionnaires for Modules 2, 3 and 5. The idea was that other poverty indicators in Module 2 would be correlated with housing type to show that housing type was a proxy for poverty, supporting its use in Modules 3 and 5.

The questionnaires for Modules 2, 3 and 5 contained a series of questions that as a factorial arrangement allow the identification of 18 different types of house. Unfortunately, when Module 2 compared the main resulting housing types with other poverty variables - landholding size, number of months which own food production lasted in 1998/99 and livestock assets - there was found to be *absolutely no correlation*. This suggests that housing type is not in fact a good indicator of poverty/wealth in Malawi. As a result, housing type could not be used as an indicator of wealth when analysing the results of our studies. Nor can it be used as a simple indicator of poverty for the purposes of targeting[12].

Short-term implications for targeting[13]

The findings of the 1999-2000 Starter Pack Evaluation Programme on poverty have two important implications for targeting in the short term:

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[12] There is some indication from the Module 2 data that a weak relationship between poverty and housing type exists at the upper end of the spectrum (wealthiest households) in the northern region. One interpretation is that the northern region (the wealthiest part of Malawi) may be behaving like other countries where there is a relationship between housing type and poverty, while the southern and central regions may have had this relationship disrupted by chronic poverty and/or major shocks which have reduced once-wealthy farmers to poverty. This would explain why participatory research suggests that housing type is perceived as an indicator of poverty (e.g. World Bank Consultations with the Poor report written by the S. W. Khaila *et al* of the Centre for Social Research, July 1999).

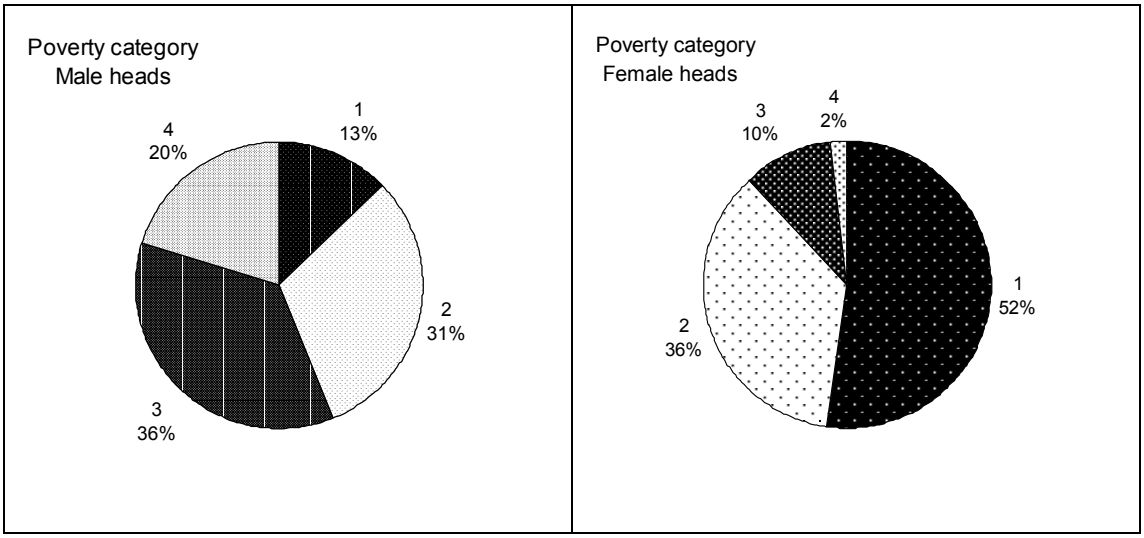
[13] Longer-term options for targeting are discussed in connection with Module 2's work on willingness to pay and Starter Pack-for-work schemes (see Chapter 8).

1. The livelihood assets-based approach to measuring poverty finds that 25-30% of the population have no assets which could be sold in times of crisis, while 63-65% may be considered 'poor'.

2. There are no simple proxy 'markers' for poverty in Malawi. This means that it will be impossible to develop *simple* criteria for poverty targeting to be used by MoAI Field Assistants or village task forces engaging in community targeting. Complex criteria are likely to be difficult to manage and open to allegations of unfairness.

One alternative would be to target groups known to be particularly vulnerable. Since Starter Pack is not appropriate for the work-constrained or landless, this would imply targeting female-headed households. Some 88% of female-headed households may be considered 'poor' (they are in Module 3 poverty categories 1-2), compared with 44% of male-headed households (see Figure 1). Over half of female-headed households have no assets.

Figure 1 Poverty of male and female household heads compared



Source: Bingo Game, Module 3.

If Starter Pack 3 wished to target female-headed households, this would be relatively simple since they can be easily identified. Field Assistants could compile the SPLU register with a code for male-headed households and another for female-headed households. Vouchers entitling the bearer to receive a pack would then be distributed to female heads. This would only work in the short-term (for one season) because farmers would soon realise that they had to register as female-headed households in order to qualify to receive the pack. However, in the meanwhile, a longer-term approach to targeting could be developed (see Chapter 8).

Chapter 4: Production

One of the key objectives of the 1999-2000 Starter Pack Evaluation Programme was to measure the production impact of the pack. Module 1 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. Module 2 contained similar questions to Module 1 on staple food production in 1998/99 (as a cross-check of M1 results) and also included farmers' production forecasts for 1999/2000.

Starter Pack contribution to maize production

Module 1 administered its household and individual questionnaires to Starter Pack recipients only. It found that farmers in its sample produced 14.3 50-kg bags of staple food on average in the 1998/99 season, with big variations between ADDs (from a high of 21.3 bags in Mzuzu to a low of 8.9 bags in Blantyre). Of these 14.3 bags of staple food, 3.4 bags were contributed by Starter Pack maize - this time with less variation between ADDs (from a high of 4.1 in Karonga to a low of 2.8 in Lilongwe). This implies that Starter Pack contributed almost one quarter of national production in the first year of the scheme.

The Module 2 results are close to those for Module 1, showing average maize production by Starter Pack recipients of 15.0 50-kg bags in 1998/99. Although the comparison with non-recipients in the Module 2 sample, who produced 9.3 bags on average, suggests that the pack contributed 5.7 bags in the SP1 year, the farmers themselves estimated that the pack made an average net contribution of 3.7 50-kg bags to the 1998/99 crop and would add 3.5 50-kg bags to the 1999/2000 crop.

The Module 1 survey placed SP1 in context by asking farmers whether they had received other agricultural inputs or participated in credit schemes. There were major variations by region, with 22% in the north and 24% in the centre receiving non-Starter Pack benefits, but only 8% of farmers in the south (3% in Shire Valley). The team also asked farmers whether they had purchased inputs with their own money: 39% said yes, ranging from around half of farmers in Mzuzu and Blantyre to less than one quarter in Salima and Shire Valley.

Use of Starter Pack contents

Almost all recipients of Starter Pack in the 1999-2000 season got maize and almost all recipients in the centre and south got legumes. However, in the north, only 60% of the Module 1 sample found legumes in their packs. The Module 1 results show that at national level, 41% of respondents received soya beans (but less than 3% in the north), while 47%

received groundnuts and 3% received *Phaseolus* beans (these were all distributed in the central region).

Module 1 set out to discover whether the Starter Pack contents were used as envisaged by the MoAI in the 1999-2000 season. The results show that:

- 79% of recipients planted all of the maize seed; most of those who did not plant it all attributed this to the late arrival of the seed (it was either delivered too late to plant or when they had already planted other seed).
- only 57% of farmers receiving legumes planted all of the legume seed, with some 30% mentioning that they ate seed. In the north, where 62% ate seed, this was largely attributed to its late delivery. On the positive side, 43% of those who planted legumes planted only Starter Pack legumes, probably indicating that the pack encouraged people to plant legumes who would not have done so without it. According to Module 2, the pack made an average contribution of 0.8 50-kg bags to the 1998/99 legume crop and would add 0.3-0.6 bags to the 1999/2000 crop.
- 84% of pack recipients applied the basal fertiliser to the Starter Pack inputs, while 82% applied the top dressing - although a much lower percentage applied the fertiliser to the pack inputs in Shire Valley (55%) and in Karonga (65%). Of those who did not use the fertiliser as envisaged, around half applied it to another crop (another maize garden or, in the case of Kasungu, tobacco), while over 60% of farmers in Shire Valley sold it because they do not need fertiliser on their soil.

Following instructions

Module 1 found that few farmers followed all of the instructions accompanying the pack in 1999-2000, although some followed part of them:

- 64% of the sample planted Starter Pack maize in one plot;
- 57% had ridges 90cm apart;
- only 16% of planting stations were 25cm apart;
- only 24% of farmers intercropped maize and legume seed; and
- 48% mixed the basal and top dressing instead of applying them separately.

A number of reasons were given for not following the instructions (see Chapter 10). Some respondents said that they had been told to mix the basal and top dressing by agricultural officers in their areas.

Chapter 5: Food Security

The central focus of the 1999-2000 Starter Pack Evaluation Programme in terms of food security was household food self-sufficiency. We are aware that this is only one aspect of a complete definition of food security, which should also take into account households' relationships with the market for food through indicators such as income (earnings) and prices. However, our assumption was that in Malawi most smallholder farmers have a relatively weak relationship with the market, depending primarily on their own production capacity to feed themselves and their families[14].

Months of household food security

Modules 1, 2 and 3 all contained questions in their household surveys designed to establish number of months of household food security from the 1998-99 season. The pattern of the questions in all three modules was the same: the enumerator first asked when was the farmer's harvest month and then when his/her food ran out. The number of months of household food security was calculated by the enumerator/supervisor, being the difference between the harvest month and the last month of food. In the following summary we focus on the Module 2 and 3 results[15].

The Module 2 calculations indicate that the mean number of months which staple food from the 1999 harvest lasted was 8.7 for Starter Pack recipients. This compares with 6.4 months in 1998 (the year before SP1) and with 6.1 months for non-recipients of the pack in the same year. This suggests that the contribution of Starter Pack in the 1998-99 season to household food security was between 2.3 and 2.6 months.

The Module 3 calculations suggest that the mean number of months which staple food from the 1999 harvest lasted was 8.4 for male heads receiving Starter Pack. This compares with 6.7 months in 1998 and with 5.8 months for male heads not receiving the pack in SP1, indicating that the contribution of Starter Pack in the 1998-99 season to household food security was between 1.7 and 2.6 months. For female heads the contribution of the pack to household food security in the 1998-99 season was only 0.5-0.6 months using the year-on-year and control group comparisons. However, the Module 3 questionnaire also included a 'perceptions'

[14] The balance between food self-sufficiency and reliance on the market for food might be worth examining in greater detail in future Starter Pack evaluations.

[15] Module 1's results on food security were inconsistent both with that module's production results and with the Module 2 and 3 food security results. The Evaluation Programme managers have been unable to establish the source of the problem, but consider Module 1 food security results to be unreliable.

question asking respondents to say how many months of food they think came from Starter Pack in SP1. Female heads who harvested maize from Starter Pack estimated 2.3 months of extra food security, while male heads estimated 2.9 months. According to results from a similar 'perceptions' question in the Bingo Game/Focus Group Discussion Guide, both male and female heads thought that Starter Pack provided an extra 2.9 months of food.

Benefits for poorer farmers

There is some disagreement about the relative benefits for rich and poor farmers. Module 2 found that: "In SP1 poor households benefited more, but there were no gender differences; while in SP2 poor and female-headed households expected to benefit more than wealthy and male-headed households". The Module 3 results do not support this conclusion. The 'perceptions' question in the Bingo Game/Focus Group Discussion Guide suggests that richer households gained slightly more food security from the 1998-99 Starter Pack than poorer households which are predominantly female-headed (see Table 3), although female heads in poverty categories 2-4 did slightly better than male heads in the same categories. Perhaps the most important thing that we can say about these results is that differences are slight, allaying concerns that richer, male-headed households benefit disproportionately from Starter Pack in terms of extra months of food security.

Table 3 Increased months of food security due to SP1, by poverty

			Mean	Std Deviation	N
Male head	Poverty category	1	2.7	1.58	57
		2	2.7	1.31	130
		3	2.9	1.38	180
		4	3.0	1.44	104
Female head	Poverty category	1	2.7	1.57	167
		2	3.1	1.58	107
		3	3.1	1.41	32
		4	3.1	1.73	8

Source: Bingo Game/Focus Group Discussion Guide, Module 3.
Notes: Excluding respondents who did not harvest any grain from Starter Pack. Restricted to answers up to 6 months. Poverty category 1 = poorest; 4 = wealthiest.

Chapter 6: Gender and Intra-household Food Distribution

Gender issues

Modules 1, 2, 4 and 5 included in the information about households which they collected the variable sex of household head, allowing the results to be analysed in terms of the gender breakdown. Module 3 deliberately selected a sample with 30% male heads, 30% married females and 40% female heads for its household survey. Module 3 also divided the participatory workshops into these three participant types to form focus groups. As it had a specific gender focus, this module wanted to study the experiences of each of these groups.

Married females constituted a separate group because it was felt that married females are often marginalised, and their needs are ignored by studies which see them only as part of the male-headed household. Module 3's participatory research found that:

> "...some female heads were more empowered than some married women, because there were no husbands to interfere with their activities for survival. They had control of the Starter Pack inputs and their businesses. Their married counterparts were trapped in the marital obligation, and they looked more vulnerable than the female heads. However, the female heads had problems of mobilising labour during cultivation, planting and harvesting periods".

The Bingo Game results show that married women are generally on a par with male heads in terms of asset ownership (since most are shared assets) and are considerably better off than female heads (see Chapter 3). However, only 30% of married women had a business, compared with 41% of female heads. But female heads have more land under fallow than their married counterparts - probably due to lack of labour and other resources to cultivate the land: only 8% of female heads employ others to work for them (even though they lack manpower within the household) compared with 33% of male heads. Only 45% of female heads grew crops for sale, compared with 80% of male heads. Female heads in patrilineal areas appeared to be better off than their counterparts in matrilineal areas, where losing a husband means losing the main worker in the home.

Module 3 explored questions of who keeps money in the household and who takes decisions about money, with the aim of understanding gender issues in relation to any income generated by Starter Pack. The results show that men keep the money in over half of male-headed households and make the decisions about using it in three-quarters of these cases, with women taking decisions on their own in around 10% of male-headed households. In female-headed households, women keep the money and control expenditure in almost all cases.

Receipt of the pack

Module 1 contains information about registration for SP2 and receipt of the pack by gender of household head. Although about half of those registering were male and half female, 55% of recipients were male and 45% female. There were big regional differences, with female heads comprising around one-third of those receiving packs in the north and centre but 58% in the south. However, nationally the proportion of packs allocated to female heads is probably not far from reflecting the headship proportions. Module 2's sample (which included non-recipients of Starter Pack as well as recipients) contained 39% female heads; in 1999-2000, 84% of both male and female heads in the M2 sample received the pack. Module 3, however, found an increase in male head recipients (from 83% to 89%) and a decrease in female head recipients (from 80% to 77%) between SP1 and SP2, reflecting an increase in male head recipients in the south and a decrease in female head recipients in the north.

Module 3 found considerable regional/cultural variations. In north, female heads complained that the pack had the wrong inputs for some areas and that the long distances which had to be travelled to collect the pack meant that only those women who could afford bicycle transport could collect it. Some women in polygamous marriages said that they headed separate households but could not obtain a Starter Pack because only one pack was allocated to the husband, who was seen for registration purposes as the head of a single household.

Intra-household food distribution

The meals eaten by most smallholders interviewed in Module 3's household survey consist mainly of staple food and vegetables. In times of plenty, the most frequently eaten foods are maize, green maize, vegetables, sweet potatoes, cassava, groundnuts and bananas. Meat was only eaten frequently in 3% of cases recorded, but fish was eaten frequently in 18% of cases and soya in 13% of cases. In times of scarcity, the most frequently eaten foods are vegetables, maize, cassava, bananas, tomatoes, maize husks and sweet potatoes. Fish, soya and meat are eaten frequently in very few cases in times of scarcity.

In its household questionnaire, Module 3 asked interviewees about who gets priority for food within the household in times of scarcity. The woman/wife got the last priority for food, after other adults in the household and the husband/father. Respondents said that first priority was given to children under five years old and second priority to older children, with no discrimination by the sex of the child. However, comments received during the final workshop suggest that the first priority given to under five children may be largely theoretical: even if younger children are given more or better food by the mother, older children will tend to grab food from their younger brothers or sisters. This may help explain

why the Module 3 study found a high proportion of children under five with weights below the minimum healthy weight for their age established by the Ministry of Health: 35% of children under five in male headed households had weights below this minimum and 45% in female headed households[16].

Module 3 was unable to measure the impact of Starter Pack on the nutritional status of under five children because it had no baseline data from before the SPS to compare with. Although Starter Pack increased months of household food security (see Chapter 5), it is not clear whether it has had any nutritional impact.

[16] The Module 3 team was not fully confident about these results, as they had difficulty re-calibrating their weighing scales in the field.

Chapter 7: Sustainable Agriculture and Pack Composition

Farmers' views on sustainable farming

The Module 4 team sought farmers' views on sustainable farming and measured the impact of Starter Pack on 15 Sustainability Indicators identified by the farmers. In the past, experts have decided whether farmers are practising sustainable agriculture; this study was the first attempt to seek farmers' own views on the subject on a national scale. This is very important, since it is likely that attempts to promote technologies will not succeed if farmers do not see a need for them or actively oppose them. Policymakers should take into account farmers' preferences when designing interventions like Starter Pack if they wish them to be successful. A good example is the supply of chemical fertiliser to Shire Valley, where farmers do not need it because their soils are fertile (see Chapter 4); this is clearly a waste of resources.

The Module 4 team facilitated pair-wise ranking of 15 Sustainability Indicators in the 30 villages covered by the main study. The five most important indicators of sustainable farming selected by farmers are (in descending order of importance):

1. **Crop diversification** (growing a range of staple crops)
2. **Seed availability** (enough seed for timely planting at recommended spacing for all crops)
3. **Farmland size** (enough land to feed the family)
4. **Tools and implements** (own all the necessary farm tools and implements)
5. **Mixed cropping** (optimal mix of crops for in-field soil fertility management through inter-cropping and relay planting)

All of these indicators ranked top in the southern region. However, in the northern region farmland size was ranked 6th, while considerably more emphasis was placed on affiliation with an **institution**. In the central region, mixed cropping ranked 7th, with much greater priority given to **crop rotation**. Interestingly, **fertiliser application** ranked 6th in the south and centre and 8th in the north. Given the importance attached by the MoAI to increasing fertiliser application in Malawi, we had expected farmers to give it greater priority.

One of the exercises carried out during the Module 4 study was to ask focus groups of male and female household heads to place the households in their village in Farming Practice Groups (FPGs) according to their implementation of the 15 indicators of sustainable farming practices. Although this was deliberately not emphasised during the exercise, FPG1 represented highly sustainable farmers and FPG3 represented farmers with poor sustainability practices, with FPG2 = medium sustainability. FPG1 farmers tended to be richer and FPG3 farmers were poorer, with fewer physical and information resources enabling them to practice sustainable farming. The male heads' focus groups estimated that 17% of male-headed

households were in FPG1, compared with 8% of female-headed households; they put 46% of male heads in FPG3, compared with 56% of female-headed households. The female heads' focus groups were slightly more optimistic; but they still placed over half of female-headed households in FPG3.

The division into FPGs provided a fascinating insight into different groups' priorities regarding the 15 Sustainability Indicators. The same four indicators were ranked top by each FPG (crop diversification; seed availability; tools and implements; farmland size). But FPG1 ranked crop diversification 1st, while for FPG2 seed availability was most important and FPG3 gave farmland size top priority, implying that land is a key limiting resource for the poorest farmers.

Starter Pack and sustainable farming

The Starter Pack was found to have a generally positive impact on all five top Sustainability Indicators except tools and implements, which the SPS does not cover (although some farmers said that they had bought tools and implements with the proceeds of sales from Starter Pack produce). The SPS improved seed availability, allowed farmers to diversify crops by providing access to new crops (e.g. legumes) and seed varieties (different varieties of maize), and promoted inter-cropping of maize and legumes (see Table 4).

Table 4 Trends in farmers' Top 5 Sustainability Indicators (1970s-1990s) and perceived impact of Starter Pack

Sustainability Indicator	Trend 1970s-1990s	Impact of Starter Pack
Seed availability	-	+
Crop diversification	+	+
Farmland size	0	+
Tools & implements	+	0
Mixed cropping	+	+

Source: Module 4. Note: + = positive, - = negative, 0 = no change.

The positive impact on farmland size was because respondents said that because they had more seed, they were able to cultivate a larger piece of land. This fits with Module 3's finding that poor farmers (particularly female heads) are constrained by lack of labour and agricultural inputs (seed and fertiliser) rather than by shortage of land; with Starter Pack, many farmers increased the size of their gardens.

Pack composition

Starter Pack has made a positive contribution to crop diversification by introducing new crops and varieties of maize seed in the context of a low baseline of crop and variety diversity. However, the pack has introduced only a limited range of crops and varieties, not all of which

have been welcomed by farmers. The Module 4 report notes that: "Starter Pack has offered limited crops and varieties to date, but it does appear to have the *potential* to increase the diversity of the crop and variety base in Malawi if better attention is paid to variety choice and seed quality in packs in the future".

Module 4's 'Dream Pack' exercise gave farmers the opportunity to specify how they would like to vary the contents of the pack. Most farmers wanted maize seed with the characteristics of MH18, not Pannar (which was widely used in SP1 and SP2), i.e. they want a flinty, poundable maize variety. This could be MH18 but it would not have to be, so long as it had similar characteristics of taste and poundability. Farmers also wanted the legume component of the pack to be groundnuts and beans, not soya beans, which are unpopular both as a food and because they are perceived as having little sale value compared with groundnuts and beans. Most farmers were happy with the fertiliser component, except in part of the southern region, where some farmers wanted more legumes instead of fertiliser since their soils were already fertile.

Chapter 8: Willingness to Pay

Module 2 carried out a study of farmers' willingness to pay for a Starter Pack in cash, with credit or by participating in a public works programme. This only provides an indication of *willingness* to pay or work for the pack - it does not guarantee that the farmer would actually be able to pay or that public works programmes would be available for them to work in. Nevertheless, the study produced some very interesting and consistent results which would be useful to policy-makers who may wish to design a self-targeting scheme for Starter Pack. Concern has been expressed recently about the 'dependency syndrome' created by such handouts (see Appendix 7). A Starter Pack-for-work programme might provide a way out of the dependency culture in the longer term.

In the section of the Module 2 questionnaire entitled Willingness to Pay, farmers were first asked if they knew the cost of Starter Pack. Only 2% said they knew. Anecdotal evidence suggests that some households were selling the pack for MK100-150 in SP2, but this should be interpreted as the price which they could easily get for the pack on the black market (given that sales of the pack were illegal). It is not a free market valuation.

After respondents were told that the cost of Starter Pack was MK450, they were asked whether they would be prepared to pay more than MK400 cash for it; only 6.3% were willing to do so (see Table 5). However, 15.0% of the sample households said they would be willing to buy Starter Pack if they could obtain credit (at 49% interest). This is an improvement on the 6.3% willing to buy on a cash basis. The trend is consistent, with more households willing to pay higher prices in the presence of a loan, leaving fewer households saying they can only acquire the pack at lower prices. Nevertheless, the majority are still unwilling to pay for the pack at cost or near-cost prices.

Table 5 Price household would be willing to pay for the Starter Pack

	Cash	Credit at 49%
Price (MK)	%	%
>400	6.3	15.0
<400-300	17.6	20.8
<300-200	29.2	25.8
<200-100	31.6	27.4
<100	15.4	11.1

Source: Module 2.

As expected, the responses by poverty show that the wealthier categories in the livestock assets-based poverty index are prepared to pay more than the poorer categories for the pack (cash or credit), while responses by gender show that more men than women are prepared to pay higher prices for the pack.

Valuing the pack

Later in the Module 2 questionnaire, respondents were asked to say how much they would be prepared to pay for individual components of the pack and then for the whole pack. Fertiliser was the most highly valued component of the pack, followed by maize and legumes. The average price which people are prepared to pay for a whole pack is MK252, and varies only slightly between poverty categories: the range is MK239 in category 1 (poorest) to MK266 in category 4 (wealthy).

Starter Pack-for-work programme

The Module 2 study asked farmers whether they would be willing to participate in a Starter Pack for public works programme (chitukuko) in the event that Starter Pack was not free but was available for sale at MK450. The results show that 98% of the farmers would be willing to participate in public works for a period of two weeks to obtain a Starter Pack, while 46% would be willing to work for four weeks (see Table 6). Wages for ganyu labour are currently quoted in the range of MK18-25 per day. Taking the lower end of this range (MK18), the Module 2 results imply that almost all of the sample households would be willing to pay a work-equivalent of MK252 for the Starter Pack. If the requirement were set at four weeks (equivalent to MK504) just under half of the Module 2 sample would participate.

Table 6 Number of weeks willing to do chitukuko for Starter Pack

	Number	%
Not willing to work for SP	22	1.8
up to 2 weeks	1178	98.2
up to 4 weeks	549	45.8
up to 6 weeks	300	25.0
up to 8 weeks	215	17.9
more than 8 weeks	111	9.3
Total	1200	100.0

Source: Module 2.

Thus, if the government wanted to allocate Starter Packs to around half of rural households, it could establish a requirement of four weeks' work on a public works programme to qualify for a pack. This would self-target half of the population. Those participating might be paid with a voucher entitling them to receive a Starter Pack.

Analysis by gender of farmers willingness to participate in a Starter Pack-for-work programme reveals that if the requirement to qualify for Starter Pack were set at four weeks' work or more, a greater percentage of female heads would receive the pack. Although female heads are more labour-constrained than male heads, more women would see a work-for-SP programme as an opportunity to obtain inputs for use in their gardens as they experience

difficulties getting cash to purchase inputs. A poverty analysis of the same question shows that if the requirement to qualify were set at four weeks, around 48% of the poorest category of the livestock-assets based poverty index would benefit while only 38% of the wealthiest category would participate.

Regional analysis of farmers' willingness to participate in Starter Pack for work programme shows that as the period of work gets longer, a smaller proportion of farmers in the north are willing to work compared with the central and southern regions. At four weeks, only 34% of farmers in the north would participate compared with 44% in the centre and 52% in the south. This is in line with poverty levels in the three regions.

Chapter 9: Rural Economy

The SPS has taken place in the context of a web of existing economic relationships. The 1999-2000 Starter Pack Evaluation Programme attempted to establish whether the scheme had any impact on these relationships in rural areas. In particular, we considered whether it affected farmers' livelihoods by providing income directly or indirectly. We also looked at the impact of Starter Pack on the labour market.

Income

Module 2 found that the main sources of income for smallholder farmers are sales of crops, small businesses and providing casual labour (ganyu). Of those interviewed in Module 2's household survey, 71% obtained income from sales of crops; the percentage varied substantially by region, with 86% in the north, 77% in the centre and only 58% in the south obtaining income from this source. Small business was an important source of income for those in the north and south (44-45%), but less so in the centre (18%). There was even some variation in the percentages obtaining income from labour: 24% in the south, 26% in the centre and 31% in the north.

Although crop sales were an important source of income, only 16% of the Module 1 sample said that they had sold any staple food in the 1998-99 season. Moreover, of maize sales in 1998-99, only 17% were attributed to Starter Pack according to Module 2. Nevertheless, Starter Pack was more important in terms of income from sales for poorer and female-headed households. Module 2 found that female household heads sold less Starter Pack maize than male heads, but it contributed around a quarter of their income from sales of maize, compared with 15% for male heads. For the poorest category of households (using the livestock-assets based poverty index), 32% of maize sales were attributed to Starter Pack, compared with 13% for the richest households. Farmers also sold Starter Pack legumes, and 14% of legume sales were attributed to Starter Pack.

Module 2 attempted to find out whether Starter Pack had allowed farmers to sell any crops which they would not have sold without the SPS. The results suggest that there was some limited impact, producing slightly increased sales of hybrid maize, groundnuts and soybeans, as well as sweat potatoes and beans.

Ganyu

There was some discrepancy between Modules 1 and 3 about what percentage of farmers work for others. The Module 3 Bingo Game reported that around 70% work for others, while

Module 1 found that around half of its sample had gone for ganyu during the 1999-2000 season. Meanwhile, Module 1 found that 25% of respondents in its household survey had hired labour in 1999-2000. Module 3's Bingo Game results suggest that 33% of males employ others, but only 8% of females.

Starter Pack appears to have increased the demand for labour and reduced the supply of labour. However, the results suggest that there is so much slack in the labour market in rural areas that the SPS has not led to any difficulty in hiring labour so far. Module 1 found that of those who hired ganyu labour in 1999-2000, 21% attributed this to Starter Pack. It also found that of the half of its sample who did not go for ganyu in 1999-2000, 32% (and as much as 40% in the south) attributed the decision to Starter Pack. Presumably this was because of the need to work more on their own gardens and the extra food or income they expected to be generated by the pack. An estimated 57% of the Module 1 sample found it difficult to hire labour in 1999-2000, but this was almost always due to lack of money to pay wages; the difficulty was only attributed to Starter Pack in 4% of cases.

Chapter 10: Extension

Although the 1999-2000 Starter Pack Evaluation Programme did not include a module specifically dedicated to extension, Modules 1 and 4 included some coverage of extension issues. Both provide serious food for thought for the MoAI's extension department, which clearly needs to work harder to convey its messages.

Module 1 found that many farmers did not follow the instructions leaflet included in the Starter Pack on planting maize seed in one plot with ridges 90cm apart and planting stations 25cm apart. Some three-quarters of the sample did not follow the instructions on intercropping maize and legumes. Among the reasons given were that they did not understand the instructions (37%) or found them too tedious to follow (18%) or had no time to follow them (12%) or did not want to follow them (12%).

Module 4 found that farmers wanted the MoAI to re-introduce demonstration plots and they wanted the Field Assistants to give face-to-face instructions on how to use the Starter Pack inputs. Some Module 4 farmers mentioned that the written leaflets given out in 1999-2000 had been confusing, as they contained a set of new, unfamiliar recommendations (transplanted from the Sasakawa-Global 2000 programme) on planting station density and holes per station. Module 4 notes that:

> "Although farmers in some regions believe Starter Pack has increased their contact with extension institutions, this is primarily for technology delivery (delivery of the pack) and Module 4 farmers expressed a clear desire for Starter Pack to change to include more extension advice. Some small changes may help, such as ensuring planting instructions are provided in more user-friendly ways than last year's confusing written leaflets. But bigger changes may also be needed, such as increasing the emphasis of extension messages on non-crop production components of agricultural sustainability (residue incorporation, green manuring, agroforestry, etc), and delivering extension advice through NGOs and local groups as well as through GoM channels" (Module 4 report).

Chapter 11: Starter Pack Registration and Population Estimates

Module 5 carried out a Ground Truth Investigation Study (GTIS). The fieldwork consisted of mapping every household using participatory mapping techniques and then carrying out a full census in each village using a household questionnaire in which every member of the household was recorded. The study covered 6,134 households and 25,281 individuals in 54 villages. The data collected was grossed up to provide estimates for key indicators at ADD, regional and national levels.

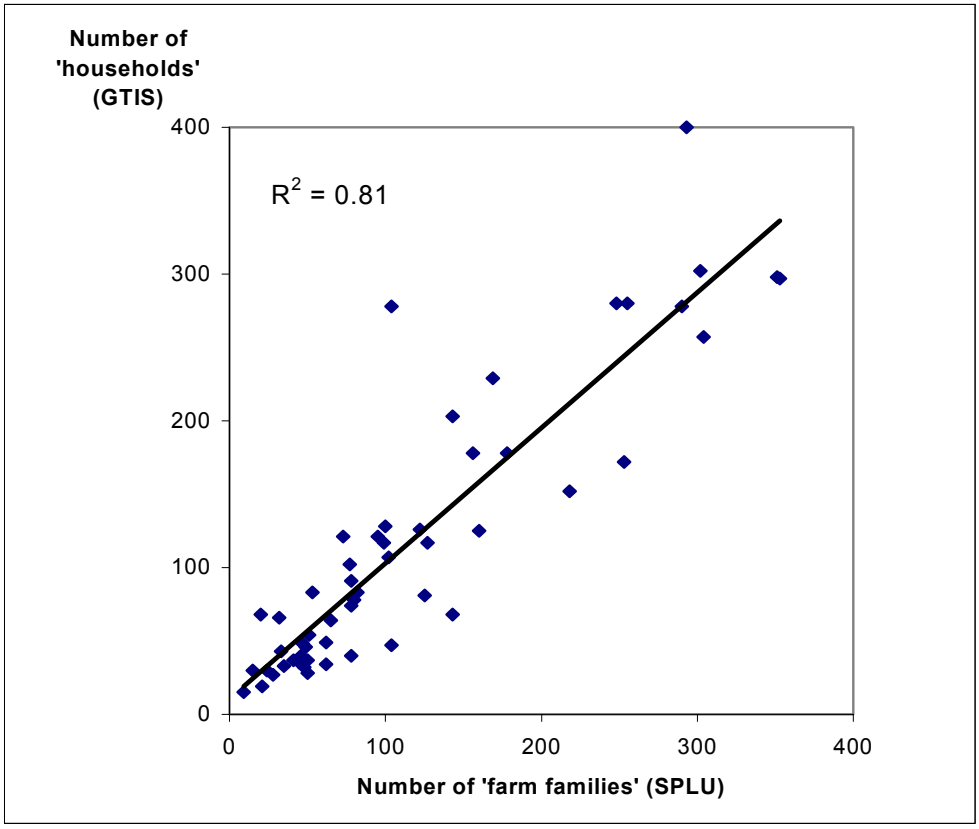
Due to some setbacks with the team originally contracted to carry out the GTIS, the team which eventually carried out the fieldwork and data processing did so under considerable time pressure. As a result, some things were done with less rigour than originally planned (see Module 5 report). Nevertheless, we consider that the results provide a reliable picture of the magnitude of key indicators. The main results, which are outlined in the following sections, have serious implications for Starter Pack registration as well as other Government of Malawi policy interventions in rural areas.

Population estimates and the SPLU database

The data collected by the GTIS was compared with the SPLU database for 1999-2000, which shows 2.89 million 'farm families' registered to receive a pack. For our sample of 54 villages, the 'household' count was compared with the 'farm family' count from the SPLU database. The linear relationship between the two counts is close (see Figure 2) although two villages stand out as outliers; it is probably not a coincidence that these two villages reported more deletions from the register than any others of the 54 villages covered in the GTIS.

Since the linear relationship between GTIS households and SPLU farm families is close, if we wanted to estimate the number of households in a village, the number of farm families shown on the SPLU register would provide a good indicator. Assuming that the ratio between 'farm families' and 'households' remains fairly steady and using a system of weights, the consultant for Phase 3 of Module 5 grossed up the GTIS sample figures to give national and regional rural population estimates (see Table 7). The estimates are sensitive to the weighting procedure used, but in this case similar results would be obtained at national level if a simpler weighting system were used. The estimate for the central region would drop by about 100,000 households and half a million people, but there would be a corresponding increase in the southern region. The estimate for the northern region would stay the same.

Figure 2 Sample villages classified by number of 'households' in them and by number of 'farm families' registered for SP2



Source: Module 5 report.

Table 7 Comparison of GTIS figures with data from other sources

Table 4.1 Comparison of GTIS figures for households and persons with data from other sources

	Farm families	Households		Persons		Average household size	
	SPLU	GTIS	1998 Census (rural)	GTIS	1998 Census (rural)	GTIS	1988 Census (rural)
	Millions	Millions		Millions			
Malawi	2.89	2.78	1.95	11.52	8.50	4.1	4.4
Region							
Northern	0.28	0.34	0.21	1.41	1.07	4.2	5.1
Central	1.11	1.32	0.78	5.67	3.50	4.3	4.5
Southern	1.50	1.13	0.95	4.44	3.93	3.9	4.1

Source: Module 5 report.

The national rural population estimate derived from the GTIS is 11.5 million people in 2.78 million households. The number of households compares well with the number of farm families in the SPLU database, but is well above the NSO's 1998 census figure for rural

households (1.95 million). The 1998 census estimated the rural population at only 8.5 million. The reason for the difference is unclear. The discrepancies between the household definitions used by the GTIS and the NSO (see below) are not enough to explain such a large difference, nor are seasonal migrations likely to explain all of it. Module 5 had hoped to compare the GTIS figures for its 54 villages with the NSO figures for the same villages, but the NSO data was not available. It is recommended that this comparison be carried out as soon as possible.

Numbers registering for and receiving Starter Pack

The GTIS figures were used to estimate the numbers of people at national level who received a Starter Pack in 1999-2000. The pack was supposed to be allocated to heads of 'farm family' households 'eating from the same pot'. Only one pack should have been allocated per household, although the impression was given early in the SP2 registration campaign that every individual farmer was entitled to a pack.

On the basis of the number of people who acknowledged receiving a pack in the 54 villages, 2.4 million individuals are estimated to have received packs in SP2. Some probably received more than one pack. Of the 2.4 million estimated to have received packs, some 1.7 million were household heads, while 0.7 million were other adults in the household. Of those who received packs, 10% of the household heads and one-quarter of the other adults did not cultivate their own gardens. Meanwhile, 0.8 million household heads and 0.9 million other adults who *did* cultivate their own gardens are estimated *not* to have received a pack.

The study estimated that some 3.7 million Malawians in rural areas cultivate their own gardens. Interestingly, the same number is estimated to have considered themselves as having been registered for SP2. However, in the southern region, where the number considering themselves registered matches the numbers on the SPLU register for SP2 (1.5 million), this figure is *above* the number of people estimated to cultivate their own garden (1.4 million). On the other hand, in the central and northern regions the numbers registered were well below the estimated numbers of people cultivating their own gardens, the latter figure being close to the number considering themselves registered to receive a pack.

There were an estimated 0.9 million households where more than one member of the household registered to receive a pack in 1999-2000, but only one-third of this number of households actually received more than one pack (0.3 million). This figure was lower than the number of households where no member received a pack, implying that there was a net under-

registration rather than a net over-registration[17]. However, the pattern varies in different parts of the country. Table 7 shows that the GTIS estimate of households in the southern region is much lower than the SPLU register's count of farm families. The GTIS estimate of households is higher than the SPLU's of farm families and higher in the central and northern regions. This suggests that in SP2 there was under-registration in the centre and north and over-registration in the south.

Is the household an appropriate unit for Starter Pack registration?

Module 5 set out to use a definition for rural households based on 'eating from the same pot'. This is a similar definition to that used by the SPLU for farm families ("the family or extended household which 'eats from the same pot'") and the NSO for households in the 1998 census ("one or more one or more persons, related or unrelated, who make common provision for food and regularly take their food from the same pot and/or share the same grain store (nkhokwe) or pool incomes for the purpose of purchasing food"). However, these classifications are far from simple, and the GTIS team apparently faced many of the same problems in clarifying how a household should be identified as the SPLU's MoAI Field Assistants and the NSO.

Part of the problem is that the 'household' varies considerably in size and composition according to region, cultural differences, sex of household head, etc. Although we can talk about the *average* household, there is no idealised 'typical' household. In a phrase coined by a recent advertising campaign in the UK: "If you're not average, you're normal". This means that attempting to distribute Starter Pack on the basis of 'one per household' creates problems for those attempting to apply the definition and inevitably leads to allegations of unfairness.

On the basis of the Module 5 findings, we would argue that it would be better to allocate the packs to adult individuals who cultivate their own gardens. The PRA work showed that this concept is much more acceptable to Malawian smallholders. Moreover, it has a certain logic: the SPS is a scheme involving agricultural inputs into production, so it would be logical to allocate it to those with gardens. Clearly, Starter Pack is not an appropriate intervention for the work-constrained or landless, and other safety net interventions should be designed to support these categories of people.

[17] Of the households in the GTIS sample, 10% received more than one pack, while 29% of households received none. Although the figures may be inflated somewhat by an over-estimate of the number of households in our sample - given the difficulty of defining a household - it does appear that there was **net under-registration** for SP2 in terms of the SPS objective of distributing one pack per household.

An immediate objection to this line of thought is that there are an estimated 3.7 million adults cultivating their own gardens in Malawi, and insufficient resources to provide a Starter Pack for each of them. However, this is not the point. The establishment of a fair, easy-to-administer 'entry qualification' for Starter Pack does not imply that everyone will get a pack. Other qualifying requirements could be used to target the pack to a sub-set of recipients. In particular, the Starter Pack-for-work self-targeting approach (see Chapter 8) would be compatible with this approach. Every individual with a garden would have a right to work for a pack. If the work requirement were set a 4 weeks, the maximum projected demand would be 1.7 packs (46% of 3.7 million); if fewer packs were available, the period-of-work requirement could be increased to prevent demand exceeding the supply of packs.

Deletions

The initial registration process for SP2 suggested a total projected figure of around 3.7 million 'farm families'. Strenuous efforts were made by the SPLU to get the MoAI Field Assistants to prune the register, and it was initially cut to 3.2 million. Later, draconian measures were taken to cut the register to 2.9 million in line with SP1. According to the estimates based on those who reported being deleted in the GTIS sample, 1.1 million people in 830,000 households were deleted from the SP2 register.

In general, the levels of dissatisfaction connected with the registration/deletion process were relatively low, with the exception of Salima ADD. In Salima, 31% of households reported being dissatisfied with the registration process, compared with 10% nationally. This is undoubtedly connected with the high deletion rates in Salima, where 35% of registered households were deleted (compared with 14% in the other seven ADDs), and 47% of households covered by the GTIS did not receive a Starter Pack in 1999-2000 (compared with an average of 24% in the other seven ADDs).

This Salima situation was clearly the result of administrative factors. The Module 5 data show that the combination of registration and deletion processes in Salima created a much higher level of discontent there than elsewhere in Malawi. An important lesson for SP3 is that any attempt to cut down on the number of packs distributed must not only be fair: *it must also be seen to be fair*. This is difficult to achieve. However, if raised expectations are disappointed and people suspect unfair dealing, serious problems may be produced.

Chapter 12: Conclusions and Recommendations

We conclude this report by summarising our assessment of Starter Pack in terms of the four key objectives of the SPS outlined in Chapter 1 and by reviewing some of the lessons for the future learned from SP1 and SP2.

The 1999-2000 Starter Pack Evaluation Programme had the following findings:

- Starter Pack provided some 3½ extra 50-kg bags of maize per household in 1998-99 and was expected to make a similar contribution in 1999-2000. However, farmers were unhappy with the Pannar variety distributed in SP1 and SP2. (**Key objective 1**).
- Starter Pack provided between two and three months of food per household in the first year of the scheme, raising the average number of food-secure months to around 8½. There were some differences in the months of extra food security for rich and poor households attributable to the pack, but these were relatively minor. (**Key objective 2**).
- The legume component of Starter Pack was less successful than the maize component, largely due to non-delivery or late delivery in the northern region. In the north, only 60% of farmers received legumes in SP2, and nearly two-thirds of these ate the seed because it was delivered too late. The legumes in the pack made an average contribution of 0.8 50-kg bags in 1998-99, but only one-quarter of farmers intercropped the legume seed with the maize (a soil fertility measure). Soya beans were distributed to some 40% of farmers, but recipients would have preferred groundnuts or beans. (**Key objective 3**).
- The MoAI extension services failed to convey to farmers how to use the SP2 technology. Nevertheless, the chemical fertiliser and hybrid maize inputs in the packs were welcomed by most farmers, with around 80% planting all of the maize seed and applying all of the fertiliser. But while farmers see seed availability as a high priority for sustainable agriculture, chemical fertiliser is not among their top five sustainability indicators. In Shire Valley, fertiliser is seen as an inappropriate technology. (**Key objective 4**).

In terms of these four key Starter Pack objectives, the intervention was largely worthwhile. However, the findings suggest that some improvements should be made, particularly in terms of the variety of maize and the type of legumes which are distributed. Late delivery and poor extension services are clearly a problem which should be addressed. It would also be worth considering the provision of a Shire Valley Starter Pack tailored to local conditions.

The 1999-2000 Starter Pack Evaluation Programme also learned the following lessons about registration, poverty, targeting and pack composition, which we would recommend taking into account in the design of future Starter Pack interventions:

1. Some 3.7 million Malawian adults in rural areas cultivate their own gardens. It would greatly simplify Starter Pack registration procedures and reduce the potential for allegations of unfairness if the 'entry qualification' for Starter Pack were based on this criteria rather than the current criteria of one pack for every 'farm family' household. However, this approach would have to be combined with targeting or self-targeting because there are insufficient resources available to provide 3.7 million packs.

2. The registration process for Starter Pack must be seen to be fair. This is unlikely to be the case if complex criteria are used, since decisions about who gets the pack will inevitably come down to matters of personal judgement. There is no simple indicator (such as housing type) which can be used to place households or individuals in poverty categories.

3. Some 65% of the population may be considered 'poor', any attempt to poverty-target less than 65% of the population will mean differentiating between degrees of poverty.

4. One poverty-targeting option which would be administratively simple and transparent would be to combine a) allocation of the pack to *female-headed households only* for SP3 with b) development in time for SP4 of a *Starter Pack-for-work programme* in which every individual with a garden has the right to work for a pack. Our findings support previous studies' conclusions that female-headed households constitute a particularly vulnerable group among non-work-constrained smallholders in Malawi.

5. Self-targeting through a Starter Pack-for-work programme would help avoid the so-called dependency syndrome. The number of weeks required to qualify could be adjusted depending on the number of packs available and those participating could be paid with a voucher entitling them to receive a pack. If the work requirement were set at four weeks or more, the scheme would favour the poor and female-headed households. However, such a scheme would require considerable forward planning and country-wide coverage.

6. Starter Pack composition is not ideal either in terms of farmers' preferences or in terms of agricultural sustainability. But the pack has the potential to increase the diversity of the crop and variety base in Malawi if more attention is paid to variety choice and seed quality. Ideal maize varieties would be ones with the *characteristics* of MH18, but without the disadvantage of hybrids that seed cannot be recycled so that farmers become dependent on fresh supplies of subsidised seed inputs each year. Plans to use composite seed varieties adapted to local preferences for SP3 appear to be a step in this direction.

Appendix 1: Characteristics of Modules and Terms of Reference

Characteristics of Modules

Evaluation Module 1: Agronomic Survey

- **Contractor:** NSO Zomba as an institution. Team led by Mr IV Gondwe (Agriculture Division) supported by Mr Charles Machinjili (Deputy Commissioner for Census and Statistics).
- **Approach:** Baseline agronomic survey based on household and individual questionnaires. Analysis presented at ADD level, with tabulations on request at RDP level.
- **Objectives:** The agronomic survey focuses on evaluating the agronomic aspects of the Starter Packs. However, as many farmers do not plant a clearly defined Starter Pack plot, the emphasis this year is not on measuring yield owing to the SPs. Instead, this year's agronomic survey focuses on how the SP is integrated into farming practices and usage of the contents of the pack.
- **Coverage:** 2,992 households and 3,527 individuals in 200 Enumeration Areas.

Evaluation Module 2: Microeconomic Impact and Willingness to Pay

- **Contractor:** Team led by K.F.D. Nyirenda of MoAI Mzuzu ADD M&E Unit; other core team members are H.C.Y. Gondwe, R. Musopole and M.N.S. Msowoya.
- **Approach:** Household survey analysing microeconomic impact of Starter Packs in rural areas, particularly their impact on household food security, inter-household distribution of wealth and poverty/vulnerability.
- **Objectives:** To assess the differential impact of the Starter Pack campaigns on household food insecurity, recording how SP inputs were used by different categories of household - measured by wealth indicators - in different locations, as well as SP linkages with the cash economy and the labour market. Also, to assess farmers' willingness to pay for SPs under a low/zero subsidy regime. The study's outputs include evidence of particular relevance to the debate on poverty targeting.
- **Coverage:** 1,200 households in 30 EPAs, stratified using FEWS poverty index.

Evaluation Module 3: Gender and Intra-household Distribution

- **Contractor:** Team led by Dr Lucy Binauli of Chancellor College Gender Studies Department. Other core team members are Mrs L. Chipeta, Mrs E. Kunkwenzu and Mr M. Polepole, also of Chancellor College.
- **Approach:** Combines some Sustainable Livelihoods poverty framework elements with a strong focus on intra-household distribution and gender aspects of SP. Qualitative approach using PRA methodologies, together with a traditional household survey.

- **Objectives:** Analysis of the Starter Pack campaigns of 1998-99 and 1999-2000 in terms of the intra-household distribution aspects of food security and nutrition; differences in use of SP associated with gender.
- **Coverage:** Small but representative sample of 48 villages. Criteria for site selection is based on FEWS food security index. The Intra-household Survey Questionnaire was administered to 476 households (approx 10 per village).

Evaluation Module 4: Sustainable Agriculture and Biodiversity

- **Contractor:** Elizabeth Cromwell of the Overseas Development Institute (ODI, UK) in partnership with Mr P. Kambewa (Chancellor College), Mr. R. Mwanza (Concern Universal), Mr R. Chirwa (Chitedze Agricultural Research Station) and Kwera (local NGO).
- **Approach:** Assesses Starter Packs from the perspective of sustainable agriculture and biodiversity, studying their short-term and medium-term impact on farming practices. Qualitative approach using participatory village workshops.
- **Objectives:** To evaluate to what extent SP1 and SP2 are contributing to sustainable agricultural practices and the conservation of biodiversity. The study elicited evidence from farmers on the 'optimal' composition of the packs.
- **Coverage:** Small but representative sample of 30 villages, with teams of field facilitators spending 3 days in each village to elicit detailed information from farmers. The criteria for site selection is based on FEWS sphere of influence clusters.

Evaluation Module 5: Ground Truth Study for SPLU Starter Pack Register

- **Contractor:** **Phase 1:** Team from Bunda College of Agriculture Rural Development Department led by Mr Rodwell Chinguwo advised by Peter Wingfield-Digby (UK consultant based in Thailand). **Phase 2:** Team led by M.N.S. Msowoya of MoAI Mzuzu ADD M&E Unit. **Phase 3:** Mr Wingfield-Digby with input from Mr Msowoya.
- **Approach:** Consists of a 'ground truth study' and comparison of the results with SP Logistics Unit (SPLU) figures and, if available, with NSO 1998 census figures. The ground truth study assesses the structure of rural households registered for Starter Packs and levels of over-registration.
- **Objectives:** The ground truth and follow-up desk study examines the structure of rural households registered for SPs and the level of over-registration according to the SPLU's definition of 'people eating from the same pot'. It assesses whether this definition is suitable for registering people to qualify for the SP scheme, and whether this may depend on the views of different stakeholders about policy objectives.
- **Coverage:** Ground truth study (village census) in 54 villages.

CONTRACT NAME: 1999-2000 Starter Pack Evaluation Programme Module 1

CONTRACT NUMBER:

APPENDIX 1: The Services

Under the Contracts for Module 1 Phases 1, 2 and 3 the Consultant shall provide **the Services** outlined in the following **Terms of Reference**:

1. Background

1.1 The 1999-2000 Starter Pack Evaluation Programme concerns the national-level Starter Pack (SP) campaign under which the intention is that each rural household with land is provided with one pack containing 0.1 ha-worth of fertiliser and seed in time for the start of the rains. The SP campaign is now in its second year (SP2).

1.2 The evaluation of the first year of the SP campaign (SP1, 1998-99) involved 1788 individuals in completing the Household Cropping Systems Survey, as well as Staking and Plot Assessment and Output Measurement data collection from 240 farmers' plots.

1.3 The SP1 Starter Pack Scheme Assessment questionnaire was designed to collect mainly agronomic data and to produce an estimate of the production benefit in terms of additional maize yield which could be attributed to the seed and fertiliser inputs made available through Starter Pack. Last year's questionnaire was too lengthy, resulting in heavy demands on respondents' time, attention and ability to respond carefully and also leading to unmanageably heavy data analysis demands, so that many data items collected were not fully analysed.

2. Overall Objectives

2.1 The SP2 agronomic survey will focus on evaluating the agronomic aspects of the Starter Packs. However, as many farmers do not plant a clearly defined Starter Pack plot, attempts to estimate increased yield owing to the SPs are likely to be futile. Instead, this year's agronomic survey should focus on how the SP is integrated into farming practices. It will question households as to whether or not they received and used one SP in the way the government envisaged. Some did not use SP as intended for various reasons, e.g. inappropriate contents or not enough land available for planting. These households must still be included in the sample and questioned using the same questionnaire. Where farm households have used the SP as envisaged, the Consultant's team will carry out Staking and Plot Assessment and Output Measurement data collection.

3. Scope of the Work

3.1 The Consultant will carry out an agronomic survey with nationwide coverage. The survey will cover 3,000 farm households. The Consultant plans to use a stratified two-stage sampling design, in which the Primary Sampling Units will be Enumeration Areas (EAs) as demarcated in the 1998 Population and Housing Census. The Consultant plans to select a sample of 200 EAs with Probability Proportional to Size. The Secondary Sampling Units will be farming households. A sample of 15 households will be randomly selected from each EA. The Consultant will have detailed sampling design proposals ready for discussion with the Statistical Services Centre, University of Reading, UK (the Managers) by 31st January 2000.

3.2 The Consultant will construct a much shorter questionnaire than in SP1 (approximately 5 pages). The main areas to be covered in the questionnaire are specified in Paragraph 4.1. The Consultant will use parts of the SP1 questionnaire to collect some of the

same information again in relation to SP2, since this will permit a year-on-year comparison which will yield information about consistency or change of behaviour. Module 1 may incorporate a limited number of questions from areas covered by other evaluation modules if required by those modules.

3.3 The Consultant will accept advice during the questionnaire design phase from Mr Time Fatch of the Ministry of Agriculture and Irrigation Development Planning Division.

3.4 The Module 1 evaluation must be (and must be seen by farmers to be) completely independent. The Consultant undertakes to include a statement of independence and confidentiality to be read to farmers at the beginning of the questionnaire.

3.5 The concise questionnaire will be administered by 100 part-time Enumerators, closely supervised by NSO Regional Officers. In addition, 5 NSO Headquarters Officers will between them make 9 field visits per month for the duration of the survey (3 months); this makes a total of 27 field visits by NSO Headquarters Officers. During these visits, the NSO Headquarters Officers will accompany the Enumerators in their work in different parts of the country to gain a closer understanding of the views of the respondents (this will help the Consultant to interpret the results of the survey).

3.6 The results of the Main Study will be presented at ADD and national levels. The Consultant undertakes to utilise in its analyses all data which it collects. The Consultant will provide tabulations at RDP level or according to FEWS vulnerability assessment mapping (VAM) on request from the Managers or other modules.

3.7 The Consultant will have a leading role in carrying out the study, but will be expected to accept reasonable advice and guidance from the Managers on methodological issues, including questionnaire design and sampling.

3.8 As the 1999-2000 Evaluation Programme comprises an integrated set of modules, the Consultant for Module 1 will be required to coordinate with Consultants carrying out other modules where appropriate. Coordination will be facilitated by the Managers.

3.9 The Consultant for Module 1 will begin the survey in Phase 1 (January-March 2000) and will complete fieldwork for the survey, data entry, cleaning and analysis in Phase 2 (April-June 2000). In Phase 3 (June-August), the Consultant will write a full, detailed report of the results (the Report). The Consultant's Team Leader will deliver the Report to the Recipients by 7 August 2000 and will present the results at a 3-day workshop in August 2000, at which representatives of all consultants for the SP2 evaluation modules will be present and will present their reports.

4. Expected Outcomes and Deliverables

4.1 The questionnaire will be designed to focus on providing evidence on the following questions:

- did the farmer use the SP?
- if NO, why not?
- if YES, how and where the seeds were planted and how the fertiliser was used
- if they didn't use it as instructed, why?
- what proportion of the farmer's garden(s) received SP inputs compared with inputs from other sources?
- how was the use of SPs affected by the delivery of the packs, especially its timing?
- how was the use of SPs affected by the content of the packs?

The questionnaire will also include questions designed to provide evidence on:

- basic indicators of food security
- whether ganyu labour was needed and whether this was owing to the SP

4.2 The main outcome of the work will be the final Report. This will be around 40 pages (maximum 20,000 words) and must be submitted by August 7, 2000. In the Report, the Consultant will present its analyses of the data collected, including year-on-year comparisons with SP1 results. The Consultant's team will be expected to analyse and interpret the information collected and suggest possible conclusions, setting out clearly their assumptions and arguing whether the evidence collected can be used to confirm or reject these assumptions. The Consultant's team should differentiate between conclusive and suggestive evidence. Team members should discuss their findings with the Managers at an early stage; the Managers may provide some advice on analysing and presenting the results of the study.

4.3 The Report will include an account of how field workers have been trained and supervised to ensure a consistently high quality of data, and how data reliability and validity have been checked.

4.4 The Consultant will deliver the Report as a hard copy and on diskette to the Recipients c/o Mr ZC Kamanga, Ministry of Agriculture and Irrigation, Planning Division, PO Box 30134, Lilongwe 3, Malawi and Dr H Potter, British High Commission, PO Box 30042, Lilongwe 3, Malawi, with copies to the Managers.

4.5 The final instalment of payment under that Contract will be payable on acceptance by the Recipients of the Report. Should the Recipients require any reasonable amendments or additions to the Report in order that the Report shall meet the required professional standards for acceptance, the Consultant will carry out such work at no extra charge by August 31, 2000.

4.6 Primary data gathered under the Contract must be computerised and full, clean copies of these raw data files, with a detailed explanation of their contents, must be delivered to the Managers by 7 August, 2000. Full copies of questionnaires used in the studies must also be delivered to the Managers by 7 August 2000. (The Managers will provide the Recipients with copies of these materials when the Managers deliver their final report for the 1999-2000 Starter Pack Evaluation Programme).

4.7 The Consultant will submit monthly progress reports (approximately 1,000 words) to the Managers. On 15 March, 15 April, 15 May and 7 August 2000, the Consultant will present to the Managers basic accounts of expenditure actually incurred and services rendered according to the Layout stipulated in Appendix 3.

CONTRACT NAME: 1999-2000 Starter Pack Evaluation Programme Module 2

CONTRACT NUMBER:

APPENDIX 1: The Services

Under the Contracts for Module 2 Phases 1, 2 and 3 the Consultant shall provide **the Services** outlined in the following **Terms of Reference**:

1. Background

1.1 The 1999-2000 Starter Pack Evaluation Programme concerns the national-level Starter Pack (SP) campaign under which the intention is that each rural household with land is provided with one pack containing 0.1 ha-worth of fertiliser and seed in time for the start of the rains. The SP campaign is now in its second year (SP2).

1.2 A key objective of the SP campaign is to increase household food production and combat household food insecurity. The 1998-99 and 1999-2000 SP campaigns have been designed to cover all rural smallholder households, rather than attempting targeting based on areas or income/wealth groups. Nevertheless, it may be expected to have had differential impact and policymakers are interested in measuring the differential welfare impact of the SP campaign on households.

1.3 The SP1 evaluation included a rudimentary attempt to assess farmers' willingness/ capacity to pay for the SPs in future, if funding for the packs should be reduced or withdrawn. The Module 2 evaluation study is intended to extend this analysis with the objective of providing a more reliable farmer valuation of the SP scheme.

2. Overall Objectives

2.1 The Module 2 study will attempt to assess the differential impact of the SP campaigns on household food insecurity, assessing how SP inputs were used by different categories of household (measured by wealth and/or landholding size), location, who benefited from the scheme and its impact on overall village welfare. It will collect evidence which may be useful in the design of future safety net/poverty targeting programmes. It will also aim to assess different categories of farmers' willingness/ capacity to pay for SPs under a low or zero subsidy regime.

3. Scope of the Work

3.1 The Main Study will comprise a quantitative household survey with a sample size of 960-1,200 households in 120 villages distributed in 30 EPAs and stratified using FEWS vulnerability assessment mapping (VAM) and differing crops/farming systems. The study will question households as to whether or not they received and used one SP in the way the government envisaged. Some did not themselves use SP as intended for various reasons, e.g. inappropriate contents, no land available for planting, contents sold to fund immediate consumption. These households must still be included in the sample and questioned using the same questionnaire.

3.2 In the Main Study, a short, concise questionnaire will be administered by Enumerators, closely supervised by field Supervisors. The Consultant and other core team members specified in paragraph 4 hereof will accompany the Enumerators in their work in 15 villages in different parts of the country, to gain a closer understanding of the views of the respondents (this will help the Consultant's team to interpret the results of the survey). Each

village will be allowed one day for interviews, and Enumerators will cover 8-10 households per village.

3.3 The techniques to be used in the Main Study will be developed in a Pilot Study of six villages involving participatory workshops and an informal household survey. The Pilot Study will involve two teams each comprising two consultants, who will spend 2.5-3 days in each village. Villages will be selected using VAM and will form a scoping set.

3.4 Within villages, in both the Pilot Study and the Main Study, households will be ranked using absolute wealth ranking indicators such as landholding size, income, assets, farm implements, location and access to services.

3.5 The results of the Pilot Study will be used to help design the questionnaire for the Main Study, which will be tested in 2 villages before use in the Main Study.

3.6 The results of the Main Study will be presented at ADD and national levels. Since the most vulnerable areas will probably be over-sampled, the disproportionate sampling will be weighted out when producing summaries at national level.

3.7 The Consultant and his core team members will have a leading role in carrying out the study, but will be expected to accept reasonable advice and guidance from the Managers on methodological issues, including questionnaire design and sampling.

3.8 Since the 1999-2000 SP evaluation programme comprises an integrated set of modules, the Consultant for Module 2 will be required to coordinate with consultants carrying out other modules where appropriate. Coordination will be facilitated by the Managers.

3.9 The Consultant and his team will carry out the Module 2 work in three phases as detailed in Appendix 2. The Consultant and his team will carry out a Pilot Study and preparation of the Main Study in Phase 1 (February-15 March). They will carry out fieldwork for the Main Study in Phase 2 (16 March-31 May). In Phase 3 (June-August) they will carry out data entry from the Main Study, data cleaning and analysis; they will write a full, detailed report of the results (the Report); and the Consultant will be expected to deliver the Report to the Recipients by 7 August 2000 and to present the results at a 3-day workshop in August 2000, at which representatives of all consultants for the SP2 evaluation modules will be present and will present their reports.

4. Personnel

The Consultant as Team Leader will head a team which will include as core members Mr HCY Gondwe, Mr R Musopole and Mr MNS Msowoya.

5. Expected Outcomes and Deliverables

5.1 The study will provide evidence on:

- the overall impact of the SP campaign on household food security and welfare, distinguishing between short- and medium-term impact;
- the differential impact of the SPs on households according to vulnerability, including any evidence of SP-induced increase or reduction in inequality between households within villages and between more and less vulnerable areas;
- how the SP inputs were used by different wealth groups, and how different groups benefited (did the poor benefit more than the wealthy or vice versa?);

- any differences in SP impact between male- and female-headed households;

- the question "Would farmers be willing and able to pay for the pack with cash or labour if the subsidy were partially or fully withdrawn?", including whether responses change according to the contents of the pack and/or farmers' income levels

5.2 The main outcome of the work will be the final Report. This will be around 40 pages (maximum 20,000 words) and must be submitted by August 7, 2000. In the Report, the Consultant will be expected to analyse and interpret the information collected and suggest possible conclusions, setting out clearly his assumptions and arguing whether the evidence collected can be used to confirm or reject these assumptions. He should differentiate between conclusive and suggestive evidence. The Consultant and his core team members should discuss their findings with the Managers at an early stage; the Managers may provide some advice on analysing and presenting the results of the study.

5.3 The Report will also include an account of how field workers have been trained and supervised to ensure a consistently high quality of data, and how data reliability and validity have been checked.

5.4 The Team Leader will deliver the Report as a hard copy and on diskette to the Recipients c/o Mr ZC Kamanga, Ministry of Agriculture and Irrigation, Planning Division, PO Box 30134, Lilongwe 3, Malawi and Dr H Potter, British High Commission, PO Box 30042, Lilongwe 3, Malawi, with copies to the Managers.

5.5 The final payment (under the Contract for Phase 3 of Module 2) will be payable on acceptance by the Recipients of the Report. Should the Recipients require any reasonable amendments or additions to the Report in order that the Report shall meet the required professional standards for acceptance, the Consultant will carry out such work at no extra charge by August 31, 2000.

5.6 Primary data gathered under the Contract must be computerised wherever possible and full, clean copies of these raw data files, with a detailed explanation of their contents, must be delivered to the Managers by 7 August, 2000. Full copies of questionnaires used in the studies, together with mappings and other records of participatory workshops must also be delivered to the Managers by 7 August 2000. (The Managers will provide the Recipients with copies of these materials when the Managers deliver their final report for the 1999-2000 Starter Pack Evaluation Programme).

5.7 The Consultant will submit monthly progress reports (approximately 1,000 words) and will present basic accounts according to the Layout stipulated in Appendix 4 on March 1, May 15 and August 15, 2000.

CONTRACT NAME: 1999-2000 Starter Pack Evaluation Programme Module 2

APPENDIX 2: Calendar of Activities

Timing	Activity	Personnel inputs	Further details
Phase 1 - February	**Pilot PRA-type Study** involving workshops in 6 villages across the country selected according to vulnerability assessment mapping of FEWS	Consultants: 48 PDs, Drivers: 24 PDs.	In addition to the participatory workshops, in each village 8-10 households will be sampled using an informal questionnaire
Phase 1 - February	Data entry from Pilot Study, analysing results & designing short questionnaire for Main Study; including discussion with Managers of questionnaire design, stratification and sampling	Consultants: 15 PDs, Assistant Statisticians: 10 PDs, DECs: 5 PDs.	During this time, the Managers will provide advice on sampling and questionnaire design
Phase 1 - 1st half of March	Testing questionnaire in 2 villages	Consultants: 6 PDs, Drivers: 3 PDs.	Any problems with questionnaire must be remedied after testing
Phase 1 - 1st half of March	Training 21 Enumerators and 8 Supervisors for Main Study	Consultants: 6 PDs, Enumerators 63 PDs Supervisors 24 PDs.	3-day workshop, in which 2 of the Consultants will train Enumerators and Supervisors
Phase 2 - 16 March-31 May	**Main Study** - quantitative household survey involving 120 households with 8-10 households per village. Villages will be located in 30 EPAs selected according to vulnerability strata	Consultants: 45 PDs, Enumerators: 240 PDs, Supervisors 120 PDs *allowed* (probably less), Drivers 45 PDs.	Village visits by Enumerators assumed to take 2 days including time allowed for travel to villages. Consultants will closely observe the survey, accompanying Enumerators as they conduct the survey in 15 villages in different parts of Malawi
Phase 3 - June	Data entry and cleaning, analysis of results. DECs will input and check data from 960-1,200 short questionnaires. Preliminary analysis will be done by Assistant Statisticians, full analysis by Consultants	DECs: 85 PDs, Assistant Statisticians 30 PDs, Consultants 30 PDs.	The Managers will provide some advice on analysis of results during this period.
Phase 3 - July	Writing final Report	Consultants: 20 PDs.	Deadline for Report is 7 August, 2000
Phase 3 - August	3 Consultants will attend final workshop	Consultants: 12 PDs.	Team Leader will present results

Notes: Consultants = Team Leader (the Consultant) and members of the core team as defined in Appendix 1. PDs = Person Days. DECs = Data Entry Clerks.

CONTRACT NAME: 1999-2000 Starter Pack Evaluation Programme Module 3

CONTRACT NUMBER:

APPENDIX 1: The Services

Under the Contracts for Module 3 Phases 1, 2 and 3 the Consultant shall provide **the Services** outlined in the following **Terms of Reference**:

1. Background

1.1 The 1999-2000 Starter Pack Evaluation Programme concerns the national-level Starter Pack (SP) campaign under which the intention is that each rural household with land is provided with one pack containing 0.1 ha-worth of fertiliser and seed in time for the start of the rains. The SP campaign is now in its second year (SP2).

1.2 The SP campaign is a national-level intervention which gives equivalent agricultural inputs to rural households, without regard to differences in soil fertility status, suitability for maize growing, landholding size, cultural and climatological variations, or the presence of other projects such as safety net interventions.

1.3 However, the Sustainable Livelihoods (SL) approach views rural households as operating in a context of vulnerability, with access to certain assets and influenced by the prevailing social, cultural, institutional and organisational environment - as well as the natural environment. This context needs to be understood in order to facilitate decisions on priorities for action to reduce poverty.

1.4 Certain tasks and benefits, inputs and outputs are associated with males and others with females in rural Malawian households. The treatment of male and female children may be different in terms of the resources invested in feeding or educating them, or the contributions to the household expected from them. It is asserted on occasion that these intra-household issues are treated differently in different cultural groups.

2. Overall Objectives

2.1 The aim of Module 3 is a practical analysis of the Starter Pack campaigns of 1998-99 and 1999-2000 in terms of:

- the Sustainable Livelihoods framework for poverty reduction;
- the intra-household distribution aspects of food security and nutrition; and
- differences in use of SP inputs and outputs associated with gender.

The study will attempt to learn potential lessons for future food security campaigns and the potential for poverty targeting/safety nets.

3. Scope of the Work

3.1 The Main Study will use participatory M&E techniques based on case studies in 48 villages in Malawi to evaluate the relationship between the vulnerability context, intra-household distribution and gender and the design and implementation of the SP campaign. The Main Study will be carried out by four teams, each comprising one Consultant and one Research Assistant.

3.2 The teams will hold participatory workshops in each of the 48 villages visited and will also conduct a household survey of 10 households in each village using a short (2-page) questionnaire. If the respondent's household contains children under 5 years old, they will be weighed and the results recorded on the questionnaire.

3.3 The village visits will take 2 days and will be structured in the following manner:

Day 1 Participatory workshop looking at the village as a whole in terms of wealth and access to resources (Sustainable Livelihoods). After an initial discussion in which all will participate, the workshop will be divided into 3 focus groups (males, female household heads and married women).

Day 2 Household survey, starting with 3 or 4 questions 'placing' the household according to wealth indicators and then concentrating on intra-household distribution of resources, nutrition and gender.

3.4 The techniques to be used in the Main Study will be developed in a Pilot Study of seven villages involving *only* participatory workshops (no household survey). The results of the Pilot Study will be used to help design a household questionnaire for the Main Study, which will be tested in 2 villages before being used in the Main Study.

3.5 The Consultant and her team will, wherever possible, attempt to use criteria and indicators which permit comparisons between villages, so that their final report (the Report) may give generalisable indications of how important the selected factors are, and for how many members of relevant population sub-groups. The Report should show that the Main Study provides representative coverage of the varied range of livelihood contexts in rural Malawi. Where generalisation of results is difficult or impossible, the study will aim to explain the diversity of specific contexts and evaluate the importance of this diversity.

3.6 It will be necessary to ensure that the sampling of locations serves effectively to represent the different population segments implied by a set of stratification factors. The Consultant and her team will stratify by FEWS vulnerability assessment mapping and by Agro-Ecological Zones (AEZs) and may then over-sample the most vulnerable areas.

3.7 The Consultant and her core team members will need to agree the indicators to be measured with the Managers. The Consultant and her core team members will have a leading role in carrying out the study, but will be expected to accept reasonable advice and guidance from the Managers on methodological issues, including questionnaire design and sampling.

3.8 Since the 1999-2000 SP evaluation programme comprises an integrated set of modules, the Consultant for Module 3 will be required to coordinate with consultants carrying out other modules where appropriate. Coordination will be facilitated by the Managers.

3.9 The Consultant and her team will carry out the Module 3 work in three phases as detailed in Appendix 2. The Consultant and her team will carry out a Pilot Study and preparation of the Main Study in Phase 1 (February-15 March). They will carry out fieldwork for the Main Study, data entry and cleaning in Phase 2 (16 March-31 May). In Phase 3 (June-August), the Consultant and her team will write a full, detailed report of the results (the Report); the Consultant will be expected to deliver the Report to the Recipients by 7 August 2000 and to present the results at a 3-day workshop in August 2000, at which representatives of all consultants for the SP2 evaluation modules will be present and will present their reports.

4. Personnel

The Consultant as Team Leader will head a team which will include as core members Mrs Lucy Kondwani Chipeta, Mrs Esthery Dembo Kunkwenzu and Mr McLloyd Mwayiwawo Polepole.

5. Expected Outcomes and Deliverables

5.1 The main outcome of the work will be the final Report. This will be around 40 pages (maximum 20,000 words) and must be submitted by August 7, 2000. In the Report, the Consultant will be expected to analyse and interpret the information collected and suggest possible conclusions, setting out clearly her assumptions and arguing whether the evidence collected can be used to confirm or reject these assumptions. She should differentiate between conclusive and suggestive evidence. The Consultant and her core team members should discuss their findings with the Managers at an early stage; the Managers may provide some advice on analysing and presenting the results of the study.

5.2 The Team Leader will deliver the Report as a hard copy and on diskette to the Recipients c/o Mr ZC Kamanga, Ministry of Agriculture and Irrigation, Planning Division, PO Box 30134, Lilongwe 3, Malawi and Dr H Potter, British High Commission, PO Box 30042, Lilongwe 3, Malawi, with copies to the Managers.

5.3 As stipulated in the Contract for Module 3 Phase 3, the final instalment of payment under this Contract will be payable on acceptance by the Recipients of the Report. Should the Recipients require any reasonable amendments or additions to the Report in order that the Report shall meet the required professional standards for acceptance, the Consultant will carry out such work at no extra charge by August 31, 2000.

5.4 Primary data gathered under the Contract must be computerised wherever possible and full, clean copies of these raw data files, with a detailed explanation of their contents, must be delivered to the Managers by 7 August, 2000. Full copies of any questionnaires used in the studies, together with mappings and other records of participatory workshops must also be delivered to the Managers by 7 August 2000. (The Managers will provide the Recipients with copies of these materials when the Managers deliver their final report for the 1999-2000 Starter Pack Evaluation Programme).

5.5 The Consultant will submit monthly progress reports (approximately 1,000 words) and will present basic accounts according to the Layout stipulated in Appendix 4 on March 1, May 15 and August 15, 2000.

CONTRACT NAME: 1999-2000 Starter Pack Evaluation Programme Module 3

APPENDIX 2: Calendar of Activities

Timing	Activity	Personnel inputs	Further details
Phase 1 - February	3-day workshop for training RAs and planning work	Consultants: 12 PDs, RAs: 12 PDs	All Consultants and RAs will attend
Phase 1 - February	**Pilot Study** over 9 days (workshops in 3 villages in Southern Region, 2 in Central, 2 in North)	Consultants: 21 PDs, RAs: 21 PDs. Drivers: 15 PDs.	Village visits will take 2 days (3 days allowing travel time). Day 1 = participatory workshop. Day 2 = household survey & weighing under 5s
Phase 1 - February/March	Analysing results of pilot study & designing 2-page questionnaire	Consultants: 12 PDs.	During this time, the Managers will provide advice on sampling and questionnaire design
Phase 1 - first half of March (to 15th March)	Testing questionnaire in 2 villages	Consultants: 4 PDs, RAs: 4 PDs. Drivers: 4 PDs.	Any problems with questionnaire must be remedied after testing
Phase 2 - 16th March-April (4 weeks) April-31st May (6 weeks)	**Main Study**. 20 workshops in the South in February, i.e. 5 workshops per team. Then in April-May: 16 in the Centre & 12 in the North, i.e. 7 workshops per team.	Consultants: 144 PDs, RAs: 144 PDs. Drivers: 78 PDs.	Village visits will take 2 days structured as in Pilot Study. Consultants and RAs will discuss and record results of participatory workshops while in the field
Phase 2- March, April, May	Data entry and cleaning (data from household surveys and information on under 5s).	DECs: 35 PDs.	DECs will input and check data from 480 2-page questionnaires
Phase 3- June & July	Analysing results of Main Study and writing final Report	Consultants: 20 PDs, RAs: 20 PDs.	Managers will provide advice on analysing results. Deadline for Report is 7 August
Phase 3- August	Attending final workshop	Consultants: 6 PDs.	Team Leader will present results

Notes: Consultants = Team Leader (the Consultant) and members of the core team as defined in Appendix 1. RAs = Research Assistants. PDs = Person Days. DECs = Data Entry Clerks.

CONTRACT NAME: 1999-2000 Starter Pack Evaluation Programme Module 4

CONTRACT NUMBER:

APPENDIX 1: The Services

Under this Contract the Consultants shall provide **the Services** outlined in the following **Terms of Reference**:

1. Background

1.1 The 1999-2000 Starter Pack Evaluation Programme concerns Malawi's national-level Starter Pack (SP) campaign under which the intention is that each rural household with land is provided with one pack containing 0.1 ha-worth of fertiliser and seed in time for the start of the rains. The SP campaign is now in its second year (SP2).

1.2 At least eight different kinds of pack were distributed in different areas in the first year of the SP campaign (SP1). The proportion of sample households growing hybrid maize seed more than doubled to 84% of sample households as a result of SP1. In SP2, the packs have contained a larger component of hybrid maize and a smaller component of seed of non-maize crops than in SP1. The composition of the packs has been determined largely by supply constraints and has not been tailored to agro-ecological conditions.

2. Overall Objectives

2.1 There was some evidence from the SP1 evaluation that the packs could be designed to fit more closely with Malawi's agro-ecological conditions. The sustainable agriculture and biodiversity module of the 1999-2000 monitoring and evaluation (M&E) programme (Module 4) will focus on the composition of the starter packs in SP1 and SP2. The study will elicit evidence from farmers on the 'optimal' composition of the packs, differentiating between short-term and medium/long-term criteria. It will attempt to evaluate to what extent SP1 and SP2 are contributing to sustainable agricultural practices and the conservation of biodiversity.

3. Scope of the Work

3.1 The Module 4 work will comprise a preliminary, in-depth study of 3 villages in Malawi, a Main Study of 30 villages and a limited exploration of secondary sources. The Consultants will coordinate the work in Malawi through their main Malawi-based associate, Dr Patrick Kambewa of Chancellor College, Zomba. The Consultants' other key associates in Malawi will be: Mr Richard Mwanza of Concern Universal, who will be allowed leave of absence by his employers; Dr Rowland Chirwa of Chitedze Agricultural Research Station; and Kwera (a Malawi-based non-governmental organisation).

3.2 The preliminary study of 3 villages will develop the techniques and the indicators to be used in the Main Study. The preliminary study will be carried out by Kwera using teams of 2 people who will spend 6-7 days in each village. The indicators derived from the preliminary study will form a set of standard indicators for which information will be sought in each village during the Main Study. However, the use of this set of indicators should not limit the scope of the village workshop discussions or prevent the inclusion of new elements if these emerge from the village workshops during the Main Study.

3.3 The Main Study will consist of field work comprising 3-day village workshops which will be carried out by 3 teams of 3 Field Facilitators (9 Field Facilitators in total) coordinated by Mr Mwanza. Mr Mwanza will run 6 village workshops himself and will recruit and train the Field Facilitators (FFs) to run the other 24 workshops. The FFs' training will consist of a

3-day workshop run by Mr Mwanza and of accompanying Mr Mwanza on a field trip before beginning their own field work. The FFs' training will take place in February after the results of the preliminary study have been made available by Kwera and discussed by the Consultants with Dr Kambewa and Mr Mwanza.

3.4 It will be necessary to ensure that the sampling of locations for the Main Study serves effectively to represent the different population segments implied by a set of stratification factors. The Consultants will stratify by FEWS vulnerability assessment mapping (specifically the Food Deficiency Index and Sphere of Influence Clusters).

3.5 The Main Study will use participatory M&E techniques such as indicators of sustainability matrices and time lines to elicit farmers' views on the relationship between the starter packs and sustainable agricultural practices. The Consultants will attempt to use criteria and indicators which permit comparisons between villages and integration of results. This will require the use of a consistent methodology derived from the preliminary, in-depth study. For instance, matrices of scores should be used in preference to ranking matrices. Where generalisation of results is difficult, the study will try to explain the diversity of specific contexts and evaluate the importance of this diversity.

3.6 Mr Mwanza and the FFs will produce a de-briefing document for each of the 30 villages visited in the Main Study, allowing recording and systematisation of results. The records of participatory workshops such as maps, time lines and matrices will be attached to the de-briefing document.

3.7 The Consultants will need to agree the indicators to be measured in the Main Study with the Managers. The Consultants will have a leading role in carrying out the study, but will be expected to accept reasonable advice and guidance from the Managers on methodological issues, including participatory workshop methodologies and sampling.

3.8 Since the 1999-2000 SP Evaluation Programme comprises an integrated set of modules, Module 4 Consultants will be required to coordinate with consultants carrying out other modules where appropriate. Coordination will be facilitated by the Managers.

3.9 The Consultants and their Malawi-based associates will carry out field work and analysis in January-June 2000, as detailed in Appendix 2. The Consultants will deliver a full, detailed report of the results (the Report) to the Recipients by 7 August 2000 and will present the results at a 3-day workshop in August 2000, at which representatives of all consultants for the SP2 evaluation modules will be present and will present their reports.

4. Expected Outcomes and Deliverables

4.1 The contractors will attempt to evaluate:

- whether the proportion of hybrid maize, composite maize, other cereals and legumes in the packs affects their acceptability to farmers in the short term;
- whether the farmers' criteria on the composition of the starter packs alters in a medium/long-term perspective;
- whether the composition of the packs has had an impact on agricultural practices, local consumption, seed stock and replanting patterns (e.g. in terms of the varieties of maize and legumes consumed and kept for replanting);
- whether the starter pack programme has affected farmers' overall strategy, for instance the balance between maize and other crops planted; and
- the use and impact of chemical fertiliser on the farm and how SP fertiliser compares with the alternatives available to the farmer for increasing soil fertility.

4.2 The main outcome of the work will be the final Report. This will be around 40 pages (maximum 20,000 words) and must be submitted by August 7, 2000. In the Report, the Consultants will be expected to analyse and interpret the information collected and suggest possible conclusions, setting out clearly their assumptions and arguing whether the evidence collected can be used to confirm or reject these assumptions. They should differentiate between conclusive and suggestive evidence. They should discuss their findings with the Managers at an early stage; the Managers may provide some advice on analysing and presenting the results of the study.

4.3 The Consultants will deliver the Report as a hard copy and on diskette to the Recipients c/o Mr ZC Kamanga, Ministry of Agriculture and Irrigation, Planning Division, PO Box 30134, Lilongwe 3, Malawi and Dr H Potter, British High Commission, PO Box 30042, Lilongwe 3, Malawi, with copies to the Managers.

4.4 As stipulated in the main body of this Contract, the final instalment of payment under this Contract will be payable on acceptance by the Recipients of the Report. Should the Recipients 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 August 31, 2000.

4.5 Primary data gathered under the Contract must be computerised wherever possible and full, clean copies of these raw data files, with a detailed explanation of their contents, must be delivered to the Managers by 7 August, 2000. Full copies of questionnaires used in the studies, together with mappings and other records of participatory workshops must also be delivered to the Managers by 7 August 2000. (The Managers will provide the Recipients with copies of these materials when the Managers deliver their final report for the 1999-2000 Starter Pack Evaluation Programme).

4.6 The Consultants will submit monthly progress reports (approximately 1,000 words) and will present basic accounts according to the Layout stipulated in Appendix 4 on March 1, May 15 and August 15, 2000.

CONTRACT NAME: 1999-2000 Starter Pack Evaluation Programme Module 4

APPENDIX 2: Calendar of Activities

Timing	Activity	Personnel inputs	Further details
January	**Preliminary study** involving workshops in 3 villages (one in each Agro-Ecological Zone).	Kwera: 42 PDs.	In-depth study to develop methodology and indicators for Main Study
January/early February	Analysing results of preliminary study & designing village workshops for Main Study, de-briefing document etc, including coordination with Managers.	Cromwell: 7 PDs; Kambewa: 5 PDs; Mwanza 3 PDs.	The Managers will provide advice on sampling and on key indicators to be explored in Main Study workshops
February	Training 9 Field Facilitators for Main Study	Mwanza: 4 PDs; FFs: 27 PDs.	3-day workshop, in which Mr Mwanza will train 9 FFs (3 teams of 3 FFs)
February-June	**Main Study** - 3-day participatory workshops in 30 villages; Mwanza will run 6 workshops with the remaining 24 to be run by FFs. Each team of FFs must accompany Mwanza on one field visit before beginning own visits.	Mwanza: 24 PDs; FFs: 396 PDs; Kambewa 4 PDs; Cromwell 3 PDs.	FFs are allowed one extra day each per village for travel to and from the site, plus one extra day per team for recording the results of workshops in the de-briefing document
June	Discussion of results and structuring of final Report, including contribution from Chirwa	Cromwell: 8 PDs; Kambewa: 6 PDs; Mwanza: 2 PDs; Chirwa: 1 PD.	The Managers will provide some advice on analysis of results
July	Writing & critiquing final Report, including contribution from Chirwa	Kambewa: 15 PDs; Chirwa: 6 PDs; Cromwell: 4 PDs (in UK).	Deadline for Report is 7 August, 2000
August	Cromwell, Kambewa and Mwanza attend final workshop in Lilongwe	Cromwell 4 PDs; Mwanza 3 PDs; Kambewa: 3 PDs.	Consultants will present results

Notes: PDs = Person Days. FFs = Field Facilitators. Additional days not specifically allocated: Cromwell: 1 PD for liaison with Managers; Kambewa: 4 PDs for coordination of Malawi-based associates.

CONTRACT NAME: 1999-2000 Starter Pack Evaluation Programme Module 5 Phase 2

CONTRACT NUMBER:

APPENDIX 1: The Services

Under the Contract for Module 5 Phase 2 the Consultant shall provide **the Services** outlined in the following **Terms of Reference**:

1. Background

1.1 The 1999-2000 Starter Pack Evaluation Programme concerns the national-level Starter Pack (SP) campaign under which the intention is that each rural household with land is provided with one pack containing 0.1 ha-worth of fertiliser and seed in time for the start of the rains. The SP campaign is now in its second year (SP2).

1.2 The Starter Pack Logistics Unit (SPLU) has used Village Registers of heads of households as a basis for pack distribution. In 1999, the system has introduced a bias by encouraging the registration of more individuals as heads of household than would be found using any conventional household definition. The SPLU registers have been used along with average household size - derived from other sources - to create estimates of overall rural population size, which theoretically exclude the landless. The figures derived in this way are very far out of line with NSO information.

2. Overall Objectives

2.1 This study will comprise a 'ground truth' investigation of village listings used by SPLU in 1998 and 1999. The SP and other Malawi Government and donor initiatives need reliable data on the size and composition of the rural population.

3. Scope of the Work

3.1 The Consultant will carry out an *independent* ground truth study at village level, using skilled Enumerators who are not employed by the NSO or as MoAI Field Assistants. These will aim to establish actual population by participatory village mapping of dwellings and enumeration of the individuals within dwellings (village census). The Consultant and his team will carry out the ground truth study in 60 villages in 30 EPAs, using participatory mappings and village census in each of the villages.

3.2 The ground truth study will examine:

- the structure of rural households registered for SPs
- the level of over-registration according to the SPLU's definition of 'people eating from the same pot'
- whether this definition is 'suitable' for registering people to qualify for the SP scheme in order to achieve the objectives of the scheme.

The Consultant will present a PRA Summary of Results for each village which will contain his observations on each of these three areas of interest.

3.3 The Consultant and his team will carry out the ground truth study (fieldwork, data entry and data cleaning) between 1 April and 23 June 2000. The questionnaire for the census used in the ground truth study has already been prepared and pre-tested, and the Managers

will supply this questionnaire to the Consultant at mobilisation. The Managers will also supply the data entry form for the census questionnaire and an example of the form on which the PRA Summary of Results should be presented.

3.4 The fieldwork will be carried out by three teams, each comprising four Enumerators. Each field team will be headed by the Consultant as Team Leader or by a Supervisor. The Consultant and Supervisors should move between teams so that the Consultant spends some time with each team.

3.5 The Consultant will have a leading role in carrying out the study, but will be expected to accept reasonable advice and guidance from the Managers on methodological issues, including quality control. In order to ensure a high standard in the completion of the questionnaires, the Managers will require the Consultant and Supervisors to check carefully the work of the Enumerators, particularly in the first two weeks of fieldwork, and to correct immediately any problems with filling in the questionnaire. All questionnaires must be checked and signed by the Consultant or a Supervisor.

3.6 The Consultant and his team will input and clean the data from the village census; they will not be required to analyse the results of the census, but the Consultant must make himself available to discuss the work carried out in Phase 2 with the consultant for Phase 3 who will be in Malawi for one week at the end of June; the Consultant will receive a 'liaison allowance' for this purpose.

4. Personnel

4.1 The Consultant as Team Leader will head a team which will include as core members two Supervisors and Mr KFD Nyirenda as Coordinator; the Coordinator will be responsible for general coordination, data entry supervision and financial management.

4.2 The Consultant will recruit three teams each comprising four skilled Enumerators who are not employed by the NSO or as MoAI Field Assistants (FAs). If this is impossible, the Consultant may employ MoAI FAs, but under no circumstances must an FA work in any village for which he/she is responsible as part of his MoAI duties.

5. Expected Outcomes and Deliverables

5.1 Primary data gathered under the Contract must be computerised and full, clean copies of these raw data files, with a detailed explanation of their contents, must be delivered to the Managers by 23 June 2000. Full copies of questionnaires used in the studies, the village mappings and the PRA Summaries of Results for each village must also be delivered to the Managers by 30 June 2000.

5.2 The final instalment of payment under this Contract will be payable on acceptance by the Managers of the clean data files, the questionnaires used in the studies, the village mappings and the PRA Summaries of Results for each village.

5.3 The Consultant will submit a progress report (approximately 1,000 words) on 1 May and 1 June 2000. The Coordinator will present basic accounts according to the Layout of Expenditure stipulated in Appendix 3 on 15 May and 15 June 2000.

CONTRACT NAME: 1999-2000 Starter Pack Evaluation Programme Module 5 Phase 3

CONTRACT NUMBER:

APPENDIX 1: The Services

Under the Contract for Module 5 Phase 3 the Consultant shall provide **the Services** outlined in the following **Terms of Reference**:

1. Background

1.1 The 1999-2000 Starter Pack Evaluation Programme concerns the national-level Starter Pack (SP) campaign under which the intention is that each rural household with land is provided with one pack containing 0.1 ha-worth of fertiliser and seed in time for the start of the rains. The SP campaign is now in its second year (SP2).

1.2 The Starter Pack Logistics Unit (SPLU) has used Village Registers of heads of households as a basis for pack distribution. In 1999, the system has introduced a bias by encouraging the registration of more individuals as heads of household than would be found using any conventional household definition. The SPLU registers have been used along with average household size - derived from other sources - to create estimates of overall rural population size, which theoretically exclude the landless. The figures derived in this way are very far out of line with NSO information.

2. Overall Objectives

2.1 The SP and other Malawi Government and donor initiatives need reliable data on the size and composition of the rural population. Module 5 Phase 3 will comprise an analysis of the data collected during the 'ground truth' investigation of village listings used by SPLU in 1998 and 1999, which has been carried out in Module 5 Phase 2.

2.2 The Consultant will compare the results of the ground truth study with data from the SPLU and from the NSO 1998 Census (if available). If 1998 Census figures are not available, the Consultant will be expected to produce 'predictions' of the numbers he expects to see in the 1998 Census enumeration of the same villages.

2.3 The Consultant should attempt to use the results of the ground truth study to define appropriate 'headship rates' and 'household sizes' corresponding to the countrywide SPLU information. The intention is that these can be used along with SPLU data to give national-level rural population estimates which should be much closer to NSO estimates. If this is not the case, the Module 5 study will attempt to explain why.

3. Scope of the Work

3.1 The ground truth study at village level (60 villages) carried out in Phase 2 of Module 5 aims to establish actual population by participatory village mapping of dwellings and enumeration of the individuals within dwellings (village census).

3.2 The ground truth study has been designed to answer questions about:

- the structure of rural households registered for SPs;
- the level of over-registration according to the SPLU's definition of 'people eating from the same pot';
- whether this definition is 'suitable' for registering people to qualify for the SP scheme in order to achieve the objectives of the scheme; and

- whether this may depend on the views of different stakeholders (e.g. farmers, MoAI, donors) about policy objectives.

3.3 The Module 5 Phase 3 study involves developing factual guidance about sources and probable degrees of bias in figures on household size, numbers of households and total rural population. This will involve a careful review of data sources and consultation with bodies such as the SPLU, the NSO and the MoAI.

3.4 With a view to the above, the Consultant for Phase 3 will analyse results of the Phase 2 ground truth investigation and write final report. In order to do this, he will need to develop a plan of analysis based on the objectives and scope of the ground truth study and the questionnaire used in the village census.

3.5 The Consultant will be expected to analyse the population figures collected and to provide detailed comparisons with existing data sets. Findings should be discussed with the Managers (Statistical Services Centre, University of Reading, United Kingdom) at an early stage, and may be communicated to consultants for other packages if they are considered important for the effectiveness of their studies. The Managers may provide some advice on analysing and presenting the results of the study.

3.6 The Consultant will be required to liaise with the Team Leader for Phase 2 in order to elicit the results of the participatory exercises carried out in Phase 2, and will also consult the views of key stakeholders including MoAI and DFID.

3.7 The Consultant will work with the Managers and the Module 5 team to prepare the presentation for the Evaluation Workshop and will attend the workshop and participate in the presentation.

4 Outputs

4.1 The main outcome of the work will be a final, detailed report of the results (the Report), which must be delivered to the Managers by 31 July 2000. This will be around 40 pages (maximum 20,000 words).

4.2 The final instalment of payment under this Contract will be payable on acceptance by the Managers of the Report. Should the Managers require any reasonable amendments or additions to the Report in order that the Report shall meet the required professional standards for acceptance, the Consultant will carry out such work at no extra charge by 31 August 2000.

4.3 Data files, with a detailed explanation of their contents, must be delivered to the Managers by 7 August, 2000. Any materials from Phase 2 used by the Consultant must also be returned to the Managers by 7 August 2000.

Appendix 2: Principles of Sampling Applied to PRA Work[18]

Sampling, generalisation and comparability

One of the challenges of using PRA to collect information is that these methods have mainly been used to generate local actions, empower participants and produce information at local level and it is not possible to use this information to make generalisations that apply to a larger population. According to Henninger (1998)[19], one disadvantage of PRA approaches "is that they use relatively small samples that make it difficult to extrapolate results and compare different surveys. A second major limitation is that the quality of participatory approaches varies greatly with the skills of the facilitators and the established level of trust between facilitators and participants". However these constraints are not impossible to overcome. In order to do so, the planning of the PRA exercises should take into account some basic principles usually applied to surveys. The SSC has been involved in a number of projects where efforts are made to introduce some of the principles of statistical methods into 'qualitative' studies approaches. We briefly discuss what we consider to be the most important principles that can be borrowed from standard sampling.

When statisticians talk about sampling they imply a series of requirements in the selection of the sample, these are:

1. A group of study units from an identifiable population are included in the study; each of them provides information independently of the others.

This means that the population of interest (sometimes called recommendation domain) needs to be well defined. Any generalisation or extrapolation resulting from the study will apply to that population. In addition, the sampling unit (communities, households or individuals) should be carefully defined. Having a large enough sample permits a study of the variability between units and this is that eventually provides an indication of what statisticians call 'precision' in the generalisation of results to the whole population. If a PRA exercise is looking at the relative importance of indicators of sustainable agriculture, for example, a set of indicators might consistently be regarded by a sample of communities as important whereas a second set might be regarded as important by some communities but not by others.

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[18] Adapted from Numbers of Forest Dependent People - A Feasibility Study, a report prepared for DFID's Forestry Research Programme by Calibre Consultants and The Statistical Services Centre (SSC) University of Reading, May 2000.

[19] Henninger, N, 1998: Mapping and Geographic Analysis of Human Welfare and Poverty - Review and Assessment, World Resources Institute, April 1998. Available online at: http://www.grida.no/prog/global/poverty/pub/pov_fintoc.htm

The generalisation of the first set would be more reliable than the generalisation of the second set.

2. Sample size.

The sample size is determined by the resources available and the level of precision required for the generalisation of the study. If we require more precise results the sample size should be larger. PRA practitioners tend to resist carrying out PRA studies in a suitably large number of study units mainly because of the demands on resources that this implies.

3. There is some element of randomness in the selection of the sample.

The inclusion of an element of randomness supports the claim that the sample is representative. This does not mean that simple random sampling is necessary, nor even advisable. The use of stratification, cluster sampling or multi-stage sampling should be considered to fit the requirements of the specific conditions of the study.

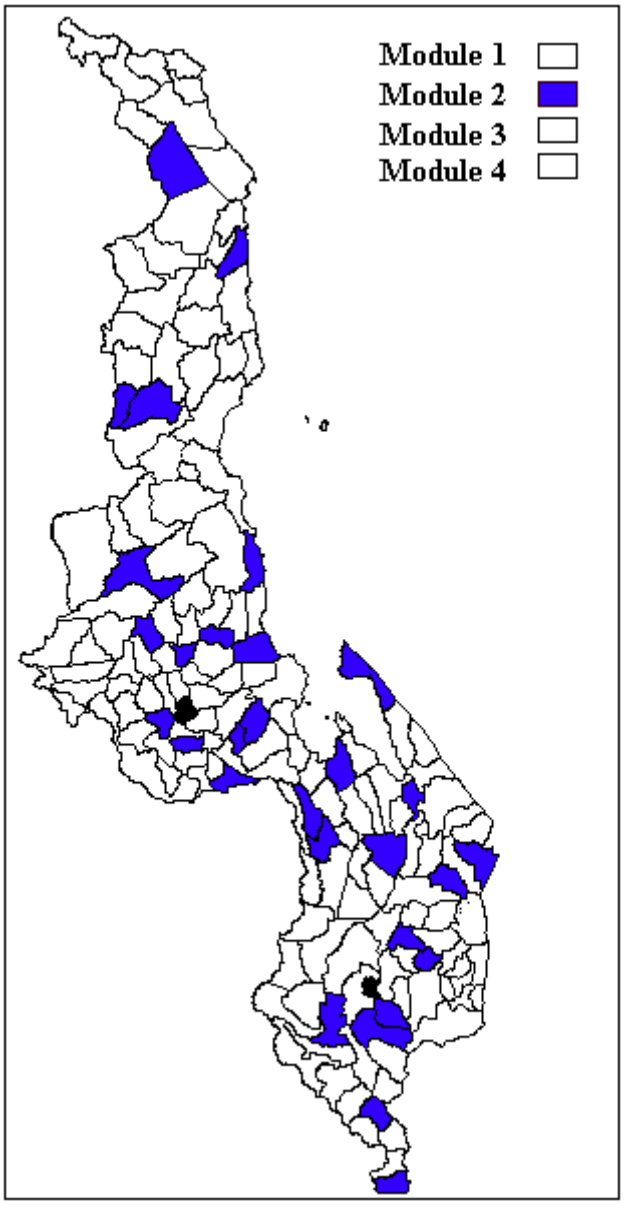
4. The information that comes from different PRA sites must be appropriate for integration and analysis.

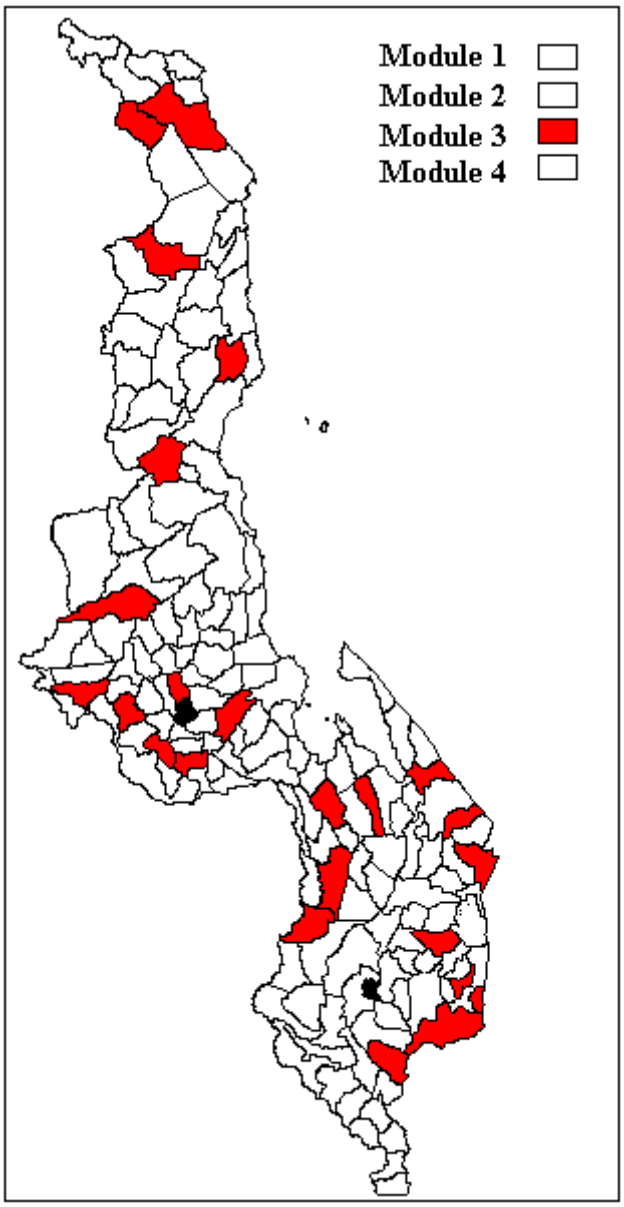
To achieve this, the information should be of the same nature and similar quality across sites. Probable inconsistencies in results derived from different facilitators and facilitators' varying abilities needs to be addressed. This is not an easy problem to tackle, and in our experience attempting to solve it implies imposing a structure on PRA exercises that brings certain restrictions to the usual flexibility of PRA tools. This is a trade-off that we have found unavoidable and that in our experience requires careful planning, testing of tools and training of facilitators as well as good communication between PRA experts and statisticians. A further requirement to ensure comparability of results is the design of a debriefing document to be used by the PRA teams to record the results from the PRA exercises. The integration of results is then based on the integration of the debriefing documents.

Analysis of information

Depending on the nature of the information generated, the analysis of a sample of PRA exercises can take different forms. Quantitative information such as that coming from matrices of scores or ranks is often suitable for statistical analysis provided certain conditions are met. Information from other types of tools such as causal diagrams or village maps that are not suitable for numerical manipulation requires different analysis strategies. A review of options available to analyse this type of information can be found in a series of papers under the title “Integrating qualitative and quantitative approaches in socio-economic survey work” (DFID project R7033, SEM) by SSC and NRI to be published by NRI in the near future.

Appendix 3: Maps

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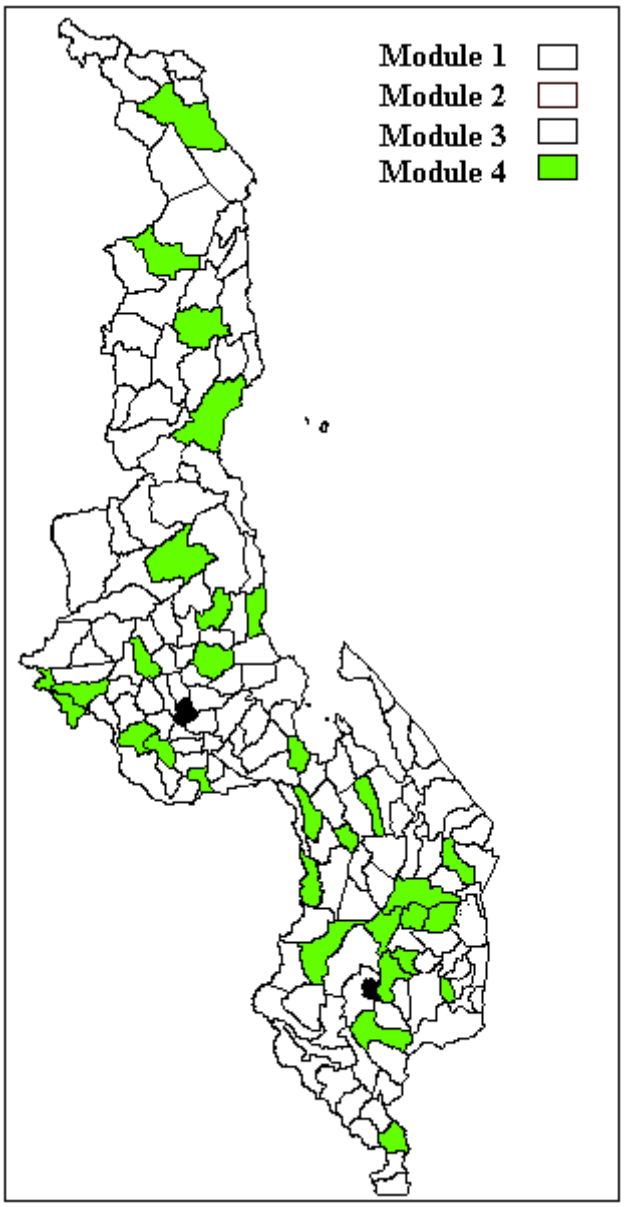
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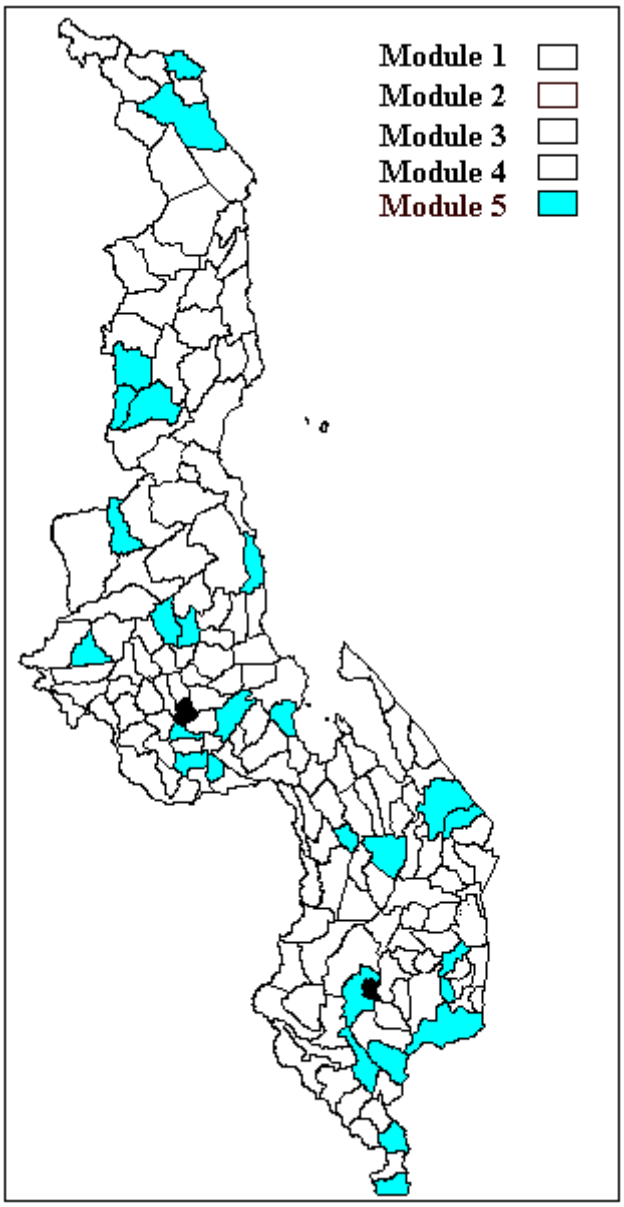
Module 1
Module 2
Module 3
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Module 5

Appendix 4: Information Available on CD

The managers have compiled a 1999-2000 Starter Pack Evaluation Archive CD available on request from DFID-Lilongwe which contains the following information:

- final reports for Modules 1, 2, 3, 4 and 5
- data sets in SPSS for Modules 1, 2, 3 and 5
- copies of questionnaires used in Modules 1, 2, 3 and 5
- a copy of the Module 3 Bingo Game and Focus Group Discussion Guide
- PRA summaries/village reports for Modules 2 (preliminary phase only), 3 and 5
- PRA debriefing documents for Module 4
- materials produced by village focus groups for Module 4
- village maps showing location of every household for Module 5
- PowerPoint presentations from the Final Workshop
- the report of the SP2 voucher and flexi-voucher study by UK-based consultants Paul Harnett (REPIM Ltd) and Elizabeth Cromwell (ODI)

The data sets can be used by anybody who is familiar with SPSS. 'Data dictionaries' have been provided to clarify the names of variables. The variables relate to responses to questions in the Module 1, 2, 3 and 5 questionnaires and to the Module 3 Bingo Game and Focus Group Discussion Guide. Although analysis of the main issues has already been carried out by the module teams for their final reports, these data sets should be a valuable source of information for further research. The Module 5 data set will provide a useful baseline for future studies in the villages covered by the module, since it contains a complete census of these villages.

The managers insisted that careful records be kept of all participatory work carried out in the main phases of the modules, whether in the form of PRA summaries/village reports, debriefing documents or maps and other materials produced in the workshops. This has been achieved in most cases. In particular, Module 4 has a complete set of debriefing documents and materials produced by focus groups in the 30 villages covered by the study. These have been converted into electronic form and can be consulted using a web browser on the CD. Module 5 has village maps for the 54 villages covered by the study and PRA summaries/village reports for 52 of them.

Appendix 5: The Final Workshop

The final workshop of the 1999-2000 Starter Pack Evaluation Programme was held on 21-23 August at the Malawi Institute of Management near Lilongwe. The first two days were attended by Ian Wilson, Carlos Barahona and Sarah Levy, of the SSC; all module team members except Elizabeth Cromwell and Roland Chirwa of Module 4, who were unable to be in Malawi; and Mr ZC Kamanga and Mrs M. Nyekanyeka of the MoAI Planning Division's M&E Unit. During Days 1-2, the Team Leaders made initial presentations of results and prepared their presentations for Day 3 (23 August).

On Day 3, the results of the Evaluation Programme were presented to a wider audience. The workshop was hosted by Mrs Mchiela, Principal Secretary of the MoAI, Harry Potter and John Hansell of DFID and Mr Z Chikhosi, head of the MoAI Planning Division. Ian Wilson of the SSC chaired the proceedings.

The agenda for Day 3 is presented below, together with a list of those attending the workshop. The attendance list is incomplete because some delegates left before it was circulated, but we estimate that some 50 people attended in addition to those attending on Days 1-2. The Day 3 workshop comprised a series of PowerPoint presentations, which are included on the 1999-2000 Starter Pack Evaluation Archive CD.

1999-2000 Starter Pack Evaluation

Presentation of Results

Malawi Institute of Management (MIM)

23 August 2000

08:30	Introduction by Dr Harry Potter, Natural Resources Adviser, DFID
08:45	Opening comments by Mrs Mchiela, PS, Ministry of Agriculture
09:00	Overview and methodology of the Starter Pack Evaluation Programme by Carlos Barahona, Statistical Services Centre, University of Reading
09:30	Presentation and discussion of the results of Evaluation Module 5: Starter Pack Registration (Ground Truth Study of the SPLU's Starter Pack Register)
10:30	Coffee break
11:00	Presentation and discussion of the results of Evaluation Module 1: Agronomic Survey
12:00	Lunch
13:00	Presentation and discussion of the results of Evaluation Module 2: Microeconomic Impact and Willingness to Pay
13:45	Presentation and discussion of the results of Evaluation Module 3: Gender and Intra-household Distribution
14:30	Presentation and discussion of the results of Evaluation Module 4: Sustainable Agriculture and Biodiversity
15:15	Tea break
15:30	Summary of Evaluation Programme results by Sarah Levy, Statistical Services Centre, University of Reading
16:00	Presentation and discussion of the results of the Starter Pack voucher and flexi-voucher study by Paul Harnett, REPIM UK Ltd
16:45	Closing comments by Mr Chikhosi, Head of the Planning Division, Ministry of Agriculture

The proceedings will be chaired by Ian Wilson, Director of the Statistical Services Centre, University of Reading; the order of the presentations may change.

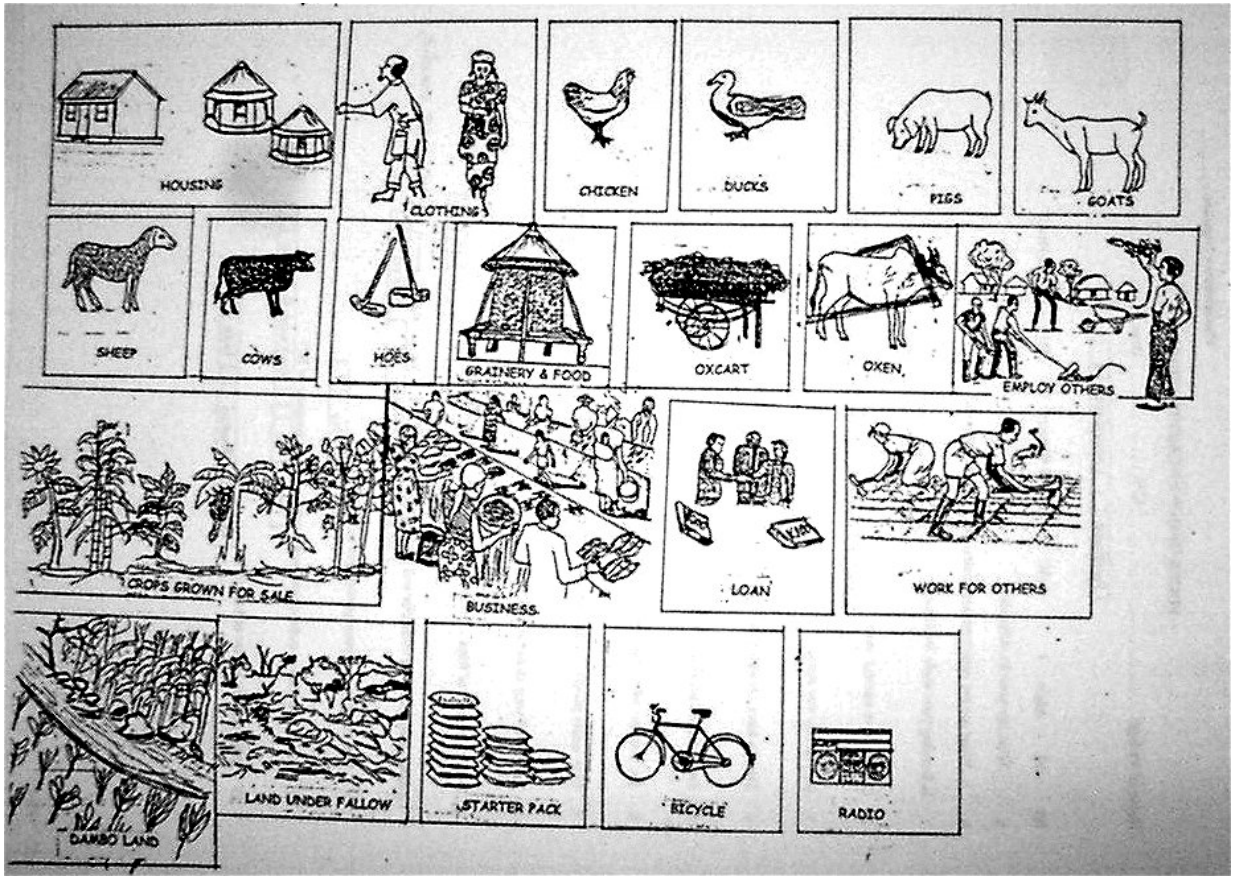
1999-2000 Starter Pack Evaluation

Presentation of Results - 23 August 2000

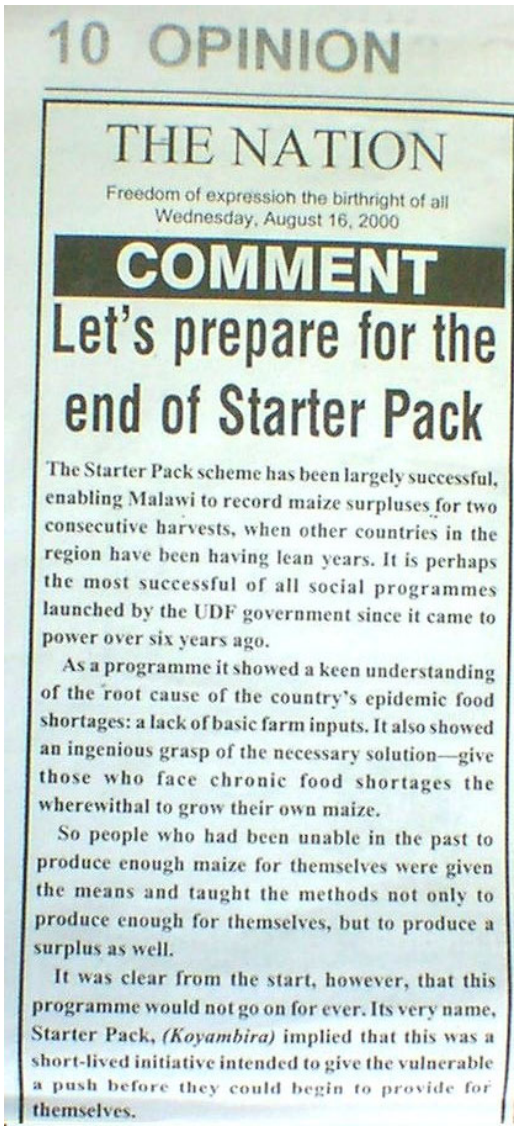
Attendance List

Mrs Mchiela, PS, MoAI
Mr Z Chikhosi, Head of Planning Division, MoAI
John Hansell, DFID-Harare
Harry Potter, DFID-Lilongwe
Catherine Hara, DFID-Lilongwe
M.L. Mlotha, Kasungu ADD
E.P. Chinglamba, Lilongwe ADD
G.S.V.K. Nyandulephiri, Machinga ADD
A.J. Kaunda, Machinga ADD
C.M. Kanyenda, Salima ADD
Mrs E. Lwara, Salima ADD
Mr ZC Kamanga, M&E Unit, MoAI
Mrs M. Nyekanyeka, M&E Unit, MoAI
A Namaona, Starter Pack Unit, MoAI
B.W. Nkomba, Principal Economist, Planning Division, MoAI
Ann Conroy, Office of the Vice President
Susan Mills, FAO
Guy Evers, FAO Investment Centre Division (Rome)
Mr P Jere, WFP
Aline Coudouel, World Bank
AC Amaral, EU Food Security Unit
Peter Killick, CIDA
Mr LF Golosi, Commissioner for Census and Statistics, NSO
Neil Fantom, NSO-DFID
Ian Kumwenda, MASIP
Charlie Clark, SPLU
Duncan Samikwa, RESAL
Paul Harnett, Starter Pack Voucher Study consultant
Y. G. Kamgwira, Oxfam
Kenneth E Matekenya, ActionAid (Malawi)
Sakou Jobe, ActionAid (Malawi)
Charles Mukiwa, Emmanuel International
L.J. Masangmawe, Malawi Red Cross
Nick Osborne, CARE Malawi
Charlotte Walford, SPLU Southern Region & Nutrition Outreach
Neil Orchardson, HTS Development Ltd, UK
John Tyson, consultant
Evance Chapasuka, FEWS
Petrus Van Rooyen, Pannar Seed (Malawi) Ltd
Dipak Jevani, Farmers World Ltd
Samuel Kankhunda I. Maliro, SFFRFM
Module 1: I.V. Gondwe, G.T. Mazunda, M.J.T. Khwepeya
Module 2: K.F.D. Nyirenda, H.C.Y. Gondwe, R. Musopole, M.N.S. Msowoya
Module 3: Lucy Binauli, Esthery Kunkwenzu, M^{c}Lloyd Polepole, Lucy Chipeta
Module 4: Patrick Kambewa, Richard Mwanza
Module 5: Peter Wingfield-Digby, M.N.S. Msowoya
Evaluation Programme Managers: Ian Wilson, Carlos Barahona, Sarah Levy

Appendix 6: The Bingo Game (Module 3)



Appendix 7: Article from The Nation



10 OPINION

THE NATION

Freedom of expression the birthright of all
Wednesday, August 16, 2000

COMMENT

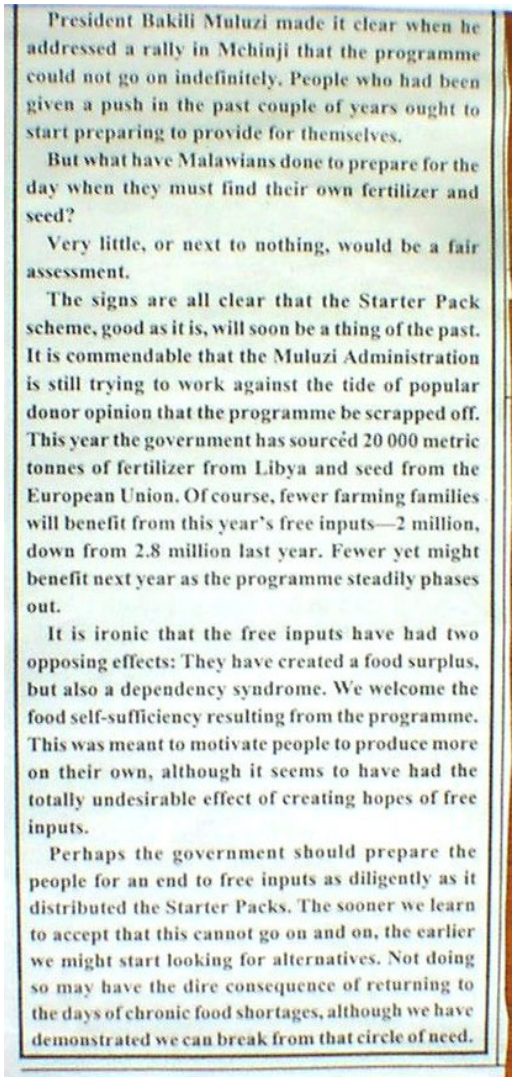
Let's prepare for the end of Starter Pack

The Starter Pack scheme has been largely successful, enabling Malawi to record maize surpluses for two consecutive harvests, when other countries in the region have been having lean years. It is perhaps the most successful of all social programmes launched by the UDF government since it came to power over six years ago.

As a programme it showed a keen understanding of the root cause of the country's epidemic food shortages: a lack of basic farm inputs. It also showed an ingenious grasp of the necessary solution—give those who face chronic food shortages the wherewithal to grow their own maize.

So people who had been unable in the past to produce enough maize for themselves were given the means and taught the methods not only to produce enough for themselves, but to produce a surplus as well.

It was clear from the start, however, that this programme would not go on for ever. Its very name, Starter Pack, *(Koyambira)* implied that this was a short-lived initiative intended to give the vulnerable a push before they could begin to provide for themselves.



President Bakili Muluzi made it clear when he addressed a rally in Mchinji that the programme could not go on indefinitely. People who had been given a push in the past couple of years ought to start preparing to provide for themselves.

But what have Malawians done to prepare for the day when they must find their own fertilizer and seed?

Very little, or next to nothing, would be a fair assessment.

The signs are all clear that the Starter Pack scheme, good as it is, will soon be a thing of the past. It is commendable that the Muluzi Administration is still trying to work against the tide of popular donor opinion that the programme be scrapped off. This year the government has sourced 20 000 metric tonnes of fertilizer from Libya and seed from the European Union. Of course, fewer farming families will benefit from this year's free inputs—2 million, down from 2.8 million last year. Fewer yet might benefit next year as the programme steadily phases out.

It is ironic that the free inputs have had two opposing effects: They have created a food surplus, but also a dependency syndrome. We welcome the food self-sufficiency resulting from the programme. This was meant to motivate people to produce more on their own, although it seems to have had the totally undesirable effect of creating hopes of free inputs.

Perhaps the government should prepare the people for an end to free inputs as diligently as it distributed the Starter Packs. The sooner we learn to accept that this cannot go on and on, the earlier we might start looking for alternatives. Not doing so may have the dire consequence of returning to the days of chronic food shortages, although we have demonstrated we can break from that circle of need.

...