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UNITED NATIONS DEVELOPMENT PROGRAMME

REPORT ON MISSION

TO

NATIONAL STATISTICAL OFFICE, MALAWI

ON

SURVEY OF HOUSEHOLD EXPENDITURE AND SMALL  
SCALE ECONOMIC ACTIVITIES 1990-1991

BY

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(24 MARCH TO 21 APRIL 1990)

NATIONAL STATISTICAL OFFICE  
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**MISSION REPORT ON THE SURVEY OF HOUSEHOLD  
EXPENDITURE AND SMALL SCALE ECONOMIC ACTIVITIES  
1990-91 OF MALAWI**

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by  
**S.K.Gupta**  
UNDP Consultant  
(March 24 to April 21,1990)

**INTRODUCTION**

1. At the request of UN/DTCO, the Consultant arrived at Lilongwe, Malawi on March 24, 1990 on a four-week mission to assist the Government of Malawi (National Statistical Office-NSO) in finalizing the survey of Household Expenditure and Small Scale Economic Activities (HESSEA). On March 25,1990, the Consultant was briefed by the National Household Survey Capability Programme (NHSCP) Co-ordinator of the United Nations Statistical Office (UNSO) on his terms of reference and about the discussions currently in progress between NSO and World Bank, SDA (Social Dementions of Adjustment) mission on inclusion of certain additional items of information in the HESSEA.

2. On March 26,1990, the NHSCP Co-ordinator introduced the Consultant to the Deputy Resident Representative of UNDP, Malawi explaining the objectives of his mission. On 27th morning after a brief introduction meeting with the Commissioner for Census and Statistics and other senior officers of NSO, the Consultant attended the joint meeting between NSO and World Bank, SDA Mission Representatives and NHSCP Co-ordinator. The meeting continued till the fore-noon of the following day which among other things also finalized the terms of reference of the Consultant.

**TERMS OF REFERENCE**

3. AIDE-MEMOIRE of the meeting referred to in paragraph 2 of this report precisely gives the terms of reference of the Consultant. The relevant para. 8 is quoted as follows:-

"The mission reviewed the terms of reference of the short-term Consultant provided by UNDP. It was agreed that he should be utilized to improve the overall survey design of the HESSEA with special emphasis on questionnaire design, including:

- (a) improvements of the questionnaire design as noted above;
- (b) knowledge gained from the review of the census data from a small sample of the census on community facilities and small scale economic activities to serve as inputs for prioritizing and further improvements of the questionnaire;

- (c) review of the quality of data collected by the pilot HESSEA;
- (d) review of the HESSEA sample design, to take into account such needs as the provision of estimates for rural areas in each of the three regions and the need to provide separate estimates for major towns;
- (e) review of the time-schedule for the preparatory work and the field work with special emphasis on any means that can facilitate a fast start of the field work;
- (f) review of resources both local and international;
- (g) recommendations on the utilization of the remaining three months of short term technical assistance provided for by UNDP.

4. With regard to (a) of the terms of reference mentioned in para. 2 of this report, the Aide-Memoire in para.6 elaborates certain modifications and additions in HESSEA survey as follows:-

- "(a) A certain number of social indicators as shown in annex 2 will be included in the survey.
- (b) NSO will integrate in the main body of the questionnaire provision for collection of information on consumption of own production. As an absolute minimum consumption of own production of maize should be included.
- (c) It was agreed that transfers and payments in kind would also be obtained.
- (d) NSO may like to refer to small scale economic activity sections of the proposed SDA questionnaire in further developing relevant sections of HESSEA questionnaire."

5. In para.7 of the Memoire, it has also been stated that "the SDA Unit would provide a draft community questionnaire within a short time, allowing NSO to further discuss and decide upon whether to include a community questionnaire or not, during the stay of the short term technical assistance provided for 4 weeks by UNDP."

6. Besides the terms of reference as defined in para.2 of this report (para.8 of Aide Memoire), it was also decided during the joint discussions, that the date of the first meeting of the Task Force which is to be established under the provisions of the SDA project for Malawi, is to be decided in consultation with the Short Term Consultant (Reference para.16 of Aide-Memoire).

7. The Consultant, therefore, has to perform two main substantive tasks of making recommendations on: (1) improvement of questionnaire content and design (combining terms of reference (a), (b) and (c)) and (2) improvement of sampling design (terms of reference (d)). Items of terms of reference at (e), (f) and (g) and all other matters could be combined as "Other Tasks." Accordingly, the recommendations are presented under these three headings in paragraphs 10 to 23.

#### MEETINGS AND DISCUSSIONS

8. The Consultant had the first round of discussions on March 28, 1990 with the Principal Statistician In-Charge of HESSEA, Principal Statistician (Economic Statistics) and the two Statisticians working on the preparatory work of HESSEA. The discussions revealed that NSO had considerably progressed by way of preparing a questionnaire and pilot testing it, finalizing a sampling design and selecting a sample of EAs including allocation scheme between Enumerators. The budget had also been sanctioned and plans were ahead to launch the survey in July 1990. The Consultant agreed to expedite his recommendations on overall improvement of the survey and questionnaire design, so that the survey could start as per planned schedule. The Consultant had also a brief discussion with the Deputy Commissioner on March 29, 1990 who clarified that although limitation of time was the main constraint, viable suggestions for overall improvement of the survey were welcome.

9. Based on examination of all available material and discussions with concerned officers, the Consultant prepared two papers, namely: (i) Some preliminary Suggestions for Improvement of Survey Design; and (ii) Some suggested modifications in questionnaire design and Improvement in subject-matter coverage. These papers were thoroughly discussed in a meeting on April 11, 1990, when all officers of NSO directly dealing with HESSEA were present. With some minor modifications and additions, the suggestions made in the paper were accepted for the HESSEA 1990-91. Copies of the amended papers are annexed to this report (Annex I and Annex II).

10. Consultant's draft mission-report containing the main recommendations on technical aspects of the HESSEA 1990-91 along with other recommendations on survey organisation and training were discussed with the Commissioner and other officers of NSO on April 17 and 18, 1990. The draft report was slightly revised based on the points emerging from those discussions. The Consultant also met the UNDP Resident Representative, Malawi on 20 April, 1990 before leaving Malawi and apprised her of the salient features of his Mission Report.

#### IMPROVEMENT OF DESIGN AND CONTENT OF HESSEA QUESTIONNAIRE

11. During March 1990 discussions between NSO and the World Bank, certain specific modifications and additions in the content of HESSEA had been agreed to as mentioned in paras. 3 and 4 of this report. Besides these, the Consultant was also to

review the pilot study results and census tabulations with a small sample on community facilities and small scale economic activity for improving the questionnaires in these areas. SDA Unit of the World Bank was also to provide a draft community questionnaire for consideration of NSO to be included in HESSEA or not.

12. Pilot Study: The objective of the pilot-study was to test the draft questionnaire and survey methodology which was met according to NSO. The Consultant, however, could not make use of pilot-study for the purposes mentioned in his terms of reference because of its extremely limited coverage, too small a sample size and non-availability of processed data from the computer. A few broad tables were generated manually which also could not be used to meet those purposes. It had been suggested by the Consultant that all the filled-in questionnaires should be manually scrutinized at the level of Statisticians and a series of diagnostic studies made through manual tabulations. These studies might indicate certain areas needing improvement in the HESSEA design. These studies could not be completed before the Consultant's departure.

13. 1987 Census tabulations: The Consultant was given to understand that currently data-entry and processing corresponding to a programme of detailed tables (Region-wise and District-wise) was in progress. There was, however, no programme of tabulating data on community facilities and on household activities. The Computer Section felt that it was not possible to undertake any additional tabulation work within this limited time. The Consultant, however, put up a requisition for generating two quick tables on household economic activities to be used in improving the sampling design of HESSEA, which could not be produced before the Consultant's departure.

14. Community Questionnaire: SDA Unit of the World Bank was supposed to send a draft community questionnaire for the consideration of NSO and the Consultant for inclusion in the HESSEA. Due to non-receipt of this draft and absence of any feed-back from the census data as well as on considerations of not over-loading further the HESSEA survey the idea of including community questionnaire was dropped.

15. While trying to incorporate additional information to be collected on social indicators, home consumption and transfers and payments in kind in HESSEA 2 to 4 and review HESSEA 5 totally, the Consultant had to make a thorough examination of the Questionnaires Section by Section. Based on this examination, some detailed recommendations have been made on enlarging the content of the questionnaires including some structural changes in the design, in the Technical Paper No.2 annexed to this report. This paper also presents revised formats for HESSEA 2 and HESSEA 5 on Household Composition and Small Economic Activity respectively. The summary of recommendations made in the paper is described as follows:-

- (a) The content of HESSEA 2 on Household Composition should be enlarged to include information on education, health and economic activity particulars. The Section on Housing should be transferred from HESSEA 3 to HESSEA 2. The design of the questionnaire should be streamlined and re-structured into the form of a compact schedule.
- (b) Due to various problems associated with anthropometric measurements these may not be included in HESSEA 1990-91.
- (c) In view of urgency in completing the preparatory work of the survey so as not to delay its commencement beyond July 1990, the restructuring of HESSEA 3 - Recall Questionnaire into a compact schedule may not be done for this survey. The heading of the questionnaire should be changed to: Household income, expenditure and indebtedness. It will also be necessary to re-order the various Sections of the questionnaire to bring common items together.
- (d) Since integrating provision of collection of data on consumption out of home-grown stocks, etc. in the main body of the questionnaire was not possible without re-structuring it, a separate Section to collect such data is recommended.
- (e) More space should be provided to record shop/outlet and quantity (including unit of quantity) in HESSEA 4: Diary of Expenditure. The approach of collection of data through diary including the reference period needs to be standardised. In rural areas Enumerators should collect data on the first date of interview and subsequently at three-day interval uniformly. In urban areas, either the head or one educated member of the household should be requested to fill the diary on daily basis in consultation with all spending members of the household.
- (f) HESSEA 5: The definition and cut-off points for Large, Medium and Small-scale activity have been given in Annex III. Small scale economic activity questionnaire should be expanded to include all receipts and expenses in kind. Data on stocks may only be collected as on date of survey since most of the household enterprise units do not maintain record of stocks on specific dates. One new Section on Purchase of assets during the last 12 months should be added. (Revised format of HESSEA 5 has been enclosed with Technical Paper No.2).

IMPROVEMENT OF SAMPLING DESIGN

16. As mentioned earlier, NSO had already progressed considerably in preparing a sampling design and getting the budget approval of the Government on the basis of a total sample size of 600 EAs and 6,000 households for the survey. Keeping this constraint in view and that no feed-back would be available regarding concentration of small-scale economic activity from the census results, the Consultant had to review the sample-size and design on the basis of 1987 population data and the estimates of coefficient of variation of some characteristics published in 1979-80 survey report. Technical Paper No.1, prepared by him (annexed to this report) presents this review suggesting some modifications in the sampling design. The main recommendations contained in the paper are as follows:-

- (i) Since household will be the logical unit of enquiry (reporting unit), it will be the most appropriate and advantageous ultimate sampling unit (USU) eliminating chances of possible biases and likely reduction in effective sample sizes. It is, therefore, recommended that for HESSEA - 1990-91, households instead of dwelling units should be taken as 'USU'. The HESSEA-1 (listing questionnaire) should accordingly be modified to include listing of households and the name of head of households (A revised format along with explanatory note has been annexed to the Technical Paper No.1).
- (ii) It is recommended to have 10 basic strata instead of 6 proposed by NSO to enable study of regional disparities along with rural urban differentials of socio-economic variables. In addition to 4 major cities, rural and other urban areas in each region will be separate strata.
- (iii) Based on the data on coefficient of variation published in 1979-80 survey report, it is recommended to reduce the proposed sample-sizes of Blantyre and Lilongwe and supplement the sample-sizes of rural areas correspondingly. Similarly based on relative population sizes, the proposed sample-sizes of other urban areas were also reduced to supplement sample-sizes of rural areas. Consequently a revised allocation of total sample between strata has been recommended (given in the Technical Paper No.1).
- (iv) Some minor modifications are also recommended in the procedure of sample selection. In the major cities, instead of treating the high-income and low-income groups as two different

sub-strata and selecting sample of EAs independently from each sub-strata, stratification could be ensured by suitable arrangement of EAs group-wise and selecting systematically with pps to simplify estimation procedure. In other urban areas, EAs should be arranged district-wise and Boma-wise within a district and then selected systematically with pps at the first-stage. 12 EAs should then be selected systematically with pps from each TA/STA. At the ultimate stage, households should be selected on the basis of simple random sampling.

OTHER TASK

17. Review of resources for the survey: Currently, all technical as well as organisational elements of work relating to planning of HESSEA, 1990-91, are being carried out by one Principal Statistician and two Statisticians along with their principal duties relating to industrial and price statistics. For the field work, it is proposed to recruit 70 new primary level workers (Enumerators, Coders and Checkers) and deploy 12 Supervisors from NSO's existing strength. International professional support has been provided for four man-months of short-term consultancy (UNDP), out of which one man-month has already been completed.

18. Examining the entire work-load both technical and administrative and organisational of HESSEA, 1990-91 comprising two major subjects of Income and Expenditure and Small Scale Economic Activity, the following local staff strength is recommended:-

- (a) The current Principal Statistician should be designated as Survey Director to work on full-time basis and be relieved from his other duties.
- (b) The other two Statisticians should also work on full-time basis at the headquarters, taking care of all technical aspects of survey work.
- (c) For such a large scale survey with two major subjects, one of which is first of its kind in Malawi, their needs to be at least two-tier of field supervision and control. It is, therefore, recommended that 3 Statisticians, one for each region should be provided to ensure proper field inspection and quality control. It will also be the responsibility of these Regional Statisticians to clarify and/or settle technical and administrative problems at regional level under the overall guidance of the Survey Director.
- (d) At the primary level and the first stage of supervision no further augmentation is recommended.

- (e) It will not be possible to run the survey smoothly without full-time administrative support staff. It is recommended to employ one Executive officer, one Assistant Accountant, one Accounts clerk, one Secretary for Director and two typists.
- (f) Although the resources needed for processing HESSEA, 1990-91 is not being currently assessed, it is recommended that one full-time Systems Analyst should be appointed early enough to take charge of all aspects of processing work.

19. In consultation with NSO, no further addition other than 3 remaining man-months of UNDP Consultancy is recommended. The need for undertaking analytical work, however, was not assessed by the Consultant.

20. It is learnt that 70 bicycles for primary workers have already been purchased and that 12 Land-Rovers will be available from current stock for the Supervisors. It is recommended that 5 more four-wheel drive vehicles (preferably Toyota Land Cruiser) should be purchased out of IDA funds, for 3 regional statisticians and Headquarters (one for the Director and one to be shared between two statisticians and Consultant). It is also recommended to buy from IDA funds one photo-copier and two electronic type-writers for the survey.

21. Time-Schedule: Taking into account NSO's goal to start the field work on 1st July, 1990, the preparatory work will have to be taken up seriously. In consultation with the Principal Statistician, In-Charge of HESSEA, 1990-91, the following time-schedule was drawn up:-

<u>Item of Work</u>	<u>Starting Date</u>	<u>Completion Date</u>
1. Revision of questionnaires	In progress	30/04/90
2. Revision of Instruction Manual	"	"
3. Printing of questionnaire & Manual	01/05/90	31/05/90
4. Selection of EAs	23/04/90	15/06/90
5. Recruitment of Staff	01/05/90	31/05/90
6. Training of Staff	01/06/90	30/06/90
7. Setting up Central and Field Offices	15/05/90	30/06/90
8. Field Work	01/07/90	30/06/91

22. It is recommended that there should be regular monthly meetings between Director and his five Statisticians to review progress of items of work in the previous paragraph. Similarly there should also be quarterly meetings with Commissioner and other senior staff to review and evaluate periodically.

23. Utilization of UNDP Short-term Technical assistance:  
It is recommended that the remaining three months of UNDP consultancy should be divided into 2 parts of 4 weeks and 8 weeks to perform the following tasks:-

- (a) From January 1 to 31 January, 1991 to assist NSO in: (i) Mid-term evaluation and preparing the report, (ii) Making recommendations for the remaining part of survey.
- (b) From 1 June to 31 July, 1991 to assist NSO in:
  - (i) developing estimation procedure,
  - (ii) computation of multipliers and
  - (iii) preparing the list of end-tables.

24. Meeting of task-force on SDA Project: This issue will be decided by the Commissioner in due course.

#### CONCLUSION AND OTHER GENERAL RECOMMENDATIONS

25. The Consultant while reviewing the preparatory work in progress in connection with HESSEA, 1990-91, was highly impressed with the volume of work being done by the Principal Statistician and his staff with extremely limited resources. With a little augmentation, reorientation and re-organisation, NSO could soon develop a permanent National Household Survey Organisation within its orbit operating a continuing programme of annual socio-economic surveys. Although the Consultant's present terms of reference do not include consideration of any such proposal, yet with a view to initiate steps in building such a capability, he is venturing to make the following recommendations for implementation at the nearest opportunity:-

- (a) Training in Sampling Theory and Practice:  
One area where NSO currently seemed to be comparatively weaker was 'Sampling' and therefore it is recommended that some of the officers of NSO engaged with sample surveys should be sent abroad for short-term specialisation courses and long-term courses leading to Master's degree. It should be possible to fund these trainings from the budget of SDA Project in which NSO, Malawi is going to participate. It should also be ensured that these officers after training return back to NSO and work in the same fields as they were trained at least for some specified number of years.

(b) Pilot-Surveys and Studies: Some guide-lines are given in the paragraph in planning pilot-studies in future. Pilot surveys are very important instruments to produce extremely useful information leading to efficient designing of large-scale sample surveys. The objectives are much wider than mere testing of questionnaire namely: (i) to get an idea of technical problems associated with choice of reference periods, location and identification of sampling units, variability of characteristics to be estimated regionally and so on. (ii) to get a precise estimate of time taken in conducting different survey operations, (iii) to get an idea of organisational, logistic, language and other administrative problems and identify likely solutions to ensure adequate response etc. It is not necessary to adopt probability sampling design for pilot surveys since estimates need not be built, but care has to be taken while selecting that all likely problem areas are adequately represented in the sample. It is also very important that the results of the pilot-study are presented in the form of report well before the design of the main survey, so that due consideration is given to the results obtained.

(c) Survey Design and Research: It is recommended that the survey Design Section should be established quickly. It is important that work should start in developing suitable questionnaire-designs, preparation of sampling frame, standard concepts and definitions and so on.

#### ACKNOWLEDGEMENTS

26. The Consultant expresses his heart-felt gratitude to the Commissioner, Deputy Commissioner and all his officers and members of staff for extending full cooperation and assistance in enabling him to perform his duties and complete this report smoothly. He would specially like to place on record, his deep appreciation for Mr. C.Machinjili, Mrs.L.A.Chikoti and Mr.E.Phiri who had been working hand-in-hand with him throughout his stay in Malawi.

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NATIONAL STATISTICAL OFFICE

SURVEY OF HOUSEHOLD EXPENDITURE AND SMALLSCALE  
ECONOMIC ACTIVITIES 1990/91

SOME SUGGESTIONS FOR IMPROVEMENT OF SURVEY DESIGN

BY S.K. GUPTA, UNDP CONSULTANT

INTRODUCTION

1. When the UNDP Consultant (short-term) arrived in Malawi and reported at the National Statistical Office (NSO), Zomba, discussions were in progress between NSO, World Bank and the UN Statistical Office on the question of integration of NSO's Survey of Household Expenditure and Smallscale Economic Activities (HESSEA) and the Social Dimensions of Adjustment (SDA) proto-type questionnaire. The Consultant participated during the last two days' discussions (March 27 and 28, 1990). The Aide-Memoire on discussions among other things, indicated areas of agreement on certain modifications and additions on the content and the outline of the HESSEA as well as on the terms of reference of the Consultant. The main task of the Consultant was to make concrete suggestions on the improvement of the questionnaire and survey design of HESSEA based on agreements mentioned in Aide-Memoire, results of the Pilot Study, some quick tabulation of 1987 Census data and additional need for providing precise estimates for rural part of the Survey. The Consultant was also required to review the resource requirements and the time-schedule of HESSEA as well as make recommendations on utilization of the remaining three months of UNDP short-term technical assistance programme.

2. The Consultant had the first round of discussions on March 28, 1990 with the Principal statistician (Industrial Statistics), In-Charge of HESSEA, Principal Statistician (Economic Statistics) and the two Statisticians working on the preparatory work of HESSEA. The discussions revealed that NSO had considerably progressed by way of preparing a questionnaire and pilot-testing it, finalizing a sampling design and selecting a sample of EAs and allocation scheme between Enumerators. It was also mentioned that the Government of Malawi had already approved the budget of the Survey and plans were ahead to launch the Survey in July 1990. The Consultant appreciated the need for expediting all aspects of preparatory work for the Survey and agreed to work on the principle of retaining the basic structure of HESSEA and suggesting minimal changes considered absolutely necessary from technical and operational considerations. He, however, pointed out that the deterring factors in speeding up his task might be delays in getting the Pilot Study Report and the needed tables on smallscale economic activity from the data collected during 1989 population census. Till these were

(b)

available, he proposed to go ahead with the examination of available material namely: questionnaires and Interviewer's Manual; Papers prepared on pilot study proposal, sampling design and sample selection; and the Report on Urban Household Expenditure Survey, 1979/80.

3. The Consultant had also a brief discussion with the Deputy Commissioner for Census and Statistics (DCCS) on March 29, 1990. The DCCS clarified that although limitation of time was the main constraint, the Consultant should feel free to make viable suggestions for overall improvement of the Survey which would certainly be taken into consideration while finalizing it. He also suggested that the Consultant should propose one summary table on the small scale economic activity to be quickly generated out of Census data to enable preparing an efficient sampling design of the HESSEA.

4. Based on discussions and examination of material referred to in the foregoing paragraphs, this technical paper has been prepared on suggestions for improvement of survey design to start the process as well as to initiate further work in improving the HESSEA, 1990/91 Survey.

#### PILOT STUDY

5. The paper number NSO/15/20B dated September 25, 1989 gives some details of the pilot survey. The objective of the Survey as stated in the paper is to test the draft questionnaires and survey methodology. A total of six EAs was selected in Blantyre (two high income, two low income and two rural) and four EAs in Mangochi (two urban and two rural). Ten households were selected from each selected EA bringing the total sample size in terms of households to 100. The paper does not indicate how the EAs and households had been selected. (It was later explained that on considerations of cost and operational convenience, two Districts were selected purposively from the Southern Region only, but EAs were selected with pps and households were selected systematically). The Pilot Survey was conducted in November/December 1989.

6. Pilot Study data are still under processing. However, the following tables each for Blantyre and Mangochi districts had been quickly generated for examination:-

Table 1: Number of households with or without smallscale economic activity.

Table 2: Number of households with smallscale economic activity classified by type of activity.

Table 3: Number of households with one and two activities.

Table 4: Number of heads of households by marital status.

Table 5: Number of heads of households by race.

(c)

7. Tables to be generated out of pilot survey are generally not going to be very useful, due to small sample size, specially for rural areas with just 40 households and that too drawn from just one Region. On the other hand, it would be worthwhile to undertake manual scrutiny of all the 100 sets of filled-in questionnaires by experienced Statisticians and to make some diagnostic studies as suggested in Annex 1.

#### REVIEW OF CENSUS DATA

8. It is learnt that currently data-entry and processing corresponding to a programme of detailed tables (Region-wise and District-wise) is in progress to be completed by July 1990. It also revealed that although household economic activities data collected in Part E of the Census Questionnaire were being entered, there was no programme of generating any table out of these data. This is an extremely unfortunate omission since apart from providing some useful data on number and type of household economic activity units, seasonality and employment to serve the needs of users, immediate requirement for this office is to get precise information on geographical distribution and concentration of such units by type of activities, to be utilised for preparing an efficient sampling design for the HESSEA 1990/91. It does not seem possible to get this information before the start of HESSEA Survey. However, a requisition for the following two tables has been made, which if received quickly, could be utilised to improve upon the proposed sampling design of the HESSEA.

Table 1: Total number of households and households with no business by Regions/Districts/TA/STA/Bomas/Cities.

Table 2: Total number of households with economic activity and its distribution by type of business by Regions/Districts/TA/STA/Bomas/Cities.

#### CHOICE OF ULTIMATE SAMPLING UNIT AND MODIFICATION OF HESSEA-1

9. During the Urban Household Expenditure Survey, 1979/80, a three stage sampling design was adopted. At the first stage, the Enumeration Areas called Census Districts (CDs) were selected with probability proportional to size using the number of dwelling units (DUs) obtained in the 1977 population census as a measure of size. The selected CD was then divided into blocks, each of which consisted of approximately fifty DUs and then blocks were selected. How these blocks were formed and selected, has not been mentioned in the report. DUs were then selected from each selected block by systematic sampling after listing. The report states, "Due to the fact that some DUs were found vacant or the occupants could not be contacted because they were away or the DU was not the main residence of the household head, the resulting sample size, in terms of DUs, was less than the original selection and meant that such a design was non-self weighting". The problem, however, is much greater than simply that of becoming non-self weighting, but that of becoming less efficient and biased.

(d)

10. In the Pilot Study as stated in the 'Interviewers Manual' para. 2.4 DU was again treated as the ultimate sampling unit (USU) and listed in HESSEA 1. The Reference Paper number NSO/15/20B dated March 15, 1990 gives some details of the proposed sampling design of the main survey. In the Cities and Bomas a two-stage sampling design will be adopted. At the first stage an EA will be selected from a stratum with probability proportional to size (PPS) while at the second stage households will be selected using systematic sampling. In the rural areas there will be three stages of selection, at the first and second stages Traditional and Sub-Traditional Authority (TA/STA) and EA will be selected respectively with pps, whereas households will be selected at the third stage using systematic sampling. This paper states that the USU will be households and not dwelling units as used during 1979/80 Survey. This approach will be welcome.

11. Since household will be the logical unit of enquiry (reporting units), it will be the most appropriate and advantageous USU eliminating chances of: possible biases, likely reduction in effective sample-sizes, complicating estimation procedures and unequal distribution of work-load between Enumerators. Unless there are very strong operational reasons, housing unit/dwelling unit, should not be preferred as USU in a household survey. If at all it is to be done, the definition of a dwelling unit/housing unit will have to be modified, to treat all housing units in the same compound or nearby area within the EA (or pen-ultimate sampling unit) where one household with extended family-ties reside, as one unit (USU).

12. It is, therefore, recommended that for HESSEA 1990/91, households instead of dwelling units should be taken as USU. The HESSEA - 1 (listing questionnaire) should accordingly be modified to include listing of households and the name of head of households. A revised format along with an explanatory note is at Annex 2.

13. During the 1979/80 survey, the effective sample size in terms of households got substantially reduced mainly because of treating DU as USU and restricted definition of eligible household. By taking household as USU, suitably defining an eligible household and selecting households in the sample after preparing comprehensive list of eligible households, the problem of ensuring the desired sample size could be solved. There will always be a few cases of non-response because of refusal to co-operate and/or for other unavoidable circumstances. These households may be substituted but only after all efforts to get response from them have failed. Substitution introduces a bias and therefore should be as few as possible.

#### SAMPLING DESIGN

14. The paper number NSO/15/20B dated March 15, 1990 gives the proposed sampling design as well as the distribution of total sample size of 600 EAs (consequently 6000 households also) between the six strata. The country has been divided into six separate strata namely:

Cities/Municipality of Blantyre, Lilongwe, Zomba and Mzuzu; Bomas representing other urban areas in all Regions taken together; and districts representing the rural areas of all the Regions taken together. The following table gives stratum-wise proposed sample size of households along with allocation percentage between strata compared with percentage distribution of population between them:

S.No.	Strata	Sample-Size (Households)	Allocation Percentage	Percentage Population to total
1	Blantyre	1440	24	4.2
2	Lilongwe	1080	18	2.9
3	Mzuzu	240	4	0.6
4	Zomba	240	4	0.5
5	Bomas (Other Urban)	1080	18	2.6
6	Districts (Rural)	1920	32	89.2
7	All Strata	6000	100	100

15. The reason for allocating higher percentage of sample-size to the four Cities is obviously to enable obtaining precise estimates of weights needed for revising/constructing consumer price indices for them. Perhaps, for similar reason in order to obtain separate region-wise estimates for Bomas (other urban areas), a much higher sample size has been allocated to them. Consequently, the rural areas have received much lower share of the total sample size.

16. Presumably the resource considerations have limited the total sample size to 6000 and therefore any scheme of revision of sampling design will have to adhere to this given constraint. It is also told that there was no possibility of getting the desired tables on smallscale economic activity mentioned in para.8 in near future. Taking note of these constraints, the need for region-wise estimates, non-availability of any information on concentration of small scale/household economic activity in the country and the published data on coefficient of variation from the 1979/80 report, some modifications in the sampling design and allocation of sample size between strata have been suggested in the following paragraphs.

17. Study of regional disparities of socio-economic variables along with rural/urban differentials is gaining more and more importance in developing countries. With these objectives in view, it is considered important to increase the number of basic strata from six to ten as follows:-

(f)

STRATA	CODE
Northern- Rural	01
Northern- Mzuzu City	02
Northern- Other Urban	03
Central - Rural	11
Central - Lilongwe City	12
Central - Other Urban	13
Southern- Rural	21
Southern- Zomba Municipality	22
Southern- Blantyre City	23
Southern- Other Urban	24

18. Considering the data on co-efficient of variation published in the 1979/80 survey report, the proposed sample sizes in the March paper of NSO appear to be very high for Blantyre and Lilongwe. In 1979/80 survey, the total effective sample-size in terms of households was 1085 and 1281 in Blantyre and Lilongwe respectively. Reducing the sample-size by 50% will only increase the co-efficients of variation  $\sqrt{2}$  times or 1.4 times approximately, meaning thereby that the co-efficient of variation of expenses on alcohol and tobacco group which was the highest for these two Cities would only increase from 1 to 1.4 for Blantyre and from 1.8 to 2.5 for Lilongwe, both of which would still remain too good. The sample sizes, therefore, could be brought down to 542 and 640 for Blantyre and Lilongwe respectively. To make the sample sizes multiples of 10 and as well as 12 to be evenly distributed equally over months during the survey year and to keep a constant household sample of 10 per EA and also the likelihood of variabilities of Blantyre's expenditure pattern having increased over years due to its commercial and industrial importance, it is proposed to allot sample sizes of 720 and 600 to Blantyre and Lilongwe respectively. In view of very small population of Mzuzu and Zomba Cities but since separate estimates are needed for constructing consumer price indices, the minimum sample size of 240 households each are allotted to them. On similar considerations, 240 households are also allotted to each of Northern, Central and Southern Regions and 'Other Urban Areas'. The remaining 3600 are allotted to rural areas to be distributed between Regions in proportion to their population. The distribution of sample sizes of EAs and households will be as follows (having a constant sample size of 10 households per EA):-

		(g)	
<u>Code</u>	<u>Stratum</u>	<u>No. of EAs</u>	<u>No. of Households</u>
01	Northern - Rural	36	360
02	Northern - Mzuzu City	24	240
03	Northern - Other Urban	24	240
	Sub-Total	84	840
11	Central - Rural	144	1,440
12	Central - Lilongwe City	60	600
13	Central - Other Urban	24	240
	Sub-Total	228	2,280
21	Southern - Rural	168	1,680
22	Southern - Zomba Municipality	24	240
23	Southern - Blantyre City	72	720
24	Southern - Other Urban	24	240
	Sub-Total	288	2,880

19. The proposals made in the March paper of NSO of grouping of EAs into two groups namely high income and low income groups (based on subjective considerations of low population density, higher electricity rates, types of dwellings, etc) in four major cities and adopting two-stage sampling design in urban areas and three-stage design in rural areas, are retained. It is, however, suggested that in the major cities, instead of treating the high-income and low-income groups as two different sub-strata and selecting sample of EAs independently from each sub-strata, stratification could be ensured by suitable arrangement of EAs group-wise and selecting systematically with pps for operational convenience and to simplify estimation procedure. In other urban areas, EAs should be arranged district-wise and Bomas within a district and then selected systematically with pps. This will ensure better representation between districts.

20. In rural areas the number of TA/STA to be selected at the first stage will be determined by dividing the number of EAs to be selected by 12, which will mean from each selected TA/STA, STA will be arranged district-wise and then selected systematically with pps at the first stage. 12 EAs will then be selected systematically with pps from each TA/STA. It is recommended that at the ultimate stage households should be selected on the basis of simple random sampling for simplifying estimation procedures, specially for errors. The distribution of sample sizes in the rural areas will be as follows:-

<u>Code</u>	<u>Stratum</u>	<u>No. of TA/STA</u>	<u>No. of EAs</u>	<u>No. of Household</u>
01	Northern - Rural	3	36	360
11	Central - Rural	12	144	1440
21	Southern - Rural	14	168	1680
	Sub-Total	29	348	3480

ANNEX 1

A. It is suggested that all the 100 sets of questionnaires divided into Rural-40, Blantyre City-40 and Other Urban - 20 should be thoroughly examined at the statistician's level and studies made to determine the following stratum-wise:

- (1) Number of multi-household dwellings and number of multi-dwelling households.
- (2) Number of diaries filled by all persons (eligible) of the households.
- (3) Number of diaries filled by some persons and the rest by the Enumerators.
- (4) Number of diaries filled by Enumerators only
- (5) Number and type of non-responses and substitutions.
- (6) Average and range of time taken in completing one set of questionnaires giving details of number of visits.
- (7) Average and range of major/minor errors committed - questionnaire-wise by Enumerators.
- (8) Analysis of type of errors committed.

B. It is not known when the tabulated data of pilot-study will be available and whether a detailed report on the pilot-study will be prepared or not. It is, however, suggested manually to prepare the following table stratum-wise and calculate average and range of each characteristic:-

H/H Serial No.	H/H Size	No. of Males	No. of Females	Total Income and Receipts	Total Expenditure and disbursements	Economic Activity	
						Total Output	Total Input
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
.							
.							
.							
.							

Revised format of HESSEA - 1

Dwelling Unit Number	Dwelling Unit Description	Household Number	Name of Head	Sample Number
(1)	(2)	(3)	(4)	(5)

**Explanatory Note:** This is the main questionnaire for listing work. The Enumerator has to visit house to house in the allotted Enumeration Area and prepare the list of private dwelling units as well as the households residing in those units. The same definition of private dwelling unit as used during the pilot survey will be retained i.e., "A private dwelling includes separate huts and houses, separate servants' quarters, separate flats in a block of flats (or sub-divided house), places with eating and sleeping facilities incorporated into shops or factories and so on," and the exceptions pointed out in the Instruction Manual will also be adhered to. Private dwelling units are to be numbered serially, starting with 001 and recorded in boxes provided in column (1). The dwelling unit has to be described in column (2) as given in the Instruction Manual. It will then have to be ascertained whether one or more eligible households reside in this dwelling unit. It should also be found out whether some members of the eligible household live in nearby dwelling units within the same Enumeration Area. The households are to be numbered serially starting with 001 in column (3). If there are more than one household in a dwelling unit, each will get a separate serial number and recorded in the following rows. Dwelling unit number in column (1) and description in column (2) will however remain the same. Similarly, if one household lives in more than one dwelling units, cols. (1) & (2) will change but column (3) will remain the same. In column (4), the name of the head of the household corresponding to column (3) should be recorded. The definitions of a household, household-member and head of the household as given in the manual will generally be retained with slight modifications. A household may be either a person living alone or a group of people, either related or unrelated, who live together as a single unit in the sense that they have common house keeping arrangements (that is, share or are supported by a common budget). Persons who will be living with the household and participating or being supported by the common housekeeping arrangements for 14 or more days during the survey period to be counted from the starting date of enumeration to fill in HESSEA Questionnaires 2 to 5, will be current members of the household. The head of the household is the person commonly regarded by the household as their head. The head is usually the main income earner or the oldest member of the household but the decision of the household in this context will have to be accepted. The head has also to be a current member of the household as per definition. In case the usual person acknowledged as head of the household is not a current member of the household, the person next in command or one who mostly controls the housekeeping arrangements and expenditure should be treated as

the current head. This should also be decided by the household. Household coverage rules and personal coverage rules in the Manual should also be revised accordingly. Paras. 6.12 to 6.17 should be revised as follows:-

- 6.12 A household will be listed in a dwelling unit and surveyed if selected in the sample, provided it is going to be in the dwelling unit for 14 or more days during the survey period, irrespective of whether this dwelling unit is its usual residence or not. Similarly if a household as a whole which is usually living in a dwelling unit will be away for 15 or more days during the survey period, it will not be listed and excluded from the survey.
- 6.13 In cases of extended family system and polygamous men, household members are distributed over two or more dwelling units. If these dwelling units are in the same compound or are nearby, but necessarily within the EA being listed, these dwelling units will get separate serial numbers but the household will be treated as one and will be listed as such with a common serial number. For this common household, there will be one and only one head, which is acknowledged as such and the household will be surveyed as one entity. In case the head is not a current member and is not living in one of the dwelling units belonging to this household for the required number of days, he should be excluded from the survey and substituted as head by the next member in command of the household. The household has to be listed and surveyed and not excluded. The cases of one household occupying more than one dwelling unit should be exception and not rule, just because one person is supporting different set of members living in different dwellings. As far as possible these should be treated as different households with different heads, unless house-keeping arrangements specially cooking of food are common.
- 6.14 To be omitted.
- 6.15 Same as in the Manual
- 6.16 Given that the household is to be included, then members of the household who are present at the time of your first visit to fill-in questionnaires HESSEA 2 to 5, should be included in the survey provided they would be present for 14 or more days during the period of survey, otherwise they will be excluded.

6.17 Similarly, a person who arrives during the period of the survey and intends to stay for 14 or more days during the survey period as a member of the household, will be included in the survey.

ANNEX - II

NATIONAL STATISTICAL OFFICE  
SURVEY OF HOUSEHOLD EXPENDITURE  
AND  
SMALL SCALE ECONOMIC ACTIVITIES 1990/91

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Some suggested modifications in questionnaire design and improvement in subject-matter coverage.

By S.K.Gupta, UNDP Consultant.

1. In continuation of the first paper dealing mainly with some aspects of the survey design and suggesting a modified listing questionnaire (HESSEA - 1) and distribution of sample size between strata, this paper is devoted to suggesting modifications and improvement in content and structure of the questionnaire. In view of the fact that NSO had already finalised a questionnaire and pilot-tested it and therefore was planning to make minimal changes based on the pilot study and go ahead with printing of the questionnaire, it was initially considered not very necessary to go deep into the questionnaire. But later, while trying to incorporate certain modifications and additions as suggested and agreed upon during the discussions with the World Bank's representatives on 27th and 28th March, 1990, as reflected in paragraph 6 of Aide-Memoire, a thorough examination of the questionnaires section by section had to be done resulting into some structural changes and re-designing of the questionnaire. These are discussed in some details in the following paragraphs and the suggested revised questionnaires are also annexed to this paper.

SOCIAL INDICATORS

2. One of the major agreements reached with the World Bank is that "a certain number of social indicators" (a list of which is enclosed with the Aide-Memoire) should be included in HESSEA Questionnaire. The most suitable place where these indicators could be incorporated is in HESSEA - 2: Household Composition Form which incidentally included information on education-level of household members. During the process of incorporating these additions, it was considered useful to transfer similar information from HESSEA - 3 and to re-structure HESSEA - 2 in the form of a compact structural schedule. The revised HESSEA - 2: Household Composition, housing and other socio-economic variables/indicators, may be seen at Annex - 1. Based on problems associated with anthropometric measurements of rural children, likely delays in procuring measuring instruments and stretching further on the respondent's patience, it was felt not necessary to include these measurements in the survey schedule.

(b)

HESSEA - 3 AND CONSUMPTION OF OWN PRODUCTION

3. HESSEA - 3 covers all questions on income and loans bulk of the questions on expenditure of households apart from those on "housing" (proposed to be transferred to HESSEA - 2 in paragraph 2 of this note). It would be extremely useful to restructure this questionnaire into a compact schedule form similar to the proposed one for HESSEA - 2, dividing into three possibly four compartments namely: Part I - Income and other Receipts; Part II - Expenditure and other Payments; Part III - Loans or Indebtedness; and Part IV - Savings, Assets, Investment etc. (not covered in HESSEA - 3). As an illustration, the collection of income-data (excluding other receipts to be collected separately in another section) could be structured into the following two tables:-

Section 1: Income from paid employment

Person Number	Total cash wages/salaries including overtime, allowances, commissions etc. before deductions in the last month excluding bonuses and leave grants	Values of benefits received in kind e.g. food, housing, fuel, transport etc. during the last month	Bonuses and leave grants received during last month both in cash and kind
(1)	(2)	(3)	(4)

Section 2: Income from self-employment activities

Person Number	Profits before tax from self-employment activities		Estimated net-value of goods and services from own business consumed by the household or transferred as payments to certain costs, loans, gifts etc.	
	Last month	Last year	Last month	Last year
(1)	(2)	(3)	(4)	(5)

4. Considering that the type of improvement suggested in the previous paragraph will mean almost re-drawing the main questionnaire and re-writing the Instruction Manual, which might delay completion of the preparatory work resulting in postponement of the start of the survey, the format of the existing HESSEA - 3 may be retained with re-ordering of some sections to bring common items together. It is also suggested to drop the section

(c)

on information on bank account and cheques for its applicability to only a few respondents and likely indifferent response. A copy of HESSEA - 3 with these revisions has been passed on to the concerned section for their consideration.

5. The suggestion made at paragraph 6 (b) of the Aide-Memoire of integrating in the main body of the questionnaire provision for collection of information on consumption of own production, does not seem possible unless the questionnaire-format is drastically revised. It is, therefore, suggested to add a separate section at the end of HESSEA - 3 as given in Annex - 2.

6. It is also proposed that HESSEA - 3 should be titled "Household, Income, Expenditure and Indebtedness, rather than "Recall Questionnaire". It is better that the heading of the questionnaire indicates the content of data to be collected rather than the manner in which it is being collected.

#### HESSEA - 4: DIARY OF EXPENDITURE

7. The design of HESSEA - 4 is in order except that spaces provided to record shop/outlet and quantity which should include unit of quantity as well are not adequate. It may, perhaps be better to draw the diary horizontally instead of vertically. The Diary is going to have some conceptual problems of having a combination of approaches and reference periods, which seems unavoidable while tackling of three distinct sets of population in large cities, other urban areas and rural areas. Ideally, the diary should be maintained by each and every spender of the household recording expenditure concurrently as and when made during the entire survey period. Operationally, such situation will be difficult to be found even in one multi-spender household in the sample. Compromising between conceptual and practical problems, the following uniform approach is being recommended: (i) In all rural areas the diary should be filled by the Enumerators only through repeated visits, uniformly spaced and as far as possible sticking to the programme of visits with three days' interval that is to be on the first, fourth, seventh and so on till the twenty-eighth day; (ii) In urban areas, either the head or one energetic young school/college going member should be picked up from the household to fill the Diary for which he or she should be remunerated in cash or in kind. This member should be requested to contact each and every spender of the household everyday and get the household expenses incurred by him or her to be recorded in the diary. The enumerator, however, should be checking the progress and assisting the household in filling the diary at three day intervals as per normal programme.

#### HESSEA - 5: HOUSEHOLD ECONOMIC ACTIVITIES

8. NSO's questionnaire on Economic activities was examined in relation to the proposed SDA questionnaire as suggested in Paragraph 6 (d) of the Aide-Memoire. Taking into account the latter and to include all receipts and expenses in kind, the questionnaire

(d)

has been expanded and streamlined. The proposed revised questionnaire is placed at Annex - 3. Information on improvement of land and buildings and purchase of plant and machinery and other assets during the last 12 months will only be collected. Information on stocks will be collected on the date of survey and not at the beginning and end of the year which will be difficult to collect since most of these units do not keep any records.

ANNEX - 1

HESSEA - 2: Household Composition, housing and other socio-economic variables/indicators.

Section - 1: Household Composition and some demographic particulars

Person Number	Name	RECORD CODES AS PER MANUAL					
		Relation-ship	Age	Sex	Marital Status	Race	Birth-Place
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

Code-lists

<u>Relationship</u>		<u>Marital Status</u> <u>(current only)</u>	
Head .....	0	Single	-1
Spouse .....	1	Married	-2
Son/daughter .....	2	Divorced	-3
Brother/sister .....	3	Widowed	-4
Spouse's brother/sister	4+		
Parents .....	5		
Spouse's parents ....	6+		
Other relatives.....	7		
Houseboy/girl.....	8		
Others .....	9		

## Section - 2: Housing conditions and particulars of dwelling unit

Item Number	Description	Code-list/Explanatory Note	Code
(1)	(2)	(3)	(4)
01	Dwelling-type	Independent detached house with solid (concrete/iron-sheets/asbestos) roof - 1; Independent detached house with thatched roof - 2; Independent non-detached house or flat - 3; sharing house or flat - 4; Others (Specify) ..... 9.	<input type="checkbox"/>
02	Type of Ownership	Owned - 1; In the process of being bought - 2; Rented (normal) - 3; Rented (subsidised) - 4; Occupied rent-free - 5;	<input type="checkbox"/>
03	Number of rooms	Count the number of room including bed-rooms, lounge or lounge cum-dining room, separate rooms (to be specified) but exclude bath-rooms, lavatories, laundry-room, corridor and pantry, store-room and rooms solely for business. Include rooms shared by other households but exclude rooms occupied solely by another household. Specify separate rooms included .....	<input type="checkbox"/>
04	Drinking Water Supply	Piped water tap inside the dwelling - 1; Piped sharing tap outside the dwelling - 2; Exclusive walled or tube-well - 3; sharing walled or tube-well - 4; No drinking water nearby - 5.	<input type="checkbox"/>
05	Bathing facilities	Bath or shower with piped water for exclusive use - 1; sharing bath or shower with piped water - 2; closed bath-room facility with no piped water but stored fetched water - 3; No bathing facility - 4;	<input type="checkbox"/>

Section - 2: (Continued from pre-paged

06	Lavatory/ Chimbudzi facilities	Flushing lavatory for sole use - 1; sharing flushing lavatory - 2; Other type of lavatory for sole use - 3; Other type of lavatory sharing with other; - 4; No lavatory/chimbudsi-5;	<input type="checkbox"/>
07	Electric- connection in the dwelling	Yes - 1; No - 2.	<input type="checkbox"/>
08	Telephone connection in the dwelling	Yes - 1; No - 2	<input type="checkbox"/>

Section - 3: Education and Health Particulars

Person Number	During last 365 days are you regularly attending school -? yes - 1; No - 2.	If yes in col. (2) the level/ form atten- ding (code)	If no, whether too young to attend - 0 left this year -1 left earlier -2 never atten- ded - 3	Highest educa- tion level atten- ded (code)	During last 30 days had any me- dical consul- tion? Yes - 1; No - 2.	If yes in col. (6) the type of consulta- tion (code)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

## Section - 4 : Activity particulars of household members

Person Number	Usual activity during last 365 days			Current activity during last 7 days		
	Status (code)	Industry (code)	Occupation (code)	Status (code)	Industry (code)	Occupation (code)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

CODES FOR ACTIVITY PARTICULARS

Too young or disabled to work	0
Student	1
Self employed-employer	2
Self employed - own account worker	3
Employer/wage Labour	4
Unpaid helper and family worker in household enterprise	5
Unemployed	6
Attending to domestic duties	7
Retired persons, pensioners, rentier etc.	8
Others	9

Notes: Children who are still too young to work or those disabled persons incapacitated to be able to do any work are to be given code '0'. Generally children below the age of 10 and persons with major disability and unable to do any kind of activity will fall into the category, but the status should only be decided after proper enquiry. Full-time students even if they sometimes help the household enterprise will be assigned code 1. Part-time or students studying privately at home but casually or regularly engaged in household enterprise or employed elsewhere will be coded as students (code 1), if by time criterion studying is considered to be the major activity. Persons who are engaged in their own farm or non-farm enterprise including hawkers, petty traders and the like are defined as self-employed. There are different kinds of self employed. Some, by and large, regularly run their enterprise by hiring labour. These are termed as employers and given code 2. There are others who operate their enterprise without hiring any labour or normally work on their own but occasionally may hire a few labourers. They are termed as Own-Account Workers and coded 5. Persons working in farm or non-farm enterprises (household, non-household or government) or in Institutions and getting in return salary or wages are termed as 'Employees' or Wage-Labour and given code 4. Wages or salary may be in cash or kind or both. Paid apprentices, both full and part-time will also be included in this category. All unpaid helpers or family workers who regularly or casually work full or part-time in

household enterprises without receiving any payment in cash or kind in return of their labour nor any share of family earnings from the enterprise are given code 5. But those household members who although do not get any salary or wage from the family enterprise but have a share in the earnings of the enterprise will be termed as self-employed and coded as 2 or 3 depending upon the enterprise hiring labour or not. Members interested in working and seeking wage employment or self-employment opportunities but not yet employed during the major part of the reference period will be considered unemployed and given code 6. House-wives or other members of the household who regularly attend to domestic and house-keeping duties without receiving any wages are to be coded as '7'. All old people retiring from work due to old age receiving pension or otherwise, persons receiving rent or income from property, living on social security benefits, or from other transfers of income and so on and not willing to work will be given code '8'. Code 9 will be given to all other categories of persons including beggars, prostitutes etc and those who do not fall in any other category.

#### INDUSTRY AND OCCUPATION CODES

For persons having activity status codes from 2 to 5, industry and occupation codes are also to be given, indicating the sector of economic activity in which the persons are working and the nature of work being performed, respectively. For persons having activity status codes 0, 1, and 6 to 9, there will be no industry and occupation codes and therefore in the respective columns (3), (4), (6) and (7) record (X) indicating not applicable.

Industry-codes (one digit only) to be recorded in column (3) and (6) given as follows which correspond to Division Codes of the International Standard Industrial Classification of Economic Activities:-

<u>Industry</u>	<u>Code</u>
Agriculture, Hunting, Forestry and Fishing	1
Mining and Quarrying	2
Manufacturing	3
Electricity, Gas and Water	4
Construction	5
Wholesale and Retail Trade and Restaurant and Hotels	6
Transport, Storage and Communication	7
Financing, Insurance, Real Estate and Business Services	8
Community, Social and Personal Services	9
Activities not adequately defined	0

(vi)

Similarly occupation-codes to be recorded in columns (4) and (7) are given as follows which have been developed from the International Standard Classification of Occupation:-

<u>Occupation</u>	<u>Code</u>
Professional, Technical and Related Workers	1
Administrative and Managerial Workers	2
Clerical and Related Workers	3
Sales Workers	4
Service Workers	5
Agricultural and Allied Workers	6
Miners, Quarrymen and Mineral Treaters	7
Production (manufacturing) and related workers	8
Transport Equipment Operators and Labourers	9
Workers not classifiable by occupation	0

For detailed explanations for the industries and occupations, corresponding U.N publications may be seen.

Two types of activities namely, Usual and Current are to be recorded for each person relating to the activity mostly carried out (major criteria by time) during the last 365 or 7 days respectively.

ANNEX - 2

Section - 10: Commodities and services consumed by the household from sources other than own purchase during the last month

Item No.	Description	Code	Unit of Quantity	Quantity consumed from				Total Value (Kwacha)
				Home grown or produced	Business Stocks	Received in kind as income	Gifts and free collection	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10.1								
10.2								
10.3								
10.4								
10.5								
10.6								
10.7								
10.8								
10.9	Others							
10.0	<b>TOTAL</b>							

ANNEX - 3

**SURVEY OF HOUSEHOLD EXPENDITURE AND SMALL SCALE ECONOMIC  
ACTIVITIES 1990/91**

**HESSEA - 5: Household Economic Activities**

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**Section - 1: Eligibility and description of primary  
and secondary small scale economic acti-  
vity/enterprise**

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1.1 Is anybody of this household self employed in manufacturing activity which is not registered under Factories Act, 1965 or agricultural and/or other non-agricultural economic activity/enterprises hiring less than 5 persons? Yes - 1; No - 2.

If no, that will be the end of the survey and no further questions should be asked, but if yes, proceed with the following questions.

1.2 Describe the main/primary activity .....

1.3 Describe the next important/secondary activity .....

Subsequent sections of the questionnaire are to be filled-in seperately for the primary and the secondary activity.

---

**Section - 2: Basic characteristics of the economic activity/  
enterprise**

---

2.1 When was this enterprise set-up or re-activated

month		year	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2 Number of months active during the last 12 months

2.3 Number of household members engaged in this activity

2.4 What was the single most important difficulty in setting/reactivating this enterprise? (Record code as per Manual)

2.5 Main source of capital in setting/re-activating this enterprise (Record code as per Manual)

2.6 Capital invested in setting/re-activating (Kwacha)

2.7 Main source of 2.6 (record code as per Manual)

2.8 Percentage share of household members in the above capital

2.9 Main source of credit during the last 12 months

## Section - 3: Number and earnings of hired labour in the enterprise \*

Item No.	Description	Men	Women	Children
(1)	(2)	(3)	(4)	(5)
3.1	Number of regular employees			
3.2	Person-days worked by regular employees			
3.3	Person-days worked by casual workers			
3.4	Cash payment to all workers (Kwacha)			
3.5	Payment in kind to all workers (Kwacha)			
3.6	Total payment (3.4) + (3.5)			

\* For agricultural crop production activity data are to be collected for the last 12 months where as for all other activities data are to be collected for the last month only.

## Section - 4: Output, transfers and sale of crops during the last 12 months for agricultural crop production enterprises

Item No.	Name of Crop	Code	Unit of Quant.	Quantity transferred as		Total Sales	
				Household Consumption	Rent, Wages, seed, feed, loans, gifts etc.	Quant.	Value (Kwacha)
(1)	(2)		(3)	(4)	(5)	(6)	(7)
4.1							
4.2							
4.3							
4.4							
4.5	Other crops						
4.6	Total						

Section - 5: Output, transfers and sale of products of other agricultural activities (Livestock including dairying, fishing etc) and manufacturing activity during the last month.

Describe the activity .....

Item No.	Description of product	Code	Unit of Quant.	Output (quant.)	Quant. Transf as		sales *	
					household consumption	rent, wages, loan, gift etc	Quant.	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.1								
5.2								
5.3								
5.4								
5.5								
5.6								
5.7								
5.8								
5.9	Others							
5.0	<b>TOTAL</b>							

\* If sales proceeds are partly or wholly received in kind, it will have to be valued at the nearest market prices.

Section - 6: Value of sales, home-consumption and other transfers of goods and services meant for sale of non-agricultural enterprises excluding manufacturing during the last month.

Description of the activity .....

Item	Description of main items	Code	Total value in kwachas of		
			Sales	Home consumption of items meant for sale	Transfers for rent, wages etc
(1)	(2)	(3)	(4)	(5)	(6)
6.1					
6.2					
6.3					
6.4					
6.5	Other Items				
6.6	<b>TOTAL</b>				

Section - 7: Other receipts of the enterprise - agricultural or non-agricultural

Item No.	Type of receipt in cash or in kind	Amount (Kwacha)
(1)	(2)	(3)
7.1	Services rendered to others	
7.2	Resale of goods	
7.3	Other receipts (specify) 1. ....	
7.4	2. ....	
7.5	3. ....	
7.6	<b>TOTAL</b>	

Section - 8: Value of inputs other than hired labour of both agricultural and non-agricultural activities

Description of activity .....

Item	Description of inputs	Value of Inputs (Kwacha)	
		Crop-production activity during last 12 months	Other agriculture non-agricultural activity during last one month
(1)	(2)	(3)	(4)
8.01	Agricultural seeds and seedlings		
8.02	Animal, poultry and fish feed		
8.03	Fertilisers		
8.04	Raw materials for processing		
8.05	Explosives, chemicals, etc.		
8.06	Water, electricity, fuel and lubricants		
8.07	Goods for re-sale		
8.08	Other materials and supplies		
8.09	Transport, storage and communication		
8.10	Rent, interest, brokerage, commission etc.		
8.11	Other miscellaneous costs		
8.12	<b>TOTAL</b>		

Section - 9: Value of stocks as on the date of the survey with the enterprise

Description of enterprise .....

Item No.	Type of stock	Value in (Kwacha)
(1)	(2)	(3)
9.01	Agricultural seeds, animal, poultry feeds etc	
9.02	Fertilizers, chemicals, explosives	
9.03	Raw materials for processing	
9.04	Fuels and lubricants	
9.05	Other materials and supplies	
9.06	Agricultural crop - proceeds	
9.07	Livestock and poultry	
9.08	Finished products of other agricultural and non-agricultural activities	
9.09	Work-in-progress	
9.10	Goods for re-sale	
9.11	TOTAL	

Section - 10: Purchase of assets during the last 12 months

Item No.	Description	Value in (Kwachas)		
		New	Second-hand	Total
(1)	(2)	(3)	(4)	(5)
10.1	Land improvement			
10.2	Other land, buildings and construction			
10.3	Plant and machinery			
10.4	Transport equipment			
10.5	Office equipment			
10.6	Others			
10.7	TOTAL			

Codes for difficulties in establishing/  
setting/restarting the economic activity/  
enterprise

No difficulty	- 1
Capital/Credit	- 2
Technical know how	- 3
Government regulation	- 4
Transporting/Marketing	- 5
Others	- 9

Main source of capital in setting/re-  
starting the activity

Household savings	- 1
Loan from bank	- 2
Loan from Government agency	- 3
Loan from relatives/ friends	- 4
Rotating savings/ credit group	- 5
Other loans	- 6
Others (specify)	- 9

Source of credit for the enterprise  
during last 12 months

Bank	- 1
Other financial agency	- 2
Cooperative	- 3
Money lender	- 4
Relatives/Friends	- 5
Rotating savings/ credit group	- 6
Others (specify)	- 9
No credit used	- 0

### ANNEX - III

#### Definition of Large, Medium and Small Scale Economic Activity

Before HESSEA, 1990-91 is started, it is essential to define small scale economic activity precisely, otherwise there will be problem of coverage in the field as well as of estimation while processing of data. It is true that the users currently have economic data relating to large-scale establishments only covered by NSO's 'Annual Economic Survey' and therefore are anxious to have information relating to residual universe not covered by the Economic Survey. For statistical purposes and to build up estimates for the total economic activity of the country through establishments/households, it is proposed to divide the activity into three exhaustive but mutually exclusive compartments namely: Large-Scale, Medium-Scale and Small-Scale. The definition and coverage of large-scale should be the same as one followed by NSO to include establishments in the Annual Economic Survey for which precise up-dated lists are available. The small-scale sector should cover units (households or establishments approached through households) employing less than 5 persons (i.e. 0 to 4). This sector only should be covered through HESSEA, 1990-91. All the remaining units not covered by large or small-scale will be termed as Medium-Scale and should be surveyed separately (as early as possible) after up-dating the lists and ensuring its complete coverage as per definition, already being maintained by NSO in their Business Register. The survey of medium-scale units should be an establishment survey on similar lines as large-scale but on a sampling basis.

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