AGRICULTURAL PRODUCTION AND CONSUMPTION SURVEY

(30th September - 19th October 1991)

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Contents

5. Personnel and Physical Arrangements

5.1 Personnel
5.2 Time-table
5.3 Physical Arrangements

6. Costs of the survey

6.1 The Costs
6.2 Discussion

7. Statistical Analysis and Reliability of the Results

7.1 Statistical Analysis
7.2 Reliability of the Results

8. Tables

8.1 Area per crop per farmer by region (in square metres)

8.2 Estimated area for each crop for each region (in square metres)

8.3 Number of plants per farmer by region

8.4 Estimated number of plants for each region

8.5 Type of water drunk against method of treatment

8.6 Type of toilet used for each region

8.7 Type of fuel used for each region and total firewood used per household per month for each region

8.8 percentage of households having a radio, electricity, a refridgerator, or a TV.

8.9 Income in Rufiah per household per month by type of activity, and split for farming and non-farming households

8.10 Age, Height and Weight of children in households surveyed

8.11 Percentage of the food, by type of food, that is brought from Male'

8.12 Amount of food consumed per person per day for each region

Appendices

Chapter One

1. Introduction

1.1 Maldives

The Maldive islands are located in the Indian Ocean, at latitude 73 degrees East and from half a degree South of the Equator to seven degrees North. They are approximately 700kms South East of Sri Lanka. There are over 1,200 islands. Two hundred and two islands are inhabited. The remaining islands are uninhabited and are leased to individuals for a variety of purposes. Some sixty five uninhabited islands have tourist resorts on them, and most of the rest are used to grow coconut palms. Total land area is estimated to be 150 square kilometres. The islands are divided into 17 geographical atolls and 19 administrative atolls.

The population in 1990 was 214,000 of whom 56,000 lived in Male'. The Gross Domestic Product per capita was approximately 430 US Dollars. Between 1986 and 1990 the population increased at 3.5% per annum, and GDP increased at 8.8% per annum. The Maldives is on the United Nations list of Least Developed Countries and receives between 20 and 30 million US Dollars per year in aid. Government expenditure was about 60 million US Dollars in 1989.

The major sectors in the economy are tourism, distribution and fishing. Tourism accounted for 18.3% of GDP in 1990, distribution for 17.3% and fishing for 15.2%. If we use the usual three category system of primary, secondary, and tertiary sectors the economic situation becomes clear. In 1990 the primary sector accounted for 26.1%, the secondary sector for 14.1% and the tertiary sector for 59.8% of GDP. The economy is heavily dependent on service industries and is lacking a deep manufacturing base.

The language is Dhivehi which is also spoken in the Lacadive islands which are just North of the Maldives and are part of India. Dhivehi has been influenced by many other languages but it appears to be based on Sinhalese. Islam is the state religion and the country is one hundred per cent Muslim. In 1990 the Functional Literacy Rate was 95.4% for those aged between 15 and 45.

1.2 Agriculture

Agriculture in the Maldives faces major constraints. These include a lack of land suitable for agriculture, uneven distribution of this land within the country, rudimentary farming practices, irregular and costly transport between the islands, and a land tenure system that does not encourage investment in

the land.

Coconuts are the major crop, and provide food, drink, and also thatch, mats, and fuel. But the yield from the country's one million coconut palms is low because of poor genetic stock, close planting, lack of care, and damage by pests. Other crops grown include bananas, chillies, cassava, taro, papaya, water melon and papaya. These tend to be either low maintenance crops or crops that are grown in the backyard of the household. Most of the crops that are produced are transported to Male' and sold.

In recent years the Government has tried to increase coconut production with a pest control programme. This has included rat, fruit bat, and crow control and biological control of rhinocerous beetle and whitefly. There have also been attempts to improve farming practices and the quality of the home gardens. The latest programme began at the beginning of 1990 and is run by the United Nations Development Programme (UNDP). At the moment this is concentrating on eight islands where agriculture is a major activity, and is aiming to improve farming practices, and the genetic stock of the crops.

Agriculture declined from 11.7% of GDP in 1986 to 9.1% in 1990, according to estimates by the Ministry of Planning and Environment (MPE). The sectors value added increased from Rf 76 million in 1986 to Rf 85 million in 1990. But this growth was exceeded by other sectors in the economy and so agriculture's contribution to GDP declined. However, it must be emphasised that these figures are only indications of the true state of affairs as reliable statistics are not available. At present many of the figures are estimated by guessing fruit and vegetable consumption patterns in the country and hence estimating production figures.

1.3 Agricultural Production and Consumption Survey

The agricultural production and consumption survey followed a visit to the Maldives by an FAO consultant, Generoso Guzman, in December 1988. He proposed a number of improvements to the agricultural statistical system, including conducting a baseline survey of agricultural production. I arrived in the Maldives in May 1990 to help conduct the survey and implement the changes to the statistical system which he had recommended.

In June 1990 Mohammed Rasheed returned from eight years at the American University of Beirut as a qualified nutritionist, and came to work at the Ministry of Fisheries and Agriculture. A food consumption survey was designed and was going to be done in conjunction with the Department of Public Health in December 1990. However, this survey was not conducted because of a shortage of money.

The statistics available for calculations of the agricultural sectors contribution to the economy's GDP are very scanty. MPE has wanted to gather more information on agriculture for some

time, but it has not had a high priority.

In August 1991 it was decided to conduct an agricultural production survey. At the same time it was decided to make use of the interviewers to do the food consumption survey planned for December 1990 in the evenings. When MPE was approached they asked that a questionnaire of theirs on agriculture's contribution to GDP should be included. They would design the questionnaire and analyse it. They would also enter the data from the other sections of the survey and produce the necessary tables.

This meant that the interviewers were very busy while on the survey, but it was the only opportunity to collect information in these areas, and it was important to make as much use of this as possible. There was little overlap during the survey as the production and GDP questionnaires had to be conducted during the day and the food consumption questionnaire in the evening after the evening meal had been prepared.

Chapter Two

2. Purpose of the Survey and Area surveyed

2.1 Aims of the survey and use of the results

The survey was in three distinct parts each with a separate aim:

a) The aim of the agricultural production survey was to discover the size and content of the agricultural holdings of households that undertake agriculture. The UNDP project will supply estimates of crop yields in the islands and with these it will later be possible to estimate the crop production in the islands. This will give baseline data for future comparisons.

b) The aim of the food consumption survey was to discover how much food of different varieties was consumed on the islands. With estimates for the food consumed in the islands and in Male' and with figures for the food imported into the country it will be possible to make another estimate of crop production.

c) The aim of the MPE questionnaire was to improve the estimates of the contribution made by the agriculture sector to GDP.

2.2 Area and Population Surveyed

The area surveyed consisted of the 30 agricultural islands of the Maldives (see list in appendix C (??)). From this information it is possible to form estimates for the agricultural production and consumption of all the islands, although non-sampling errors are introduced which are impossible to quantify. Qualitatively, it would seem that the inaccuracies in the agricultural production survey will not be too severe if production is assumed to be negligible on non-agricultural islands. But the food consumption survey is likely to be significantly biased for non-agricultural islands.

Originally the area and population to be surveyed were the whole of the Maldives except Male'. A random sample of islands were to be selected from the list of agricultural islands and a second smaller sample from the list of non-agricultural islands. From each island chosen some farming households and some non-farming households were to be interviewed. From this it would be possible to get estimates of the agricultural production and food consumption for the atolls of the Maldives.

Later this sampling scheme had to be modified because of a

shortage of interviewers and of time on the islands. As the agricultural production survey was of primary importance it was decided to concentrate just on agricultural islands as almost all the production in the atolls is expected to come from these 30 islands. This cannot be quantified because no figures exist but as resources were so limited it seemed best to concentrate on those islands that were known to do a lot of agriculture. Agricultural production from non-agricultural islands is assumed to be negligible.

This sampling scheme is fine for the agricultural production survey and for the GDP survey but it is not good sample for the food consumption survey. It is likely that islands that grow vegetables eat more than islands that do not. This means that by restricting our sample to agricultural islands only we probably have a significantly biased sample for the food consumption survey. However, all we can do with the available data is to suppose that non-agricultural islands consume the same food as agricultural islands.

Chapter Three

3. Information Collected and Questionnaires

3.1 Introduction:

The questionnaires used in the survey were written in English and then translated into Dhivehi before being formatted and printed. Four questionnaires were used. Two related to Agricultural Production and two related to Agricultural Consumption.

I The first questionnaire was concerned with the farming household's fields and plants, and was designed to give a complete record of the agriculture done by the household.

II The second questionnaire was designed by the Ministry of Planning and Environment. It looked at the economic activities of the households interviewed and replaced a farm management section in the above questionnaire. It is going to be used to improve the quality of the statistics in the Agricultural GDP calculations.

III The third questionnaire was in two parts. The first part looked at the social and economic background of the households interviewed, and the second part recorded the source of the food the households used.

IV The fourth questionnaire recorded the food consumed by the household for three consecutive days using 24 hour recall. The person responsible for the cooking was interviewed each evening and the total food prepared for the household during those three days was recorded.

A copy of the first and second questionnaires was filled in for each farming household interviewed, so three copies of both forms were filled in on each island. A copy of the third and fourth questionnaires was filled in for both the farming and non-farming households interviewed in the Agricultural Consumption survey, so six copies of both forms were filled in on each island.

3.2 Agricultural Production Questionnaire (form I)

3.2.1 Description

An English copy of the Agricultural Production Questionnaire is enclosed in Appendix A. There are four sections in the Agricultural Production Questionnaire, each on a separate page.

These are a cover sheet, a backyard form, a scattered plants form, and a field form. To link the four forms a unique number was given to each farmer, and this number and the farmer's name are recorded on each sheet of the completed questionnaire. The Agricultural Production questionnaire took anything from half an hour to three or four hours to complete, depending on the amount of agriculture done and the distances to the fields.

a) **The cover sheet** records the atoll, island, farmer's name and the farmer's number. It then lists the number of sections filled in, so that none are lost. Finally, the names of the interviewers, the supervisor and the person responsible for data entry are recorded on the cover sheet. One cover sheet is filled in for each farmer.

b) **The backyard form** is filled in for the farmers backyard if he has one or more. It records the farmer's name and number at the top. If the farmer has two backyards there is a space for a backyard number. There is then space for a sketch of the part of the backyard under cultivation including its measurements, so that the area under cultivation can be calculated. The area is recorded in the box provided. Finally, all the plants present in the backyard are listed, coded, and the number of each type recorded. The coding and the area calculation were done in Male' after the survey was completed. One backyard form is filled in for each backyard cultivated by the farmer. This can be none, one or more.

c) **The scattered plant form** records the plants owned by the farmer which are not in field plots. It has the farmer's name and number at the top. The main part of the form records the plant code, the plant name, the number present, the spacing between plants and whether or not the plants were in beds. There is room for 24 different types of plants. The coding was again done in Male' after the end of the survey. One copy of this form was filled in if any plants were present. Otherwise none were filled in.

d) **The field plot form** is filled in for each homogeneous field plot. The farmer's name and number are recorded at the top of the form, and the field number as each farmer may have many plots. The type of crop, its age, spacing and code are next recorded. Space is provided for three different crops in cases of inter-cropping. The length and bearing of the sides of the plot are then recorded. Some approximation is needed here as in general the plots do not have straight sides. Twenty five metre tapes and hand held compasses were used to take the measurements. The hand held compasses were only accurate to five degrees so error is present there as well. The length measurements were taken to the nearest centimetre so the error is negligible. The area of the plot was calculated from these measurements, using standard equations (eg see FAO manual "Calculating Agricultural Areas and Yields" published in 1982). Any extra plants present in the field are recorded in the next section, for example trees in the middle of a Taro bed are recorded here. At the top a space was

provided to record whether the field is nested within another field. Nested fields are small fields completely contained within larger ones. If this happens the area of the smaller field must be subtracted from the area of the larger field. However, this did not occur in the sample taken. None, one or many field plot forms may have been filled in for each farmer. One farmer had 18 field plots, but most had less than four or five.

3.2.2 Modifications in case of future use

The questionnaire could be simplified. The field plot form does not need to have a list of extra plants. These could be put in the scattered plants form. The printed field plot forms were incompletely translated, so that the field number and nested fields boxes were not marked. The scattered plants form could be simplified by removing the "plant spacing" and "beds (Yes or No)" columns.

3.3 MPE Farm Management and GDP Questionnaire (form II)

3.3.1 Description

An English copy of the Farm Management and GDP form is enclosed in appendix A. The Farm Management form is in six parts, all were asked at the same time and the whole questionnaire took approximately half an hour to complete. This questionnaire looks at the economic role of agriculture in the Maldives, and in particular its contribution to the Gross Domestic Product of the country.

a) part I asks what sort of agriculture is done. For example, coconut production, horticulture, livestock etc.

b) part II asks about the people who work on the farm. How many there are from the house hold or from outside and how much they are paid.

c) part III has a detailed break down of the crops grown and the earnings from them over the last month. Seasonal crops earnings were placed in the same column, which lead to some confusion.

d) part IV looks at the livestock held on the farm. The type of animals kept was asked and then the number kept for breeding, the number born that year, the number that had died, the number sold etc. The earnings were also recorded. Finally, the number of eggs collected over the last month was recorded, and the way they were used.

e) part V asks about agricultural inputs and the transport of goods to market. The total money spent on agricultural inputs last year was recorded and the number of times goods were sent to Male'.

f) part VI asks about the money borrowed for agricultural purposes. It asks for the amount if any borrowed and where it was borrowed from.

3.3.2 Modifications in case of future use

There were some problems with part III of the questionnaire. The analysis of the earnings will be complicated because the earnings of the last month was recorded for most crops but the earnings for the last season was recorded for seasonal crops. This will be possible to overcome in the analysis but will be difficult and need not have arisen. In part IV there is no provision made for farmers which keep two types of livestock, for example goats and chickens. A lot of the farmers found it difficulty to answer the questions on livestock management for their chickens. Terms such as "breeding stock kept from last year" did not relate to their ususal practices, which were more haphazard than this term suggests.

3.4 Household Backqround Questionnaire (form III)

3.4.1 Description

An English copy of the household background questionnaire is enclosed in appendix A. This questionnaire gathers information on the socio-economic background of the houses interviewed in the Food Consumption survey, and also asks where the food eaten by the household comes from. This information would enable the sample to be stratified according to the household's socio-economic background. Unfortunately, the sample size is too small for this to be practical. It is in three parts, and takes approximately 20-30 minutes to complete.

a) part I asks where the drinking water comes from, and how it is prepared, what the toilet facilities are, what fuel is used for cooking, and how much firewood was used last month. Then it asks whether or not the house has electricity, a radio, a television, or a refrigerator. The materials used to build the house are then recorded. This section then asks about the people of the house who work and their earned income. Activities are coded according to the ILO recomendations.

b) part II is a table for all the children in the household

aged less than two years old. Age, weight, height and details of any sickness in the last two weeks are recorded.

c) part III asks where the food used in the house during the past month has come from. 85 types of food are listed in twelve groupings. It is recorded whether the food was bought in Male', the island, bartered, or a gift.

3.4.2 Modifications in case of future use

The coding used in part I for the occupations of household members was not ideal. The coding was too generalised for the specialised nature of work in the islands of the Maldives. A more relevant coding system, keeping the possibility of international comparison with ILO categories, should be used in future. It was originally intended to measure all children aged less than five, but the weighing machines available could only weigh children less than two years old. So the sampling was modified accordingly. In future it would be useful to include children up to five years old if suitable weighing machines could be found. Some items were missing from the list of foods in part III. In particular water melon was not present although it is grown on many islands, and curry powder and a type of curry leaf, ramba fai, were left off although they are often used.

3.5 Food Consumption Questionnaire (form IV)

3.5.1 Description

An English copy of the food consumption questionnaire is enclosed in appendix A. A copy of this form was filled in for all six households interviewed on each island. It asks about all the food prepared in the house during the three days that the interviewers were on the island. The person responsible for the cooking was interviewed on three successive nights after the sunset prayers. There are three parts to the questionnaire, and the whole interview takes approximately 15-30 minutes every evening.

a) the first part asks for the name of the interviewee, their relation to the head of the household, how long they have been in charge of the cooking, and how many people had breakfast in the house on the first day.

b) the second part is a list of ingredients of typical dishes prepared on the islands. There are three columns spread over two open pages. One column for each day of the interview period. Within each day-column there are sub-columns for each meal. The rows are for types of food. Each type of food has a code number (the same as that used

in part III of the background questionnaire), and a units number. Possible units are individuals (eg onions are measured in individuals); cups (eg sugar is measured in cups); or table spoons (eg salt is measured in table spoons). The number of units used is filled in for each meal column. Different types of food are grouped together so that the ingredients of the usual dishes prepared on the islands are all in one place. For example, if curry was prepared for lunch all the possible ingredients are together, so that recording the food used is easier. Types of food are repeated in different dishes so that, for example, fresh tuna fish appears five times.

c) the third part is a list of all the different types of food recorded. This part is used when a dish is prepared which is not on the second part of the questionnaire or when the list of ingredients is not complete.

3.5.2 Modifications in case of future use

The list of different types of food should be updated to include the three items mentioned in the third questionnaire. The units used for measuring quantities of food were not always familiar to the respondents. It is difficult to see how this could be modified though as the usual units of measure vary from island to island, or even from day to day. For example, tuna is usually measured in pieces (ie fillets). So the size of a piece of tuna varies from fish to fish. Some account must be made of this and in the survey it was measured in cups. Measuring fish by volume was not entirely satisfactory but there is no clear alternative. However one easy modification which would be useful would be to replace the unit of cups by the more usual measure of "laahi". This is in common use in the islands. One laahi = half a pint (approx). Two more difficult problems for the interviewers arose from the length of the questionnaire. The list of menus took four pages and the list of different types of food took a further two and a half pages. This meant that looking through the questionnaire for the menu and the type of food wanted took a long time until the interviewers knew the form well, and even then it was not easy. Secondly, the fact that food items occured many times on the form in different menus was confusing. The advantages of having all the ingredients of a dish in one place was outweighed by these two disadvantages. It would have been better to have just one list of the different types of food, and have a separate card with a list of menus for the interviewers to use as a prompt when completing the questionnaire. These problems with the length of the questionnaire were exacerbated by the layout and printing. The layout was designed to have three columns spread over an open double page, but the form was printed onto only one side of paper. This made filling the form in very difficult as for each day alternate pages had to be turned to, and the questionnaire was thirteen pages long.

Chapter Four

4. The Sampling Procedure for the Survey

4.1 Agricultural Production Survey

4.1.1 Agricultural islands

There are large differences in the agricultural practices of the islands of the Maldives, because of factors such as availability of land, ease of transport to Male', access to fishing grounds and collector vessels, as well as cultural traditions. In the past the islands have been divided into two groups: agricultural islands and non-agricultural islands. It was therefore decided to stratify the sample according to this division. There was already a list of agricultural islands, but on inspection it was found to be out of date, so a new list was prepared by MPE with the data from the 1990 census. The definition used for an agricultural island was that:

a) there were at least ten farmers;
b) more than 10% of the economically active population were farmers.

There were 30 islands on the list, a copy of which is included in Appendix C.

4.1.2 Original Sample Scheme

The original sampling scheme proposed would have visited 4 agricultural islands and 2 non-agricultural islands in each of three regions. On the agricultural islands 6 farmers and 2 non-farmers would have been interviewed. On the non-agricultural islands 6 non-farmers would have been interviewed and 2 farmers if there were any farmers. Each farmer would take up to a day to be completely enumerated, depending on the number and size of the fields cultivated, and at least two interviewers would be needed. Five people - two pairs of interviewers and a supervisor - would make up each team, and would spend approximately three days on each agricultural island and two days on each non-agricultural island. The total time for the survey would be roughly three weeks, twelve days on agricultural islands, four days on non-agricultural islands and four or five days travelling. Altogether, 15 people would be needed for three weeks for the survey and a week before hand for training and organisation.

4.1.3 Modifications to the Sample Scheme

However, it was then decided that only nine people would be available to do the survey and that the survey should take at most two weeks. We could either have three teams with only three people in each, or change to two teams with four people. If we had used two teams the transport costs would have gone up dramatically. We would no longer have been able to fly and take local dhonis, but would have had to hire yacht dhonis from Male' to cover the greater distances in each teams area. This would have taken much longer and it would have been difficult for each team to visit six widely seperated islands in two weeks. So three teams of three people were used.

There are much greater differences in agricultural practices between islands than within them, so it was decided to halve the number of farmers interviewed on each island rather than reduce the number of islands visited. But even so there would not be time to visit non-agricultural islands.

This meant that each team visited four agricultural islands and interviewed three farmers on each island. The team would spend two and a half days on each island and half a day travelling to the next. So ten days would be spent on the islands and two days travelling between them. Two days would be spent travelling to and from Male'. A total of fourteen days.

4.2 Agricultural Consumption Survey

This part of the survey had to take second place to the Production side when the sampling was decided. Six households could be interviewed every night by the three people in the team. The three farming households chosen for the Production survey were interviewed and a further three non-farming households were interviewed. On one island, Gaaf Dhaalu Vaadhoo, there were no houses which did not do some agricultural work so there three more farming households were interviewed.

4.3 Sample Islands Chosen

4.3.1 Introduction

All the islands with more than 100 farmers were selected. There were five such islands:

Shaviyani Feevah;
Kaafu Kaashidhoo;
Alifu Thoddoo;
Laamu Isdhoo;
Gnaviyani Foammulah.

One of the biggest expenses of the survey was transport and to minimise this the islands were divided into three regions - the Northern, Central and Southern regions - and one team of interviewers sent to each region. The Northern region went from Haa alifu atoll to Baa atoll; the Central region went from Kaafu atoll to Thaa atoll; and the Southern region went from Laamu atoll to Addu atoll.

Four islands, including those already chosen, were visited in each region. This made a total of 12 agricultural islands, of which five had been chosen.

It was convenient to have the same number of farmers interviewed on each island. This meant that in order to avoid a biased sample the probability of an island being selected had to be proportional to the number of farmers on the island. This was done with random number tables in

> Sampling Methods for Censuses and Surveys (4th ed.), by Yates.

The detailed sampling breakdown is shown below.

4.3.2 Northern Region

Shaviyani Feevah had already been selected so three other islands had to be selected. There were 268 farmers in the remaining islands in the region. The random numbers were 56, 51, 217 and 108. 51 was ignored as an island can only be selected once.

The islands selected were:

Shaviyani Feevah;
Haa Alifu Filladhoo;
Haa Alifu Baarah;
Shaviyani Foakaidhoo.

4.3.3 Central Region

Kaafu Kaashidhoo and Alifu Thoddoo had already been selected so two other islands had to be selected. There were 223 farmers in the remaining islands in the region. The random numbers were 203, and 171.

The islands selected were:

Kaafu Kaashidhoo;
Alifu Thoddoo;
Dhaalu Kudahuvadhoo;
Thaa Vandhoo.

4.3.4 Southern Region

Laamu Isdhoo and Gnaviyani Foamulah had already been selected so two other islands had to be selected. There were 421 farmers in the remaining islands in the region. The random numbers were 235, and 337.

The islands selected were:

Laamu Isdhoo;
Gnaviyani Foamulah;
Gaafu Dhaalu Gadhdhoo;
Gaafu Dhaalu Vaadhoo.

4.4 Sample Households Chosen

Three farming and three non-farming households had to be chosen on each island visited. Each island office should have a list of all the people on the island who have been allocated land for farming. Three people are chosen from this list as follows:

> The total number of people on the list is divided by four and the nearest whole number recorded. Call it X.
>
> The farmers with numbers X, 2X, and 3X are chosen.
>
> If for some reason one of the households above is not suitable (for example, there may not be anyone on the island) then the next farmer on the list is chosen.

Three non-farming households are chosen from the list of all households on the island in the same way. If one of the households is a farming one then it is rejected and the next household on the list chosen. On Vaadhoo there were no non-farming households and so there was no choice but to choose three extra farming households.

On some islands the list of farmers was out of date or non-existent. Then three households were chosen from the list of households on the island. The first farmer on the list after the number selected was chosen. The non-farming households were chosen in the normal manner.

4.5 Problems with the sampling scheme chosen

Choosing all the agricultural islands with more than 100 farmers made the analysis of the data much more difficult than if the islands had been chosen at random from the three regions. It would have been difficult to form a true picture of agriculture in the Maldives without visiting some of these islands (notably

Foamulakh), but with such a restricted sample size it is not desirable to sub-divide it into small regions. For a survey of the size conducted it would have been better to split the agricultural islands into three regions and then simply select islands at random within each region. A qualitative comment on the larger islands could have been included as an appendix to such a survey. Unfortunately, this was overlooked when the sample size was reduced. Estimates have had to be made seperately for each of the large islands, and for the remaining islands in the three regions. This in turn means that the sampling error was high, and the final estimates are less reliable than if the larger islands had not been selected automatically.

Chapter Five

5. Personnel and Physical Arrangements

5.1 Personnel

A list of the nine people who took part in the survey is included in appendix D. An employee of the Ministry of Fisheries and Agriculture headed each team of three people. Two of the team heads were fisheries field officers, and one a trainee agricultural officer. For the remaining six people on the team there was one more fisheries field officer; a clerk, a secretary and a statistician from the Statistics Section; and one person from each of the Ministry of Atolls Administration and the Ministry of Planning and Environment.

Only one of these people had any formal qualifications in agriculture and for most of them it was the first time they had dealt with it. Indeed for two of the interviewers it was the first time they had worked in the islands at all. When the survey was originally proposed some of the six agricultural officers were going to take part. They have experience of the agriculture in the islands, and the living and transport conditions there. However, none were available when the survey was done so people without much knowledge or experience had to do the interviewing.

The interviewers who conducted the survey did very well in the difficult circumstances outlined above. Everyone did their best and the survey results are entirely due to their dedication to the task.

5.2 Time-table

A detailed time-table is included in appendix E. A pre-design trip had been carried out to Laamu Isdhoo in August/September 1990. There the agriculture of the Maldives was observed and the approximate form of the survey decided upon. A day trip was made to Kaashidhoo in Male' atoll on the 7th of September to test the questionnaires. MPE leant their speed boat and the journey took two hours there and two hours back. On the island two households were interviewed. Following this trip the questionnaires were finalised.

On the 23rd of September the survey itself started with all the interviewers going to Nilandhoo in Faafu atoll for the interviewer training. The boat trip from Male' to Nilandhoo took a whole day. The training for the agricultural production survey and the GDP contribution questionnaire was carried out on the 24th of September. The training for the food consumption survey

was carried out on the 25th of September. On the 26th of September we returned to Male'.

On the 30th of September the first team left for the islands. By the 16th of October the last team was back in Male' and the interviewing was finished. The MPE Computer Centre were running a course for the whole of November and so the data was entered into the computers during the first two weeks of December. The final tables were produced on the 25th of January 1992. The report was completed by the 1st of February.

5.3 Physical Arrangements

Most of the arrangements for the teams were made by the island offices. When the teams arrived on an island the island office arranged accomodation and food. They helped to arrange transport to the next island, which was normally by fishing boat. They also introduced the team to the households to be interviewed. The Ministry of Fisheries and Agriculture booked the flights for the teams travelling to and from Male', and arranged yacht dhonis for the interviewer training and the trip to interview the households on Kaashidhoo.

Chapter Six

6 Costs of the survey

6.1 The Costs

Trip to test questionnaires

food allowance for 8 people for 1 day: Rf 395
transport: free
total: Rf 395

Training

food allowance for 9 people for 4 days: Rf 1,690
yacht dhoni for 4 days: Rf 5,600
Total: Rf 7,290

Southern team

return flights to Gan: Rf 4,400
food allowance for 15 days: Rf 2,175
boat hire: Rf 9,800
miscellaneous: Rf 2,250
total: Rf 18,625

Central team

flight to Kahdhoo: Rf 1,050
food allowance for 15 days: Rf 2,175
boat hire: Rf 9,800
miscellaneous: Rf 2,250
total: Rf 15,275

Northern team

return flight to Hanimadhoo: Rf 2,100
food allowance for 15 days: Rf 2,175
boat hire: Rf 9,800
miscellaneous: Rf 2,250
total: Rf 16,325

Equipment

stationary and miscellaneous equipment: Rf 3,825
printing the questionnaires: Rf 1,280
total: Rf 5,105

Total costs

transport: Rf 42,550
food allowance: Rf 8,610
miscellaneous: Rf 11,855

GRAND TOTAL: Rf 63,015

6.2 Discussion

The US Dollar / Maldivian Rufiah exchange rate is approximately

US $ 1.00 = M Rf 10.50

So the survey cost approximately US $6,000. There were extra costs, notably the salary for the nine people involved for the three weeks of the survey (including the training), and the costs of analysing the data. But these are fixed costs and would only add an extra M Rf 5,000 to M Rf 10,000 to the total cost. On the other hand some of the money above was not spent and was returned to the Ministry but no figures are available. Furthermore, much of the stationery remained unused or could be reused. For example, three suitcases were bought for the teams going to the islands and these will be used again.

However, costs were not the limiting factor in this survey. The major problem was the shortage of man power. Transport was more than two thirds of the total cost and this would have been almost unaffected by increasing the time on the islands or the number of people travelling. This is because the air fares were small compared to the cost of dhoni hire between islands, and they would have stayed the same no matter what the size of the teams. The cost of the food allowance would, of course, increase in line with the size of the team.

For these reasons it would have been fairly cheap to increase the sample size if more people had been available. In any future survey it would very desirable to do this if possible. However, in the short term it is unlikely that the man power shortage in the Maldives will improve.

Chapter Seven

7 Statistical Analysis

7.1 Description

The survey was a base line study to provide information for future comparison. This means that the statistical analysis is very simple and mostly a question of tabulation. Furthermore, the sample size was too small for stratification of the sample after the survey was completed. However, producing the tables takes a lot of work.

First, the questionnaires were sorted into order in Male', and the Agricultural Production Questionnaire (form I) was coded for input into the computer. At the same time MPE Computer Centre wrote programs to enter the data from the questionnaires into the computer. MPE took the copies of their questionnaire (form III), and hope to finish the analysis in May as they now have another survey on hand.

Secondly, the data was fed into the computer. The data was first stored in a database system, Foxpro. Eight seperate database files were needed to store the data from the three questionnaires analysed so far. The Agricultural Production Questionnaire (form I) needed a seperate file for each sheet and the Field form was split into two parts: the data on the sides was put in one file and the rest of the data in another. The Household Background Questionnaire (form III) was split into two parts by putting information about the source of food into a different file. The Food Consumption Questionnaire (form IV) was put into one file.

Finally, the tables were produced. Some were produced with the Tables module of the statistical program SPSSPC. The rest were produced by writing programs in Foxpro. When this was done the results were copied into a Lotus 123 spreadsheet and the output was produced using Allways.

The MPE Computer Centre did a lot of work on this and deserve much thanks for completing a difficult task on time and with very little trouble. Saleem, in particular, should be mentioned as he helped design the questionnaires, and wrote the Foxpro programs for entering the data and producing the tables that were needed. Those who entered the data also did a good job and very few entry errors were found when the data was checked.

Estimations of the total area under cultivation and the total number of plants being grown in farming households have been calculated in two ways. The first is the correct way in which the different regions are seperated and sub-totals calculated for each and the total of the sub-totals gives the total estimate. The second way is to treat the whole sample as a random sample of 36 farmers from all the agricultural islands of the Maldives.

This is certainly a biased sample but the results generated in this way may be just as informative as those generated by the proper method when the sample is as small as this one. The sample fraction in each region is roughly the same so the biases should not be too large. Both estimations are shown and maybe with further information it will be possible to decide which of these is better.

7.2 Reliability of the Results

It is very difficult to estimate the reliability of the results of a small survey of this kind where little previous information is available. An additional problem is that the sample has to be split into very small sub-samples, some with only three members, for the estimation process. There is a lot of variation within the samples and sub-samples. For example, some farming households grow a lot of Sweet Potato and others on the same island grow nothing but Taro. Giving 90 percent confidence limits would be ideal but with such small samples the results would be of no interest as the bounds would be so wide. In the absence of anything quantitative of that nature it is very difficult to know what to say about the results. They will comparisons to be made when any further surveys in this field are done, and provide base-line data at the moment for any who may be interested.

Chapter Eight

8. Tables

8.1 Area per crop per farmer by region (in square metres)

8.2 Estimated area for each crop for each region (in square metres)

8.3 Number of plants per farmer by region

8.4 Estimated number of plants for each region

8.5 Type of water drunk against method of treatment

8.6 Type of toilet used for each region

8.7 Type of fuel used for each region and total firewood used per household per month for each region

8.8 percentage of households having a radio, electricity, a refridgerator, or a TV.

8.9 Income in Rufiah per household per month by type of activity, and split for farming and non-farming households

8.10 Age, Height and Weight of children in households surveyed.

8.11 Percentage of the food, by type of food, that is brought from Male'

8.12 Amount of food consumed per person per day for each region

Area per crop per farmer by region.

(in square metres)

Code	Crop Name	Region								Sample
		North	Central	South	Feevah	Kaashidhoo	Thoddoo	Isdhoo	Foamulakh	
1	Sweet Potato	0.13	17.95	172.03	0	1.58	0	378.84	582.75	111.96
2	Cassava	0	0	0	0	0	0	162.86	0	13.57
3	Taro	0	0	572.81	0	0	0	30.69	0	98.03
4	Chillies	0	90.72	0	0	0	0	0	0	15.12
10	Pumpkin	55.12	26.86	0	0	35.81	0	707.21	0	35.24
12	Curry Leaf	0	0	0	9.24	0	0	0	0	0.77
16	Water Melon	5.32	35.25	15.44	0	0	0	0	130.96	20.69
17	Papaya	96.59	0	0	0	0	0	0	0	16.1
21	Millet	349.62	0	0	0	0	0	0	0	76.62
45	Kula Filai Fai	0	0	0	0	48.23	0	0	0	4.89
	All	506.78	170.78	760.28	9.24	85.62	0	1279.6	713.71	392.99

Table 8.1

Estimated area for each crop for each region

(in square metres)

Code	Crop Name	Region								Sample (method 1)	Sample (method 2)
		North	Central	South	Feevah	Kaashidhoo	Thoddoo	Isdhoo	Foamulakh		
	Farming Households	268	223	421	128	116	199	169	191	1715	1715
1	Sweet Potato	35	4,003	72,425	0	183	0	64,024	111,305	251,975	192,011
2	Cassava	0	0	0	0	0	0	27,523	0	27,523	23,273
3	Taro	0	0	241,153	0	0	0	5,187	0	246,340	168,121
4	Chillies	0	20,231	0	0	0	0	0	0	20,231	25,931
10	Pumpkin	14,772	5,990	0	0	4,154	0	119,518	0	144,434	60,437
12	Curry Leaf	0	0	0	1,183	0	0	0	0	1,183	1,321
16	Water Melon	1,426	7,861	6,500	0	0	0	0	25,013	40,800	35,483
17	Papaya	25,886	0	0	0	0	0	0	0	25,886	27,612
21	Millet	93,698	0	0	0	0	0	0	0	93,698	131,403
45	Kula Filai Fai	0	0	0	0	5,595	0	0	0	5,595	8,386
	All	135,817	38,084	320,078	1,183	9,932	0	216,252	136,319	857,665	673,978

Number of plants per farmer by region.

Code	Plant Name	Region								Sample
		North	Central	South	Feevah	Kaashidhoo	Thoddoo	Isdhoo	Foamulakh	
1	Sweet Potato	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Cassava	0.00	0.00	0.83	15.33	0.00	0.00	100.00	9.00	10.50
3	Taro	0.00	3.33	2.50	150.00	0.00	20.67	28.33	22.67	19.44
4	Chillies	151.22	36.50	0.50	0.00	2.00	166.00	43.67	23.67	63.58
5	Bell Chillies	92.11	0.00	0.00	3.67	0.00	0.00	0.00	0.00	23.33
6	Areca Nut	0.44	0.00	6.00	12.67	0.00	4.33	5.00	12.67	4.00
7	Betel Leaf	1.33	0.17	2.50	0.33	0.33	8.67	19.67	0.00	3.19
8	Cabbage	0.56	0.00	0.00	0.00	16.67	3.33	6.00	0.33	2.33
9	Egg Plant	16.89	29.17	0.67	0.00	0.67	0.00	3.00	33.33	12.28
10	Pumpkin	1.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.31
11	Bread Fruit	1.78	0.17	1.33	0.00	0.33	4.00	2.33	3.33	1.53
12	Curry Leaf	21.44	4.33	5.00	86.33	1.67	33.00	280.33	5.33	40.80
15	Banana	93.11	18.67	44.83	1,191.33	66.33	103.67	44.67	275.33	173.97
16	Water Melon	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	1.33
17	Papaya	75.33	123.67	5.83	4.33	58.00	20.00	25.33	22.67	51.28
18	Lime	1.56	0.50	1.33	0.67	0.67	0.00	0.00	0.67	0.86
19	Mango	0.56	0.00	0.17	1.00	0.67	0.67	0.00	0.33	0.39
21	Millet	51.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.78
23	Sorgum	0.00	20.00	0.50	0.00	0.00	0.00	0.00	0.00	3.42
24	Maize	0.22	0.00	0.00	0.00	0.00	346.33	0.00	0.00	28.92
26	Goava	1.89	1.33	0.00	1.67	0.33	1.67	1.67	1.33	1.25
27	Midilli	0.00	0.00	0.00	0.00	4.33	0.00	0.00	0.00	0.36
29	Beans	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.08
30	Jambroll	0.33	0.00	0.00	0.00	0.67	0.33	0.00	0.00	0.17

Code	Crop Name	Region								Sample
		North	Central	South	Feevah	Kaashidhoo	Thoddoo	Isdhoo	Foamulakh	
31	Pommegranate	0.44	0.00	0.17	1.00	0.00	1.33	0.00	0.00	0.33
32	Drum Stick	0.33	0.17	0.17	0.33	0.00	4.33	0.00	1.67	0.67
33	Stone Apple	0.44	0.00	0.00	0.00	0.00	0.33	0.00	1.67	0.28
34	Curry Leaf (Rhamba f	1.00	0.50	0.33	0.00	0.00	0.17	4.33	3.67	1.07
35	Anona	2.78	0.00	0.00	1,845.67	0.00	0.00	0.00	0.00	154.50
36	Dhagandu Kekuri	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
37	Sugar Cane	0.00	0.00	0.00	2.50	33.33	1.33	0.00	0.00	3.10
38	Custard Apple	2.22	0.00	0.33	46.67	0.00	0.00	0.00	0.00	4.50
41	Coconut Oil	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.00	0.14
42	Maiva	13.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
46	Coconut Palm	0.00	4.33	122.67	0.00	167.67	3.00	15.00	35.67	39.61
47	Bamboo	0.00	0.00	0.00	0.00	0.00	0.00	33.67	0.00	2.81
48	Bilimagoo	0.00	0.00	0.00	0.00	0.00	0.67	0.33	0.00	0.08
49	Helenbeli	0.00	0.00	0.00	0.00	0.33	0.00	0.67	0.00	0.08
50	Mativa	0.00	0.00	0.00	0.00	0.33	0.00	0.67	0.67	0.14
51	Onion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.06
52	Passion Fruit	0.00	0.00	0.00	0.00	0.00	1.67	0.00	0.33	0.17
53	Funa	0.00	0.00	1.00	0.00	0.00	0.00	0.00	21.00	1.92
54	Hirudu	0.00	0.00	0.17	0.00	5.00	0.00	0.00	2.33	0.64
56	Heenaa	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.11
58	Loofah	0.00	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.22
59	Casuarina	0.00	0.00	0.00	0.00	0.67	0.67	0.00	0.00	0.11
	All	533.98	244.17	197.50	3,363.50	360.00	727.17	633.01	478.34	670.61

Estimated number of plants for each region

Code	Crop Name	Region								Sample (method 1)	Sample (method 2)
		North	Central	South	Feevah	Kaashidhoo	Thoddoo	Isdhoo	Foamulakh		
	Farming Households	268	223	421	128	116	199	169	191	1715	1715
1	Sweet Potato	0	0	0	0	0	0	0	0	0	0
2	Cassava	0	0	349	1,962	0	0	16,900	1,719	20,931	18,006
3	Taro	0	743	1,053	19,200	0	4,113	4,788	4,330	34,226	33,347
4	Chillies	40,527	8,140	211	0	232	33,034	7,380	4,521	94,044	109,045
5	Bell Chillies	24,685	0	0	470	0	0	0	0	25,155	40,017
6	Areca Nut	118	0	2,526	1,622	0	862	845	2,420	8,392	6,859
7	Betel Leaf	356	38	1,053	42	38	1,725	3,324	0	6,577	5,478
8	Cabbage	150	0	0	0	1,934	663	1,014	63	3,824	4,003
9	Egg Plant	4,527	6,505	282	0	78	0	507	6,366	18,264	21,059
10	Pumpkin	268	0	0	0	0	0	113	0	381	525
11	Bread Fruit	477	38	560	0	38	796	394	636	2,939	2,620
12	Curry Leaf	5,746	966	2,105	11,050	194	6,567	47,376	1,018	75,021	69,978
15	Banana	24,953	4,163	18,873	152,490	7,694	20,630	7,549	52,588	288,942	298,361
16	Water Melon	0	0	0	0	0	0	2,704	0	2,704	2,287
17	Papaya	20,188	27,578	2,454	554	6,728	3,980	4,281	4,330	70,094	87,939
18	Lime	418	112	560	86	78	0	0	128	1,381	1,479
19	Mango	150	0	72	128	78	133	0	63	624	670
21	Millet	13,697	0	0	0	0	0	0	0	13,697	21,913
23	Sorgum	0	4,460	211	0	0	0	0	0	4,671	5,860
24	Maize	59	0	0	0	0	68,920	0	0	68,979	49,591
26	Goava	507	297	0	214	38	332	282	254	1,924	2,144
27	Midilli	0	0	0	0	502	0	0	0	502	619
29	Beans	0	0	0	0	0	199	0	0	199	143
30	Jambroll	88	0	0	0	78	66	0	0	232	284

Code	Crop Name	Region								Sample (method 1)	Sample (method 2)
		North	Central	South	Feevah	Kaashidhoo	Thoddoo	Isdhoo	Foamulakh		
	Farming Households	268	223	421	128	116	199	169	191	1715	1715
31	Pommegranate	118	0	72	128	0	265	0	0	582	570
32	Drum Stick	88	38	72	42	0	862	0	319	1,421	1,143
33	Stone Apple	118	0	0	0	0	66	0	319	503	474
34	Curry Leaf (Rhamba f	268	112	139	0	0	33	732	701	1,984	1,833
35	Anona	745	0	0	236,246	0	0	0	0	236,991	264,969
36	Dhagandu Kekuri	686	0	0	0	0	0	0	0	686	1,098
37	Sugar Cane	0	0	0	320	3,866	265	0	0	4,451	5,311
38	Custard Apple	595	0	139	5,974	0	0	0	0	6,708	7,716
41	Coconut Oil	0	0	0	0	0	0	282	0	282	239
42	Maiva	3,572	0	0	0	0	0	0	0	3,572	5,715
46	Coconut Palm	0	966	51,644	0	19,450	597	2,535	6,813	82,004	67,934
47	Bamboo	0	0	0	0	0	0	5,690	0	5,690	4,812
48	Bilimagoo	0	0	0	0	0	133	56	0	189	143
49	Helenbeli	0	0	0	0	38	0	113	0	152	143
50	Mativa	0	0	0	0	38	0	113	128	279	239
51	Onion	0	0	0	0	0	0	0	128	128	96
52	Passion Fruit	0	0	0	0	0	332	0	63	395	286
53	Funa	0	0	421	0	0	0	0	4,011	4,432	3,287
54	Hirudu	0	0	72	0	580	0	0	445	1,097	1,096
56	Heenaa	0	0	282	0	0	0	0	0	282	192
58	Loofah	0	297	0	0	0	0	0	0	297	380
59	Casuarina	0	0	0	0	78	133	0	0	211	192
	All	143,107	54,450	83,148	430,528	41,760	144,706	106,979	91,363	1,096,040	1,150,093

TYPE OF WATER DRUNK AGAINST METHOD OF TREATMENT

	water				TOTAL	
	rain		well		Count	Count Percent
	Count	Count Percent	Count	Count Percent		
treatment						
nothing	45	75.0%	8	13.3%	53	88.
chlorine	3	5.0%	2	3.3%	5	8.
other	2	3.3%			2	3.
TOTAL	50	83.3%	10	16.7%	60	100.

type of toilet for whole sample and by regions

	SAMPLE		REGION					
	Count		North		Central		South	
			Count		Count		Count	
TOILET								
septic tank	14	23.3%	1	6.7%	7	30.4%	6	27.3%
sewage system	3	5.0%	1	6.7%	1	4.3%	1	4.5%
beach	35	58.3%	12	80.0%	14	60.9%	9	40.9%
gifili	6	10.0%	1	6.7%	1	4.3%	4	18.2%
other	2	3.3%					2	9.1%

type of fuel used for whole sample and by region

	SAMPLE		REGION					
	Count		North		Central		South	
			Count		Count		Count	
type of fuel used for cooking								
wood	58	96.7%	15	100.0%	23	100.0%	20	90.9%
kerosene	1	1.7%					1	4.5%
other	1	1.7%					1	4.5%

Firewood used per Household per month

split by regions

(measured in bondi)

	Region			Complete Sample
	North	Centre	South	
Firewood	26	22	17	21

households having a radio, electricity, a refridgerator, and a TV

	SAMPLE		REGION					
	Count		North		Central		South	
			Count		Count		Count	
radio								
yes	56	93.3%	14	93.3%	22	95.7%	20	90.9%
no	4	6.7%	1	6.7%	1	4.3%	2	9.1%
electricity								
yes	53	88.3%	12	80.0%	23	100.0%	18	81.8%
no	7	11.7%	3	20.0%			4	18.2%
refridgerator								
yes	5	8.3%	2	13.3%	2	8.7%	1	4.5%
no	55	91.7%	13	86.7%	21	91.3%	21	95.5%
TV								
yes	6	10.0%	1	6.7%	4	17.4%	1	4.5%
no	54	90.0%	14	93.3%	19	82.6%	21	95.5%

Income in Rufiah per household per month by type of income split for farming and non-farming households

Code	Type of Activity	Farming Households	Non-Farming Households	All Households
1	Agriculture	632	523	590
2	Coral / Sand Mining	14	0	8
3	Manufacturing	130	7	83
4	Electricity, Water	30	0	18
5	Construction	132	348	215
6	Retail Trade, Restaurants, Hotel	0	78	30
7	Transport & Communication	250	478	337
8	Finance	0	87	33
9	Government Service	326	130	251
10	Fishing	508	296	427
	TOTAL	**2,022**	**1,947**	**1,993**

8.10

Childrens measurements

Sex	Age (months)	Weight (in Kilo)	Height (in cm)
M	0	2.70	40
F	1	1.00	31
F	2	10.50	83
F	2	5.00	51
F	3	8.00	80
F	4	6.10	70
F	5	6.00	68
F	7	7.40	82
M	7	6.90	63
M	8	6.20	66
M	8	4.80	58
M	9	7.50	68
M	11	8.00	99
M	11	10.90	73
F	11	8.00	70
M	12	5.80	74
M	12	9.00	73
F	13	9.00	86
F	13	9.50	76
F	14	8.50	70
M	15	7.50	87
F	16	9.50	72
F	17	9.80	73
F	17	8.00	78
F	18	9.50	81
M	19	11.00	81
F	20	10.10	80
M	20	9.80	80
M	21	10.00	84
M	21	9.00	71
M	22	8.00	75
M	23	9.00	76
F	23	8.00	64
F	24	10.40	80
M	24	10.00	82
M	25	9.50	93
F	28	8.50	85
M	29	10.40	85
F	30	7.00	80
F	30	6.00	80
M	34	9.30	83
F	41	12.00	88
M	43	0.00	94

8.11

Percentage of the food by type that is brought from Male'

Code	Food name	Region 1	Region 2	Region 3	Sample
1	FRESH TUNA	7.69%	0.00%	0.00%	1.85%
2	DRIED TUNA	0.00%	8.33%	0.00%	3.77%
3	CANNED TUNA	100.00%	25.00%	0.00%	33.33%
4	FRESH OTHER FISH	0.00%	0.00%	0.00%	0.00%
5	DRIED OTHER FISH	0.00%	0.00%	0.00%	0.00%
6	OTHER FISH	0.00%	0.00%	0.00%	0.00%
7	TELLI RIHAARKURU	0.00%	9.09%	0.00%	3.85%
8	ORDINARY RIHAARKUI	0.00%	13.04%	0.00%	6.12%
9	CHICKEN	0.00%	5.88%	0.00%	2.27%
10	GOAT	0.00%	0.00%	0.00%	0.00%
11	OTHER MEAT	0.00%	0.00%	0.00%	0.00%
12	RICE	61.54%	75.00%	72.73%	73.68%
13	FLOUR	66.67%	75.00%	72.73%	75.00%
14	MAIZE	0.00%	0.00%	20.00%	16.67%
15	MILLET	0.00%	0.00%	0.00%	0.00%
16	SORGHUM	0.00%	0.00%	0.00%	0.00%
17	OTHER CEREAL	0.00%	0.00%	0.00%	0.00%
18	CASSAVA	0.00%	0.00%	0.00%	0.00%
19	SWEET POTATOES	0.00%	16.67%	0.00%	4.55%
20	TARO	0.00%	0.00%	0.00%	0.00%
21	POTATO	0.00%	64.29%	0.00%	66.67%
22	OTHER ROOT	0.00%	0.00%	0.00%	0.00%
23	BANANA BELL	0.00%	0.00%	0.00%	0.00%
24	BEANS	0.00%	0.00%	0.00%	0.00%
25	BEETROOT	0.00%	0.00%	0.00%	0.00%
26	BITTER GOURD	0.00%	0.00%	0.00%	0.00%
27	CABBAGE	0.00%	100.00%	0.00%	33.33%
28	CARROT	100.00%	0.00%	0.00%	100.00%
29	CHILLI	0.00%	0.00%	9.52%	3.85%
30	COCONUT	0.00%	0.00%	0.00%	0.00%
31	CUCUMBER	0.00%	0.00%	0.00%	0.00%
32	CURRY LEAVES	0.00%	0.00%	0.00%	0.00%
33	DRUM STICK	0.00%	0.00%	0.00%	0.00%
34	EGG PLANT	16.67%	0.00%	0.00%	3.57%
35	GARLIC	44.44%	60.87%	65.00%	62.00%
37	OKRA	50.00%	100.00%	50.00%	66.67%
38	ONION	33.33%	52.38%	61.90%	55.10%
39	PANDANIS	11.11%	11.76%	11.11%	12.12%
40	PUMPKIN	0.00%	12.50%	0.00%	6.06%

Code	Food name	Region 1	Region 2	Region 3	Sample
41	RADDISH	0.00%	100.00%	0.00%	50.00%
42	SNAKE GOURD	0.00%	0.00%	0.00%	0.00%
43	TAMARIND LEAVES	0.00%	0.00%	0.00%	0.00%
44	TOMATO	0.00%	66.67%	33.33%	50.00%
45	OTHER VEGETABLES	0.00%	0.00%	0.00%	0.00%
46	BANANA	0.00%	0.00%	0.00%	0.00%
47	BETEL LEAF	0.00%	0.00%	0.00%	0.00%
48	BETEL NUT	33.33%	56.52%	59.09%	55.77%
49	BILIMAGU	0.00%	0.00%	0.00%	0.00%
50	BREAD FRUIT	0.00%	0.00%	0.00%	0.00%
51	GUAVA	0.00%	0.00%	0.00%	0.00%
52	JACK FRUIT	0.00%	0.00%	0.00%	0.00%
53	JAMBROLL	0.00%	0.00%	0.00%	0.00%
54	LIME	0.00%	14.29%	14.29%	11.63%
55	MANGO	0.00%	0.00%	0.00%	0.00%
56	PAPAYA	0.00%	0.00%	0.00%	0.00%
57	POMMEGRANATE	0.00%	11.11%	0.00%	5.00%
58	SCREW PINE	0.00%	0.00%	0.00%	0.00%
59	STONE APPLE	0.00%	0.00%	0.00%	0.00%
60	OTHER	100.00%	50.00%	0.00%	40.00%
61	CONDENSED MILK	14.29%	50.00%	42.86%	42.86%
62	POWDER MILK	44.44%	59.09%	61.11%	59.57%
63	OTHER MILK	50.00%	0.00%	0.00%	50.00%
64	CHEESE	0.00%	0.00%	0.00%	0.00%
65	EGGS	0.00%	4.17%	0.00%	1.96%
66	SWEETS	33.33%	37.50%	45.45%	40.00%
67	SUGAR	61.54%	70.83%	72.73%	68.42%
68	JAM	0.00%	77.78%	100.00%	86.67%
69	DHIA HAKURU	0.00%	30.00%	0.00%	12.50%
70	OTHER	0.00%	0.00%	0.00%	0.00%
71	BREAD	0.00%	100.00%	100.00%	66.67%
72	CAKE	50.00%	75.00%	25.00%	33.33%
73	BISCUIT	42.86%	52.17%	66.67%	640.00%
74	OTHER	0.00%	40.00%	25.00%	30.77%
75	SALT	41.67%	54.17%	68.18%	58.93%
76	PEPPER	55.56%	50.00%	70.00%	61.22%
77	OTHER FLAVOURINGS	33.33%	68.18%	50.00%	56.10%
78	COOKING OIL	33.33%	60.87%	55.00%	56.00%
79	TEA	21.43%	66.67%	66.67%	57.89%
80	COFFEE	0.00%	75.00%	77.78%	76.92%
81	MILO	33.33%	68.75%	71.43%	63.89%
82	FRESH FRUIT JUICE	25.00%	52.63%	72.73%	59.38%
83	SQUASH	22.22%	72.73%	58.82%	54.05%
84	CANNED DRINK	25.00%	50.00%	35.71%	38.89%
85	OTHER	100.00%	100.00%	20.00%	55.56%

Amount of food consumed per person per day for the three regions and for the whole sample

Food code	Units	Food name	Region 1	Region 2	Region 3	Sample
1	2	Fresh tuna	0.56	0.66	0.69	0.65
2	2	Dried tuna	0.25	0.08	0.38	0.23
3	1	Canned tuna	0.02	0.01	0.04	0.02
4	2	Fresh other fish	0.09	0.53	0.15	0.30
5	2	Dried other fish	0.00	0.00	0.00	0.00
6	2	Other fish	0.02	0.00	0.00	0.01
7	2	Telli rihaakuru	0.00	0.00	0.00	0.00
8	2	Ordinary Rihaarkuru	0.07	0.04	0.01	0.04
9	2	Chicken	0.00	0.00	0.00	0.00
10	2	Goat	0.00	0.00	0.00	0.00
11	2	Other meat	0.00	0.00	0.00	0.00
12	2	Rice	0.95	1.29	1.43	1.27
13	2	Flour	0.19	0.17	0.26	0.21
14	2	Maize	0.00	0.00	0.00	0.00
15	2	Millet	0.00	0.00	0.00	0.00
16	2	Sorghum	0.00	0.00	0.00	0.00
17	2	Other cereal	0.00	0.00	0.00	0.00
18	1	Cassava	0.00	0.00	0.08	0.03
19	1	Sweet potatoes	0.00	0.06	0.31	0.14
20	1	Taro	0.08	0.00	1.12	0.43
21	1	Potato	0.00	0.00	0.00	0.00
22	1	Other root	0.00	0.00	0.01	0.00
23	1	Banana bell	0.01	0.00	0.01	0.00
24	1	Beans	0.00	0.00	0.00	0.00
25	1	Beetroot	0.00	0.00	0.00	0.00
26	1	Bitter gourd	0.00	0.00	0.00	0.00
27	1	Cabbage	0.00	0.02	0.00	0.01
28	1	Carrot	1.21	1.19	0.95	1.11
29	1	Chilli	0.00	0.00	0.00	0.00
30	1	Coconut	0.21	0.51	0.31	0.37
31	1	Cucumber	0.00	0.00	0.01	0.00
32	1	Curry leaves	0.10	0.19	0.34	0.23
33	1	Drum stick	0.00	0.00	0.00	0.00
34	1	Egg plant	0.00	0.01	0.02	0.01
35	1	Garlic	0.00	0.02	0.03	0.02
37	1	Okra	0.00	0.00	0.00	0.00
38	1	Onion	0.28	0.30	0.24	0.27
39	1	Pandanis	0.00	0.00	0.00	0.00
40	1	Pupkin	0.01	0.00	0.00	0.00
41	1	Raddish	0.00	0.00	0.00	0.00
42	1	Snake gourd	0.00	0.00	0.00	0.00
43	1	Tamarind leaves	0.00	0.00	0.00	0.00
44	1	Tomato	0.00	0.00	0.00	0.00
45	1	Other vegetable	0.02	0.05	0.02	0.03

Food code	Units	Food name	Region 1	Region 2	Region 3	Sample
46	1	Banana	0.00	0.00	0.03	0.01
47	1	Beetle leaf	0.00	1.06	1.03	0.82
48	1	Beetel nut	0.00	1.36	1.10	0.97
49	1	Bilimagu	0.00	0.06	0.16	0.08
50	1	Bread fruit	0.08	0.00	0.00	0.02
51	1	Guava	0.00	0.00	0.00	0.00
52	1	Jambroll	0.00	0.00	0.00	0.00
53	1	Lime	0.00	0.00	0.00	0.00
54	1	Lime	0.05	0.08	0.04	0.06
55	1	Mango	0.00	0.01	0.01	0.01
56	1	Papaya	0.00	0.00	0.00	0.00
57	1	Pommegranate	0.00	0.00	0.00	0.00
58	1	Screw pine	0.00	0.00	0.00	0.00
59	1	Stone apple	0.00	0.01	0.01	0.00
60	1	Other	0.00	0.00	0.00	0.00
61	3	Condensed milk	0.00	0.03	0.13	0.06
62	3	Powder milk	0.02	0.21	0.42	0.25
63	3	Other milk	0.00	0.00	0.01	0.01
64	3	Cheese	0.00	0.00	0.00	0.00
65	1	Eggs	0.07	0.12	0.03	0.08
66	2	Sweets	0.00	0.00	0.00	0.00
67	2	Sugar	0.49	0.53	0.57	0.53
68	2	Jam	0.01	0.00	0.00	0.00
69	2	Dhla-hakaru	0.00	0.00	0.03	0.01
70	2	Other	0.00	0.00	0.00	0.00
71	1	Bread	0.00	0.00	0.00	0.00
72	1	Cake	0.18	0.00	0.00	0.04
73	1	Biscuit	2.93	0.92	1.32	1.50
74	1	Other	0.00	0.19	0.60	0.30
75	3	Salt	0.55	0.59	0.51	0.55
76	3	Pepper	0.01	0.03	0.04	0.03
77	3	Other flavourings	0.00	0.05	0.05	0.04
78	3	Cooking oil	0.01	0.23	0.30	0.21
79	3	Tea	0.34	0.43	0.53	0.45
80	3	Milo	0.03	0.00	0.00	0.01
81	2	Fresh fruit juice	0.00	0.00	0.01	0.01
82	2	Squash	0.01	0.07	0.06	0.05
83	1	Canned drink	0.06	0.07	0.20	0.12
84	1	Other	0.00	0.00	0.03	0.01
87	1	Roshi	1.36	1.60	1.98	1.69
88	1	Noodles	0.08	0.00	0.00	0.02

Units code

1 = number

2 = cups

3 = spoons

Chapter Nine

9. Discussion of the Results and Conclusion

9.1 Discussion of the Results

The total area under cultivation by farming households in the agricultural islands of the Maldives is estimated at 86 hectares, using the correct method (method 1), and at 67 hectares, using the biased method (method 2). The number of plants grown by agricultural households in the agricultural islands of the Maldives is estimated at 1,100,000 using the correct method and 1,150,000 using the biased method. Both estimates are close to each other, and do give some support to the figures. Not surprisingly, the plant figures are closer together than the area figures because the relative variation in the data is not as high.

The income per household table shows how little difference there is between farming and non-farming households on the agricultural islands. Every house does some agriculture even if it is only in the home garden. This throws some doubt on the whole idea of splitting the islands into agricultural and non-agricultural. However, maybe households on non-agricultural islands do not grow things in their backyards in significant quantities. This should be looked into. More data on the income from the agricultural sector will be available when the MPE questionnaire (form II) is analysed.

As expected a lot of the food eaten on the island was imported directly from Male'. The food consumed table should be of interest to the Ministry of Health, as well as to the Ministry of Fisheries and Agriculture and MPE. It needs to be analysed by a nutritionist in terms of protein, calories, and other requirements. Mohammed Rasheed will do this at a later date. It should be noted that about 20 bondi of firewood are used per household per month in the sample. If the value of this were to be included in the GDP calculations it could make a significant difference.

The remaining tables will show how the sample taken compares to averages from the MPE population data. Any changes in these areas will be of interest to any further surveys.

9.2 Conclusion

The survey was a very small one and this limited the accuracy of the results. However, as no other information is available the results should be of interest to all who deal with agriculture in the Maldives.

Chapter Ten

10. Summary

The Agricultural Production and Consumption Survey was carried out between the 30th of September and the 19th of October, 1991. The aim of the survey was to provide baseline data on the state of agriculture in the Maldives. This included the area under cultivation, the number of plants grown, the contribution agriculture makes to GDP, and the food consumed on the islands.

There were three teams of interviewers each with three members. The teams visited four islands, so twelve islands were included altogether. All the islands visited were agricultural islands. Three farming households and three non-farming households were chosen on each island, except in the North as the team there did not understand what was required. They just interviewed the three farming households. A total of 60 households were interviewed.

The results of the survey were ananlysed with the help of the MPE computer centre, using Foxpro and SPSSPC. The survey found that the estimated area being used as a field in the area surveyed (the agricultural islands of the Maldives) was 67 to 86 hectares and that about one million plants were being grown for consumption or sale. It is not possible to quantify the accuracy of these figures until more work has been done.

The survey cost about M Rf 63,000 which is just over US $ 6,000.

Appendix A

English copies of the Questionnaires

Agricultural Production Questionnaire (form I)

MPE Farm Management and GDP Questionnaire (form II)

Household Background Questionnaire (form III)

Food Consumption Questionnaire (form IV)

AGRICULTURAL PRODUCTION SURVEY
COVER SHEET

Farm

Atoll:	
Island:	
Farmer Name:	
Farmer Number:	

Forms completed

Number of Field Forms:	
Number of Backyard Forms:	
Number of Plant Forms:	
Farm Management Form (Tick):	

People Involved

Job	Name	Date
Interviewer		
Interviewer		
Interviewer		
Supervisor		
Data Entry		

Remarks

AGRICULTURAL PRODUCTION SURVEY
BACKYARD PRODUCTION FORM

Farmer and Field data

Farmer Name:
Farmer Number:

Field Number:

Sketch of Backyard: (Include measurements)

Total Area:

Plants

	Plant	Number
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

	Plant	Number
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

AGRICULTURAL PRODUCTION SURVEY
BACKYARD PRODUCTION FORM

Farmer and Field data

Farmer Name:
Farmer Number:

Field Number:

Sketch of Backyard: (Include measurements)

Total Area:

Plants

	Plant	Number
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

	Plant	Number
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

AGRICULTURAL PRODUCTION SURVEY
FIELD FORM

Farmer and Field data

Farmer name:		Field Number:	
Farmer number:		In other field?	Y = 1 ->
			N = 2

Crops

	Crop 1		Crop 2		Crop 3	
Crop						
Age						
Density						

Field Measurements

Side	Length	Bearing
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Side	Length	Bearing
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Other Plants in the Field

	Plant	Number
1		
2		
3		
4		
5		
6		

	Plant	Number
7		
8		
9		
10		
11		
12		

Ministry of Planning and Environment
Male', Maldives

AGRICULTURAL PRODUCTION AND CONSUMPTION SURVEY

IDENTIFICATION

1.Name of Atoll/Island : ..... ⌊⌊⌊⌊

2.Name of house : .....

3.Name of respondent : .....

4.Name of enumerator : ..... Signature : .....

5.Date of enumeration : .....

CONFIDENTIALLY

All the information collected will be kept confidential in MPE and will not be used to extract individual information for any legal purposes.

PURPOSE OF DATA COLLECTION

This survey provides data essential for compiling the Agricultural sector estimates for Gross Domestic Product (GDP) of Maldives.

FOR OFFICE USE

	Name	Date
1.Data checked by :	.....	.....
2.Coded by :	.....	.....
3.Data entry by :	.....	.....

1.PRODUCTS OF AGRICULTURE :

Q1. What types of Agricultural activities are the members of this household engaged in ?

1.Coconut production ⌊⌋⌊⌋⌊⌋⌊⌋

2.Production of cereal crops : maize, millet etc.. ⌊⌋⌊⌋⌊⌋⌊⌋

3.Production of roots and tubers : cassava, sweet potatoes, onions etc. ⌊⌋⌊⌋⌊⌋⌊⌋

4.Production of vegetables and chillies ⌊⌋⌊⌋⌊⌋⌊⌋

5.Cattle and goat breeding and production of milk ⌊⌋⌊⌋⌊⌋⌊⌋

6.Rearing of hens, ducks and other birds and production of eggs ⌊⌋⌊⌋⌊⌋⌊⌋

7.Toddy tapping and related activities ⌊⌋⌊⌋⌊⌋⌊⌋

8.Agricultural services (to be completed only for Q13) ⌊⌋⌊⌋⌊⌋⌊⌋

9.Agricultural production n.e.c (This includes sale of firewood etc..) ⌊⌋⌊⌋⌊⌋⌊⌋

2.NUMBER OF PEOPLE ENGAGED IN AGRICULTURAL ACTIVITIES :

Q2. How many members of this household were engaged in agricultural activities, during last month for more than one hour every day ? ⌊⌋⌊⌋

Q3. Was any one from another household engaged in these activities ?
1.Yes
2.No (go to section 3, Q4)

Q3.(a) How many people were engaged in these activities ⌊⌋⌊⌋

Q3.(b) Did you give him/her any salary/wages/anything in kind, during last month ?
1.Yes
2.No (go to section 3, Q4)

Q3.(c) How much salary/wages/things in kind, did you give him/her during last month ? MRF ⌊⌋⌊⌋⌊⌋

3. AMOUNT OF AGRICULTURAL PRODUCTION :

(To be completed only if codes 5 or 6 comes in section 1, Q1)

Q4. Items produced	Q5. Time period of production 1. Whole year 2. Seasonally 3. During a certain period	Q6. Annual Yield 1. Once 2. Twice 3. Thrice 4. Always	Q7. Income during the past one month (All expenses included) (Go to section 4 Q13)
1. Coconut	1 2 3	1 2 3 4	MRf
2. Cereals like maize, millet etc..			
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
3. Roots and tubers, cassava, sweet potatoes, onions etc..			
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
4. Vegetables and chillies			
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
5. Toddy tapping and related activities			
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
6. Agricultural production n.e.c (eg: firewood)			
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf
....	1 2 3	1 2 3 4	MRf

4.LIVESTOCK AND POULTRY :

(To be completed if codes 5 or 6 comes in section 1, Q1)

Q8. What types of livestock and poultry do you usually look after ?

1.Goats (go to Q10)
2.Hens
3.Ducks
4.Others (specify) .....

Q9. Do you get hen/duck egg ?

1.Yes (~~go to Q11~~)
2.No (~~go to Q11~~)

Q10. Do you produce goat's milk ?

1.Yes
2.No

Q11. What is the avarage number of livestock and poultry (goats, ducks, hens, rabbits etc..) that you look after ? ⌊_⌋⌊_⌋⌊_⌋

Q12. (a) Livestock and poultry increasing rate:
(goats, hens, ducks, rabbits etc..)

1.What is the number of livestock and poultry kept for breeding last year ? ⌊_⌋⌊_⌋
2.Growth of stock by breeding ⌊_⌋⌊_⌋
3.Amount died from the stock ⌊_⌋⌊_⌋
4.Amount raised from the stock ⌊_⌋⌊_⌋
5.Number sold during last year ⌊_⌋⌊_⌋⌊_⌋
6.Number given away or used for own consumption last year ⌊_⌋⌊_⌋
7.Income from sales during last year MRF ⌊_⌋⌊_⌋⌊_⌋⌊_⌋
(This includes the transport cost of person and products)

Q12(b) Eggs : (Do not ask from those who raise goats)

1.Number of eggs produces last month ⌊_⌋⌊_⌋⌊_⌋
2.Number of eggs sold form last month's production ⌊_⌋⌊_⌋⌊_⌋
3.Selling price per one egg ⌊_⌋
4.Number given away/used for own consuption, out of last month's production ⌊_⌋⌊_⌋
5.Expenses incurred in selling eggs MRF ⌊_⌋⌊_⌋⌊_⌋⌊_⌋

5.EXPENSES ON PRODUCTION AND SERVICES :

Q13. What was the total cost on production and services during the past one year ?
(Total cost includes : purchasing fertilizers, making cages etc..) MRF ⌊⌊⌊⌊

Q14. How many trips do you make to male'/other islands per year on an avarage for selling your products ? ⌊⌊⌊

6.LOANS TAKEN FOR PRODUCTION :

Q15. Did you take any loans during last year for production of goods ?

1. Yes
2. No (end)

Q16. How much money did you take ? ⌊⌊⌊⌊⌊

Q17. From where did you get the money ?

1. Bank
2. Private
3. Co-operatives

Q18. Did you refund the loan you took ?

1. Yes
2. No

END OF INTERVIEW

REMARKS :

.....

.....

.....

.....

.....

.....

HOUSEHOLD BACKGROUND QUESTIONNAIRE (FORM III)

SECTION ONE:

ISLAND	[ ][ ]
HOUSE-HOLD	[ ][ ]
DATE	/ /
ENUMERATOR	
SUPERVISOR	
TIME OF START OF INTERVIEW	HOURS [ ][ ] MINS [ ][ ]
TIME OF END OF INTERVIEW	HOURS [ ][ ] MINS [ ][ ]

101 SEX OF RESPONDENT

MALE.....1
FEMALE.....2

102 NAME OF RESPONDENT

_____

_____

103 WHAT IS YOUR RELATION TO THE HEAD OF THE HOUSEHOLD?

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON OR DAUGHTER IN LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT IN LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = NOT RELATED
98 = DONT KNOW

104 WHAT SORT OF WATER ARE YOU USING FOR DRINKING AT THE MOMENT?

1 = RAIN
2 = WELL / GROUND-HOLE
3 = OTHER

105 WHAT TREATMENT DOES IT RECEIVE?

1 = NONE
2 = BOILED
3 = CHLORINATED
4 = OTHER

106 WHAT SORT OF TOILET FACILITIES DOES YOUR HOUSEHOLD USE?

1 = LATRINE WITH SEPTIC TANK
2 = LATRINE WITH MAIN SEWER
3 = BEACH
4 = GIFILI
5 = OTHER

107	WHAT FUEL DO YOU USE FOR COOKING?	1 = FIREWOOD 2 = KEROSENE 3 = ELECTRICITY 4 = GAS 5 = OTHER
108	HOW MANY BONDI OF FIREWOOD DID YOU USE LAST MONTH?	[ ][ ]
109	DOES YOUR HOUSE HAVE	YES NO
	A) ELECTRICITY	1 2
	B) A RADIO	1 2
	C) A TELEVISION	1 2
	D) A REFRIGERATOR	1 2
110	WHAT ARE THE WALLS OF THE HOUSE MADE OF? (DO NOT ASK JUST LOOK)	1 = CORAL/BRICK WITH PLASTER 2 = CORAL/BRICK WITHOUT PLASTER 3 = WOOD PLANKS 4 = CADJAN 5 = OTHER
111	WHAT IS THE ROOF MADE OF? (DO NOT ASK JUST LOOK)	1 = SHEETS 2 = TILES 3 = CADJAN 4 = CONCRETE 5 = OTHER

FILL IN SECTION ONE INCOME SHEET AND SECTIONS TWO AND THREE AND RETURN TO THIS PLACE AGAIN.

FOOD CONSUMPTION AND NUTRITION SURVEY

SECTION ONE - HOUSE HOLD INCOME SHEET

Control data:

Household number:	
Island:	

Income table:

	Names of household members involved in economic activity	Industry	Income last month
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Industry	Code
Agriculture, Hunting, Forestry	1
Mining, Quarrying	2
Manufacturing	3
Electricity, Gas, Water	4
Construction	5
Wholesale and Retail Trade and Restaurants and Hotels	6
Transport, Storage and Communication	7
Financing, Insurance, Real Estate and Business Services	8
Community, Social and Personal Services	9
Fishing	10

SECTION TWO:
NUTRITIONAL STATUS OF CHILDREN

NO.	201 NAME	202 SEX	203 DATE OF BIRTH	204 AGE IN MONTHS	205 WEIGHT IN KILOS	206 HEIGHT IN CMS	207 SICK IN LAST TWO WEEKS	208 TYPE OF SICK-NESS	209 ACTION TAKEN	210 FOO WITH DRA
1		M = 1 F = 2	MONTH [ ][ ] YEAR [ ][ ]	[ ][ ]	[ ][ ].[ ]	[ ][ ][ ]	Y = 1 N = 2	[ ]	[ ]	Y = N =
2		M = 1 F = 2	MONTH [ ][ ] YEAR [ ][ ]	[ ][ ]	[ ][ ].[ ]	[ ][ ][ ]	Y = 1 N = 2	[ ]	[ ]	Y = N =
3		M = 1 F = 2	MONTH [ ][ ] YEAR [ ][ ]	[ ][ ]	[ ][ ].[ ]	[ ][ ][ ]	Y = 1 N = 2	[ ]	[ ]	Y = N =
4		M = 1 F = 2	MONTH [ ][ ] YEAR [ ][ ]	[ ][ ]	[ ][ ].[ ]	[ ][ ][ ]	Y = 1 N = 2	[ ]	[ ]	Y = N =
5		M = 1 F = 2	MONTH [ ][ ] YEAR [ ][ ]	[ ][ ]	[ ][ ].[ ]	[ ][ ][ ]	Y = 1 N = 2	[ ]	[ ]	Y = N =

CODES	TYPE OF SICK-NESS	ACTION TAKEN
	1 = FEVER 2 = DIARRHEA 3 = FEVER + DIARRHEA 4 = OTHER	1 = LOCAL MEDICINE 2 = HEALTH WORKER 3 = TAKEN TO HOSPITAL 4 = OTHER

SECTION THREE:

KEY - BLANK = NOT USED IN THE LAST MONTH
1 = BUY FROM MALE'
2 = BUY FROM SHOP ON ISLAND
3 = PRODUCE / CATCH OWN
4 = BARTER
5 = GIFT
6 = OTHER

FISH	NO.	ORIGIN
FRESH TUNA	01	
DRIED TUNA	02	
CANNED TUNA	03	
FRESH OTHER FISH	04	
DRIED OTHER FISH	05	
OTHER FISH	06	

RIHAARKARU	NO.	ORIGIN
TELLI RIHAARKARU	07	
ORDINARY RIHAARKARU	08	

MEAT	NO.	ORIGIN
CHICKEN	09	
GOAT	10	
OTHER MEAT	11	

CEREALS	NO.	ORIGIN
RICE	12	
FLOUR	13	
MAIZE	14	
MILLET	15	
SORGHUM	16	
OTHER CEREAL	17	

ROOTS	NO.	ORIGIN
CASSAVA	18	
SWEET POTATOES	19	
TARO	20	
POTATO	21	
OTHER ROOT	22	

VEGETABLES	NO.	ORIGIN
BANANA BELL	23	
BEANS	24	
BEETROOT	25	
BITTER GOURD	26	
CABBAGE	27	
CARROT	28	

CHILLI	29	
COCONUT	30	
CUCUMBER	31	
CURRY LEAVES	32	
DRUM STICK	33	
EGG PLANT	34	
GARLIC	35	
OKRA	37	
ONION	38	
PANDANIS	39	
PUMPKIN	40	
RADDISH	41	
SNAKE GOURD	42	
TAMARIND LEAVES	43	
TOMATO	44	
OTHER VEGETABLE	45	

FRUIT	NO.	ORIGIN
BANANA	46	
BETEL LEAF	47	
BETEL NUT	48	
BILIMAGU	49	
BREAD FRUIT	50	
GUAVA	51	
JACK FRUIT	52	
JAMBROLL	53	
LIME	54	
MANGO	55	
PAPAYA	56	
POMMEGRANATE	57	
SCREW PINE	58	
STONE APPLE	59	
OTHER	60	

MILK AND DAIRY	NO.	ORIGIN
CONDENSED MILK	61	
POWDER MILK	62	
OTHER MILK	63	
CHEESE	64	
EGGS	65	

SUGAR	NO.	ORIGIN
SWEETS	66	
SUGAR	67	
JAM	68	
DIA HAKARU	69	
OTHER	70	

CAKES AND BREAD	NO.	ORIGIN
BREAD	71	
CAKE	72	
BISCUIT	73	
OTHER	74	

FLAVOURINGS	NO.	ORIGIN
SALT	75	
PEPPER	76	
OTHER FLAVOURINGS	77	
COOKING OIL	78	

BEVERAGES	NO.	ORIGIN
TEA	79	
COFFEE	80	
MILO	81	
FRESH FRUIT JUICE	82	
SQUASH	83	
CANNED DRINK	84	
OTHER	85	

FOOD CONSUMPTION QUESTIONNAIRE (FORM IV)

PART A

ISLAND	[ ][ ]
HOUSE-HOLD	[ ][ ]
DATE	DAY [ ][ ]
	MONTH [ ][ ]
ENUMERATOR	[ ][ ]
SUPERVISOR	[ ][ ]
TIME OF START OF INTERVIEW	HOURS [ ][ ]
	MINS [ ][ ]
TIME OF END OF INTERVIEW	HOURS [ ][ ]
	MINS [ ][ ]
401 MALE OR FEMALE	MALE.....1
	FEMALE.....2
402 WHAT IS YOUR NAME?	_____
	_____
403 WHAT IS YOUR RELATION TO THE HEAD OF THE HOUSE HOLD?	01 = HEAD 02 = WIFE OR HUSBAND 03 = SON OR DAUGHTER 04 = SON OR DAUGHTER IN LAW 05 = GRANDCHILD 06 = PARENT 07 = PARENT IN LAW 08 = BROTHER OR SISTER 09 = OTHER RELATIVE 10 = NOT RELATED 98 = DONT KNOW
404 HOW LONG HAVE YOU BEEN RESPONSIBLE FOR THE FOOD AND COOKING HERE?	1 = LESS THAN ONE YEAR 2 = ONE TO FIVE YEARS 3 = MORE THAN FIVE YEARS
405 HOW MANY PEOPLE HAD BREAKFAST HERE TODAY?	[ ][ ]
KEY FOR UNITS:	1 = NUMBER 2 = TEA CUPS FULL 3 = TEA SPOONS FULL

PART B

PREPARED FOOD	INGREDIENTS	NO.	UNITS QUANT.
CURRY	FRESH TUNA	01	2
	DRIED TUNA	02	2
	CANNED TUNA	03	1
	FRESH OTHER FISH	04	2
	DRIED OTHER FISH	05	2
	OTHER FISH	06	2
	CHICKEN	09	1
	CASSAVA	18	1
	SWEET POTATO	19	1
	TARO	20	1
	CHILLI	29	1
	CURRY LEAVES	32	1
	DRUM STICK	33	1
	EGG PLANT	34	1
	ONION	38	1
	PUMPKIN	40	1
	SNAKE GOURD	42	1
	SALT	75	3
	PEPPER	76	3
	COOKING OIL	78	3
GARUDHIA	FRESH TUNA	01	2
	FRESH REEF FISH	04	2
	SALT	75	3
	ONION	38	1
	LIME	54	1
MAS HUNI	FRESH TUNA	01	2
	DRIED TUNA	02	2
	CANNED TUNA	03	1
	FRESH OTHER FISH	04	2
	DRIED OTHER FISH	05	2
	OTHER FISH	06	2
	POTATO	21	1
	CHILLI	29	1
	COCONUT	30	1
	ONION	38	1
	PUMPKIN	40	1
	LIME	54	1

MAS BAI	FRESH TUNA	01	2
	DRIED TUNA	02	2
	CANNED TUNA	03	1
	FRESH OTHER FISH	04	2
	DRIED OTHER FISH	05	2
	OTHER FISH	06	2
	RICE	12	2
	CHILLI	29	1
	ONION	38	1
	SALT	75	3
	PEPPER	76	3
STAPLE	RICE	12	2
	ROSHI	87	1
	CASSAVA	18	1
	SWEET POTATO	19	1
	TARO	20	1
	POTATO	21	1
	NOODLES	88	1
SALAD	BEANS	24	1
	CABBAGE	27	1
	CHILLI	29	1
	COCONUT	30	1
	CURRY LEAF	32	1
	ONION	38	1
	TOMATO	44	1
SHORT EATS	FRESH TUNA	01	2
	DRIED TUNA	02	2
	CANNED TUNA	03	1
	FRESH OTHER FISH	04	2
	DRIED OTHER FISH	05	2
	OTHER FISH	06	2
	RICE	12	2
	FLOUR	13	2
	CASSAVA	18	1
	SWEET POTATO	19	1
	POTATO	21	1
	CABBAGE	27	1
	CARROTS	28	1
	CHILLI	29	1
	COCONUT	30	1
	ONION	38	1
	LIME	54	1
	POWDER MILK	61	2
	COND. MILK	62	2
	EGGS	65	1
	SUGAR	67	2
	DIA HAKARU	69	2

BEVERAGES	TEA	79	3
	COFFEE	80	3
	MILO	81	3
	FRESH FRUIT	82	2
	JUICE	83	2
	SQUASH	84	2
	CANNED DRINK	85	1
	OTHER	86	2
	SUGAR	67	2

PART C

FISH	NO.	UNITS	QUANT.
FRESH TUNA	01	2	
DRIED TUNA	02	2	
CANNED TUNA	03	1	
FRESH OTHER FISH	04	2	
DRIED OTHER FISH	05	2	
OTHER FISH	06	2	
RIHAARKARU	**NO.**	**UNITS**	**QUANT.**
TELLI RIHAARKARU	07	2	
ORDINARY RIHAARKARU	08	2	
MEAT	**NO.**	**UNITS**	**QUANT.**
CHICKEN	09	2	
GOAT	10	2	
OTHER MEAT	11	2	
CEREALS	**NO.**	**UNITS**	**QUANT.**
RICE	12	2	
FLOUR	13	2	
MAIZE	14	2	
MILLET	15	2	
SORGHUM	16	2	
OTHER CEREAL	17	2	
ROOTS	**NO.**	**UNITS**	**QUANT.**
CASSAVA	18	1	
SWEET POTATOES	19	1	
TARO	20	1	
POTATO	21	1	
OTHER ROOT	22	1	

VEGETABLES	NO.	UNITS	QUANT.
BANANA BELL	23	1	
BEANS	24	1	
BEETROOT	25	1	
BITTER GOURD	26	1	
CABBAGE	27	1	
CARROT	28	1	
CHILLI	29	1	
COCONUT	30	1	
CUCUMBER	31	1	
CURRY LEAVES	32	1	
DRUM STICK	33	1	
EGG PLANT	34	1	
GARLIC	35	1	
OKRA	37	1	
ONION	38	1	
PANDANIS	39	1	
PUMPKIN	40	1	
RADDISH	41	1	
SNAKE GOURD	42	1	
TAMARIND LEAVES	43	1	
TOMATO	44	1	
OTHER VEGETABLE	45	1	

FRUIT	NO.	UNITS	QUANT.
BANANA	46	1	
BETEL LEAF	47	1	
BETEL NUT	48	1	
BILIMAGU	49	1	
BREAD FRUIT	50	1	
GUAVA	51	1	
JACK FRUIT	52	1	
JAMBROLL	53	1	
LIME	54	1	
MANGO	55	1	
PAPAYA	56	1	
POMMEGRANATE	57	1	
SCREW PINE	58	1	
STONE APPLE	59	1	
OTHER	60		

MILK AND DAIRY	NO.	UNITS	QUANT.
CONDENSED MILK	61	3	
POWDER MILK	62	3	
OTHER MILK	63	3	
CHEESE	64	3	
EGGS	65	1	

SUGAR	NO.	UNITS	QUANT.
SWEETS	66	2	
SUGAR	67	2	
JAM	68	2	
DIA HAKARU	69	2	
OTHER	70	2	

CAKES AND BREAD	NO.	UNITS	QUANT.
BREAD	71	1	
CAKE	72	1	
BISCUIT	73	1	
OTHER	74	1	

FLAVOURINGS	NO.	UNITS	QUANT.
SALT	75	3	
PEPPER	76	3	
OTHER FLAVOURINGS	77	3	
COOKING OIL	78	3	

STAPLE	NO.	UNITS	QUANT.
ROSHI	87	1	
NOODLES	88	1	

Appendix B

Dhivehi copies of the Questionnaires

Agricultural Production Questionnaire (form I)

MPE Farm Management and GDP Questionnaire (form II)

Household Background Questionnaire (form III)

Food Consumption Questionnaire (form IV)

ދަރިވަރު ބަދަލުވުމުގެ ސެޓްފިކެޓް

ދަރިވަރު ،

އެޑްރެސް	
ނަން	
ދަރިވަރުގެ ރަޖިސްޓަރީ ނަންބަރު	
ދަރިވަރުގެ ރަޖިސްޓަރީ ނަންބަރު [illegible]	

ކިޔެވި ކުރި ތަޢުލީމު ،

[illegible]	
[illegible]	
ދަރިވަރުގެ [illegible]	

ސްކޫލު ހުއްދަ ދީފައި

ނަން	ތާރީޚް
ސްކޫލު ހުއްދަ ދޭ ނަން	
ސްކޫލު ހުއްދަ ދޭ ނަން	
ސްކޫލު [illegible] ހުއްދަ	
ކިޔަވާ [illegible]	

އިތުރު މަޢުލޫމާތު ،

ދަނޑުވެރިކަމާ ގުޅޭ ތަކެތި ގަތުމުގެ ކޮމިޓީ ކަނޑައަޅާ ގަސްދު

ދަނޑުވެރިކަމާ ގުޅޭ ތަކެތި ގަތުމުގެ ކޮމިޓީ ގައި ތިބި ގަސްދުގެ ބައިވެރިން

ދަނޑުވެރިކަމާ ގުޅޭ ތަކެތި ގަތުމުގެ ކޮމިޓީ ގައި ތިބި ގަސްދުގެ ބައިވެރިން

	ގަސްދުގެ ބައިވެރިންގެ ނަން	ގަސްދުގެ ބައިވެރިންގެ ދާއިރާ	ގަސްދުގެ ބައިވެރިންގެ ސޮއި	ގަސްދުގެ ބައިވެރިންގެ ދާއިރާ	ގަސްދުގެ ބައިވެރިންގެ ސޮއި
1				1	2
2				1	2
3				1	2
4				1	2
5				1	2
6				1	2
7				1	2
8				1	2
9				1	2
10				1	2
11				1	2
12				1	2
13				1	2
14				1	2
15				1	2
16				1	2
17				1	2
18				1	2
19				1	2
20				1	2
21				1	2
22				1	2
23				1	2
24				1	2

ތަރިގަނޑުގެ ތަފާތު ބަލަހައްޓާ ފަރާތްތަކުގެ ލިސްޓް

ތަރިގަނޑުގެ ތަފްޞީލް

ތަރިގަނޑު ބަލަހައްޓާ ފަރާތުގެ ނަންބަރު ތަރިގަނޑުގެ ބަލަހައްޓާ ފަރާތުގެ ނަން

ކޮށް

	ކޮށް 1	ކޮށް 2	ކޮށް 3
	ކައުޓް	ކައުޓް	ކައުޓް
ކޮށް			
ކުރީގެ ބެލެންސް			
ދަށްވާ			

ދިނުމަކާ

ތަރިގަނޑުގެ ބަލަހައްޓާ ފަރާތުގެ ނަން	ދިން ދުވަސް	ތަރިގަނޑުގެ ބަލަހައްޓާ ފަރާތުގެ ނަން

ތަރިގަނޑުގެ ބަލަހައްޓާ ފަރާތުގެ ނަން	ދިން ދުވަސް	ތަރިގަނޑުގެ ބަލަހައްޓާ ފަރާތުގެ ނަން

ތަރިގަނޑު ބަލަހައްޓާ ފަރާތުގެ ކޮށްދޭ ކަންތައް

	ކަންތައް ކުރާ ގޮތް	ތަފާސްކުރާ ފަރާތް	ކައުޓް

	ކަންތައް ކުރާ ގޮތް	ތަފާސްކުރާ ފަރާތް	ކައުޓް

ތަނަވަސް ދިވެހިރާއްޖެ ދިވެހި ފަރާތްތަކުގެ ހިއްސާ ސަރުވޭ

ތަނަވަސް ފޯމް

ތަނަވަސް ދިވެހި ފަރާތް ނަމަ ތިރީގައި ތަނަވަސްގެ ވާހަކަ ދައްކަންވާނެ.

ތަނަވަސްގެ ނަން	
ތަނަވަސްގެ ނަމްބަރ	

ކުންފުނި

	ކުންފުނި 1	ކުންފުނި 2	ކުންފުނި 3
	ތާރީ	ތާރީ	ތާރީ
ކުންފުނި			
ކުންފުނީގެ ނަމްބަރ			
ހިއްސާ			

ލިސްޓަކާ

ތަނަވަހުގެ ނަން	ފާސްވި ލިސްޓް	ކުންފުނީގެ ހިއްސާ ދާއިރާ

ތަނަވަހުގެ ނަން	ފާސްވި ލިސްޓް	ކުންފުނީގެ ހިއްސާ ދާއިރާ

ތަނަވަހުގެ ހިއްސާ ތަކެއް ހޯދާފައިވާ ކުންފުނި

ކުންފުނީ ނަން	ހިއްސާ ތަކެއް	ތާރީ

ކުންފުނީ ނަން	ހިއްސާ ތަކެއް	ތާރީ

މިނިސްޓްރީ އޮފް ފިޝަރީޒް އެންޑް އެގްރިކަލްޗަރ
މާލެ، ދިވެހިރާއްޖެ

[illegible]

[illegible]

1 - އަތޮޅާއި ރަށް: .... ☐☐☐☐

2 - ގޭގެ ނަން: ....

3 - [illegible] ގެ ނަން: ....

4 - ފޮނުވި މީހާގެ ނަން: .... ސޮއި: ....

5 - ފޮނުވި ތާރީޚު: ....

މަޢުލޫމާތު ސިއްރުކުރުން

[illegible]

[illegible]

[illegible]

[illegible]

	ނަން	ތާރީޚު
1 - [illegible]	....	....
2 - [illegible]	....	....
3 - [illegible]	....	....

I ئۇيغۇرچە سۆزلىشىش :

س 1- چېتىلىش دەرىجىسى قانداق ئۇيغۇر ئائىلىلىرىنىڭ ئۇيغۇرچە سۆزلىشىش ئەھۋالىنى ئەڭ ياخشى ئىپادىلەيدۇ؟
(چېتىلىش دەرىجىسى ئېنىق ئەمەس ئائىلىلەرنى ئۆز ئىچىگە ئالىدىغان قىلىپ ئېنىقلانغان)

1- ئۇيغۇرچە سۆزلىشىش
2- ئۇيغۇرچە، خەنزۇچە ئارىلاش سۆزلىشىش
3- خەنزۇچە، ئەمما ئۇيغۇرچە چۈشىنىش ئىقتىدارى بار ئائىلىلەرنىڭ ئۇيغۇرچە سۆزلىشىش
4- چېتىلىش دەرىجىسى ئېنىق ئەمەس ئائىلىلەرنىڭ ئۇيغۇرچە سۆزلىشىش
5- ھەممە ئەزالىرى ئۇيغۇرچە سۆزلىشىدىغان ئائىلىلەرنىڭ ئۇيغۇرچە سۆزلىشىش
6- ئاساسەن ئۇيغۇرچە، ئەمما بەزىدە خەنزۇچە سۆزلىشىدىغان ئائىلىلەرنىڭ ئۇيغۇرچە سۆزلىشىش
7- ئۆزگىرىپ تۇرىدىغان ئەھۋال
8- قىسمەن ئۇيغۇرچە سۆزلىشىدىغان ئائىلىلەرنىڭ ئۇيغۇرچە سۆزلىشىش (ئۇيغۇرچە سۆزلىشىدىغان ئەزالىرى س 13- سۇئالغا جاۋاب بەرگەن)
9- ئۇيغۇرچە سۆزلىشىدىغان ئەزالىرى ئۆيدىكى ئاساسلىق تىل بولمىغان ئائىلىلەرنىڭ ئۇيغۇرچە سۆزلىشىش
(چېتىلىش دەرىجىسى ئېنىق ئەمەس، ئۇيغۇرچە سۆزلىشىدىغان ئەزالىرى بار ئائىلىلەرنى ئۆز ئىچىگە ئالىدىغان قىلىپ ئېنىقلانغان)

II خەنزۇچە سۆزلىشىش ئەھۋالى

س 2- ئۆيىڭىزدە ئائىلە ئەزالىرىڭىز بىلەن خەنزۇچە سۆزلىشىدىغان ئەزالار بولسا، ئۇلارنىڭ ئىچىدە ئەڭ كۆپ خەنزۇچە سۆزلىشىدىغان كىم؟

س 3- ئۆزىڭىز ئۆيىڭىزدە ئائىلە ئەزالىرىڭىز بىلەن خەنزۇچە سۆزلىشىدىغانمۇ؟

1- ھەئە
2- ياق (III قىسمىغا ئۆتۈڭ س 4- سۇئالغا)

س 3-(ر) خەنزۇچە سۆزلىشىدىغان ئەزالىرىڭىز كىملەر؟

س 3-(س) خەنزۇچە سۆزلىشىدىغان ئەزالىرىڭىز بىلەن خەنزۇچە سۆزلىشىشنى قاچان باشلىغان؟

تۇغۇلغان

III ދަނޑުވެރިކަމުގެ ތަކެތި އުފެއްދުމާއި ވިއްކުން:

(I ވަނަ ސުވާލު 1 ގެ ޖަވާބު 5 ނުވަތަ 6 ވިއްޔާ އެއަށްފަހު ... ސުވާލު ކުރާށެވެ)

ސުވާލު 4 - އުފެއްދި ތަކެތި	ސުވާލު 5 - އުފެއްދުނު މިންވަރު ހުރިގޮތް 1- ގޭގެ ބޭނުމަށް 2- ވިއްކުމަށް ބޮޑުކޮށް 3- ވިޔަފާރިއަށް ބޮޑުކޮށް	ސުވާލު 6 - ތަކެތި ވިއްކާ ގޮތް 1- އާއްމުކޮށް 2- ދުވަހަކު 3- ބައެއްފަހަރު 4- އަހަރު ދުވަހު	ސުވާލު 7 - ވިއްކާ ތަކެތީގެ އަގު (... ޖަދުވަލު V ސުވާލު 13 ...)
1- ނާރު	1 2 3	1 2 3 4	ރުފިޔާ
2- ބަނޑުއަލުވި، ބިސްކުރިޔާ ... ތަކެތި			
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
3- އަލަ، ކަށިކެޔޮ، ... ތަކެތި			
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
4- މިރުސް ... ތަކެތި			
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
5- ދަނޑުވެރިކަން			
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2	1 2 3 4	ރުފިޔާ
6- އެހެނިހެން (ބަޔާން ކުރޭ)			
....	1 2	1 2 3 4	ރުފިޔާ
....	1 2 3	1 2 3 4	ރުފިޔާ
....	1 2	1 2 3 4	ރުފިޔާ
....	1 2	1 2 3 4	ރުފިޔާ
....	1 2	1 2 3 4	ރުފިޔާ
....	1 2	1 2 3 4	ރުފިޔާ

IV ދިރޭތަކެތީގެ އުފެއްދުން ދިނުމަށް: (I ވަނަ ބައިގެ ސ-1- ގައި ކޮޑު 5 ނުވަތަ 6 ގުނަވަ ސުވާލުކުރަންވާނެ)

ސ-8- ގޭގައި ގޮތެއްގައި ގެންގުޅޭ ދިރޭތަކެތީގެ ތެރެއިން ކޮން ބާވަތެއް ރައްކާކުރޭ؟

1- ބަކަރި (ސ-10- އަށް ދާށް)
2- ކުކުޅު ހަސް
3- އަސްދޫނި
4- އެހެނިހެން ތަކެތި (ބަޔާންކުރުން) ....

ސ-9- ކުކުޅު ހަސް އަދި އަސްދޫނި ވިއްކާފައި ވޭތޯ؟

1- އާއެކޭ (ސ-11- އަށް ދާށް)
2- ނޫނެކޭ (ސ-11- އަށް ދާށް)

ސ-10- ބަކަރި ވިއްކާފައި ވޭތޯ؟

1- އާއެކޭ
2- ނޫނެކޭ

ސ-11- އެތެރޭގެ ކެއުމަށް ބޭނުންކުރި ގޮތުގައި (ކުކުޅު ހަސް، ބަކަރި އަސްދޫނި ފަދަ ތަކެތި) ބަލަހައްޓާ ދިނުމަށް

ސ-12- ދިރޭތަކެތި ދިނުމަށް:

ސ-12-(ހ) ކުކުޅު، ހަސް، ބަކަރި، އަސްދޫނި

1- ގޭގައި ދިރުވާ ގޮތުގައި ވިއްކާ ބަދަލުގަ
2- ވިއްކާ ގުނަ ގޮތުގައި ބަދަލު
3- ދިރޭތަކެތި ބަދަލުގެ ގޮތުން ގަތުމަށް ބަދަލު
4- ދިރޭތަކެތި ބަދަލުގެ ގޮތުން ކުރީގެ ބަދަލު
5- އަހަރު ދުވަހުގެ ގޮތުގައި ވިއްކި ބަދަލު
6- އަހަރު ދުވަހުގެ ގޮތުގައި އާމްދަނީގެ ގޮތުން މުސްކުޅި/ ބޮޑުން ކާނާގެ ބަދަލު
7- އަހަރު ދުވަހުގެ ގޮތުގައި ގެންގުޅޭ ވިއްކާ ގޮތް ދިރުމުން ހާލަތު
(މި ގޮތުގައި ދަށުގައި ވިއްކާފައި ދިނުމުގެ ދިރޭތަކެތީގެ ބާވަތް އެނގޭނެއެވެ.)

ސ-12-(ށ) ވިއްކާ: (ބަކަރި ގެންގުޅޭ ބާވަތް ވިއްކާ ގޮތް ކުރިއަށް ގެންދެވުން)

1- ގޭގައި ދިރުވާ ގޮތުގައި އުޅެ ބަކަރި ބަދަލު
2- ގޭގައި ދިރުވާ ގޮތުގައި ބަދަލު ބަކަރި ވިއްކި ދިނުމަށް
3- ބަކަރި ވިއްކުން ހަދާ
4- ގޭގައި ދިރުވާ ގޮތުގައި ބަދަލު ބަކަރި ބާވަތް ގެންގުޅުން/
- މުސްކުޅި ގެންގުޅުން ދިނުމަށް
5- ބަކަރި ވިއްކައި ގެންދާ އަހަރު ދުވަހުގެ ގޮތުގައި ދިރުވަން ދިނުމަށް

V ތިރީގައި އެވާ ކުރުކުރު ސުވާލުތަކަށް ޖަވާބު ދީ:

ސ 13- [illegible]

ނަންބަރު

ސ 14- [illegible]

VI ތިރީގައި އެވާ ސުވާލުތަކަށް ފައިސާ:

ސ 15- [illegible] ؟

1- އާއިލާ

2- ނުހަރުދާ ([illegible])

ސ 16- [illegible] ފައިސާ [illegible] ؟

ނަންބަރު

ސ 17- ފައިސާ [illegible] ؟

1- [illegible]

2- [illegible]

3- [illegible] / [illegible]

ސ 17- [illegible] ފައިސާ [illegible] ؟

1- އާއިލާ

2- ނުހަރުދާ

ރިމާކްސް:

....

....

....

....

....

....

މިނިސްޓްރީ އޮފް އެޑިއުކޭޝަން
މާލެ، ދިވެހިރާއްޖެ

ދަރިވަރުންގެ ޤައުމީ ހުނަރު ދައްކާ މުބާރާތް 1991

ބައިވެރިވާ ފަރާތުގެ މަޢުލޫމާތު

1- ނަން ☐☐ 2- ގްރޭޑް / ނަންބަރު ☐☐

3- އުފަން ތާރީޚް ---/---/--- 4- ސްކޫލް / މަރުކަޒުގެ ނަން ....

5- ސްކޫލް / ރަށުގެ ނަން .... 6- ބައިވެރިވާ ބައި ...... މިނިޓް ......

7- ބައިވެރިވާ ބައި ...... މިނިޓް ......

ބައިވެރިވާ ބައިގެ ތަފްޞީލް

....

....

ބައިވެރިވާ ބައިގެ ބޭނުން

....

އެޕްރޫވްގެ ބޭނުމަށް

	ނަން	ތާރީޚް
1- ބައިވެރިވާ ފަރާތުގެ ބެލެނިވެރިޔާ	....	....
2- ކޯޗް / ޓީޗަރު	....	....
3- ސްކޫލް / މަރުކަޒުގެ ވެރިޔާ	....	....

ސެކްޝަން I

ގޭބިސީ އާއިލާގެ މަޢުލޫމާތު

I - 1 ޖަވާބުދޭމީހާގެ ޖިންސު

1 - ފިރިހެން 2 - އަންހެން

I - 2 ޖަވާބުދޭމީހާގެ ނަން ....

I - 3 ގޭގެ ވެރިޔާއާ ހުރި ގުޅުން

1 - ގޭގެ ވެރިޔާ
2 - އަނބިމީހާ ނުވަތަ ފިރިމީހާ
3 - ދަރިފުޅު
4 - ދަރިފުޅުގެ ދަރިފުޅު ނުވަތަ ޕިޔަދަރިފުޅު
5 - ދަރިފުޅުގެ ދަރިފުޅު
6 - ބަފަ ނުވަތަ މަންމަ
7 - ބޭބެ ނުވަތަ ދައިތަ ނުވަތަ ކޮއްކޮ
8 - ބޮޑު / ބަފަ ނުވަތަ ކުޑަ
9 - އެހެން ތިމާގެ މީހުން
10 - ރަހުމަތެރި ގުޅުމެއް ނެތް މީހުން

I - 4 މިގޭބިސީގެ ހުރި މީހުން ދިރިއުޅެނީ ކިހާ ވަރެއްގެ ގޮތްގޮތަކަށް ؟

1 - ވާރުވުން 2 - ދަރުވުން 3 - އެހެން ގޮތެއް ....

I - 5 ގޭގެ މިލްކުވެރިކަމާ ބެހޭ ގޮތުން ؟

1 - އަމިއްލަ ގޮތުން ނުވަތަ 3 - ސަރުކާރުން
2 - ކުއްޔަށް 4 - އެހެނިހެން ....

I - 6 މިގޭބިސީގެ ދިރިއުޅުމަށް ބޭނުންކުރާ ފެން ލިބެނީ ކޮންގޮތަކުން ؟

1 - ވަޅުފެން ގޭގައި ހުރި ވާލުން
2 - ޖަމާކުރާ ފެން ގޭގައި ހުރި ވާލުން
3 - އަރިހުގައި
4 - ގޮވާ
5 - ވިއްކާ ފެން ....

I - 7 މިގޭބިސީގެ މީހުން ދަތުރުކުރާ ގޮތްގޮތް ؟

1 - ދޯނި 2 - އޮޑި 3 - ބަހަނާ
4 - ބޯޓު 5 - އެހެން ގޮތެއް ....

I - 8 މިގޭބިސީގައި ދިރިއުޅޭ މީހުންގެ އަދަދު ؟ ⎵⎵

I - 9 ގޭބިސީގައި މި ތަކެތި ހުރިތޯ ؟

	އާއެކޭ	ނުހުރޭ		އާއެކޭ	ނުހުރޭ
ބަހަނާ	1	2	ޓީވީ	1	2
ރޭޑިއޯ	1	2	އައިސް ބަހަރާ	1	2

I - 10 މިގޭގެ ދިރިއުޅުމަށް ބޭނުންކުރާ ކާބޯތަކެތި ކައްކަނީ ކޮންގޮތަކުން ؟ (ސަރުކާރުން ނުވަތަ ސަރުކާރަށް)

1 - އުނދަގޫ ހިތާ 2 - ގޭސް ނުވަތަ ތެލު 3 - ދަރު
4 - ވަން 5 - އެހެން ގޮތެއް ....

I - 11 މިގޭގެ ގޮތުގައި ބޭނުންކުރާ އަލިކަން ލިބެނީ ކޮންގޮތަކުން ؟

1 - ބުއްދި 2 - ހިލް 3 - ވަން
4 - ކޮންބަޔިޑު 5 - އެހެން ގޮތެއް ....

ﯘﯖﯩﯕﯩﺴﻰ ﻣﯘﺩﯗﺭﻟﯩﺮﻯ ﻣﯘﻫﯩﻢ ﺋﯩﺸﻠﯩﺮﻯ ﺋﻮﺗﯘﺭﯗﺷﻠﯘﻕ

	ﯘﯖﯩﯕﯩﺴﻰ ﻛﻰ ﻣﯘﺩﯗﺭﻟﯩﺮﻯ ﺑﯩﻠﻪﻥ ﺑﻪﺭﺑﺎﺩ ﺑﻮﻟﻐﺎﻥ ﺋﯩﺸﻠﯩﺮﻯ	ﺋﯘﺳﺘﯩﺪﻩ ﻗﯩﻠﻐﺎﻥ ﺋﯩﺸﻠﯩﺮﻯ	ﺋﯩﺠﺎﺑﻪﺗﻜﻪ ﺋﺎﻟﻐﺎﻥ ﻣﯘﺩﯗﺭﻟﯩﺮﻯ
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

ﺗﺎﻗﻪﺕ	ﺋﯘﺳﺘﯩﺪﻩ ﻗﯩﻠﻐﺎﻥ ﺋﯩﺸﻠﯩﺮﻯ
1	ﺋﻮﺳﯘﻝ ﺋﻮﺭﻧﯩﺘﯩﺶ، ﺳﯩﺴﺘﯩﻤﺎ ﺋﻮﺭﻧﯩﺘﯩﺶ / ﺋﻮﺭﻧﯩﺘﯩﺶ
2	ﺋﯘﻗﯘﻡ ﺋﻮﺭﯗﺵ ﺋﯘﺳﯘﻟﻰ
3	ﻣﯘﺋﻪﻟﯩﻢ ﺋﯘﻗﯘﺗﻘﯘﭺ
4	ﻣﻪﺳﻪﻟﻪ ﺋﻮﺗﺘﯘﺭﯗﺵ
5	ﺑﯩﺮ ﺋﯩﺸﻨﻰ ﺋﯩﺰﺩﯩﻤﻪﻙ
6	ﺋﯘﺳﯘﻟﻰ ﻣﯘﺩﯗﺭ، ﺋﯩﺠﺘﯩﻤﺎﻋﻰ ﻣﯘﻫﯩﻢ ﺋﯩﺸﻠﯩﺮﻯ
7	ﻣﻪﻟﯘﻣﺎﺕ ﺋﯘﻗﯘﺷﻰ ﺋﯘﻗﯘﺗﻘﯘﭼﻰ ﺋﯘﻗﯘﺗﯘﺵ
8	ﺋﯘﻗﯘﺗﻘﯘﭼﻰ ﺋﯩﻘﺘﯩﺼﺎﺩﻯ ﻣﻪﺳﻪﻟﻪ ﻣﻪﺳﻠﯩﺤﻪﺕ ﺋﯘﻗﯘﺗﻘﯘﭼﻰ ﺋﻮﺗﺘﯘﺭﯗﺵ
9	ﻣﻪﺳﻪﻟﻪ ﺋﯘﻗﯘﺗﻘﯘﭼﻰ ﺋﯘﻗﯘﺗﯘﺵ
10	ﺋﯘﺳﺘﯩﺪﻩ ﺋﻮﺭﻧﯩﺘﯩﺶ

ސެކްޝަން II

ގޭގެ ދިރިއުޅޭ މީހުންގެ މަޢުލޫމާތު!

	II-1 ނަން	II-2 ޖިންސު	II-3 އުމުރު ފުރިހަމަވީ	II-4 ބަރުދަން (ވަޒަން)	II-5 ބޯދިގުމިން [illegible]	II-6 ދިގުމިން [illegible]	II-7 [illegible] ބަލިވެފައިވޭތޯ؟	II-8 ބަލީގެ ބާވަތް	II-9 [illegible]	II-10 [illegible]
1	....	1. ފިރިހެން 2. އަންހެން	މަސް ⊔⊔ އަހަރު ⊔⊔	⊔⊔	⊔⊔⊔	⊔⊔⊔	1. އާއެކޭ 2. ނޫނެކޭ	⊔	⊔	1. އާއެކޭ 2. ނޫނެކޭ
2	....	1 ފިރިހެން 2 އަންހެން	މަސް ⊔⊔ އަހަރު ⊔⊔	⊔⊔	⊔⊔⊔	⊔⊔⊔	1 އާއެކޭ 2 ނޫނެކޭ	⊔	⊔	1 އާއެކޭ 2 ނޫނެކޭ
3	....	1 ފިރިހެން 2 އަންހެން	މަސް ⊔⊔ އަހަރު ⊔⊔	⊔⊔	⊔⊔⊔	⊔⊔⊔	1 އާއެކޭ 2 ނޫނެކޭ	⊔	⊔	1 އާއެކޭ 2 ނޫނެކޭ
4	....	1 ފިރިހެން 2 އަންހެން	މަސް ⊔⊔ އަހަރު ⊔⊔	⊔⊔	⊔⊔⊔	⊔⊔⊔	1 އާއެކޭ 2 ނޫނެކޭ	⊔	⊔	1 އާއެކޭ 2 ނޫނެކޭ
5	....	1 ފިރިހެން 2 އަންހެން	މަސް ⊔⊔ އަހަރު ⊔⊔	⊔⊔	⊔⊔⊔	⊔⊔⊔	1 އާއެކޭ 2 ނޫނެކޭ	⊔	⊔	1 އާއެކޭ 2 ނޫނެކޭ

[illegible] (II-9)

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]

ބަލީގެ ބާވަތް (II-8)

1. ހުން [illegible]
2. ބޭރަށް ދިޔުން
3. ހުން އަދި ބޭރަށް ދިޔުން
4. [illegible]

ސެކްޝަން III

[illegible]
1 - [illegible]
2 - [illegible]
3 - [illegible]
4 - [illegible]
5 - [illegible]
6 - [illegible]

ނަންބަރު	ބާވަތް	[illegible]	ނަންބަރު	ބާވަތް	[illegible]
	[illegible]			[illegible]	
01	[illegible]	⊔	07	[illegible]	⊔
02	[illegible]	⊔	08	[illegible]	⊔
03	[illegible]	⊔		[illegible]	
04	[illegible]	⊔	09	[illegible]	⊔
05	[illegible]	⊔	10	[illegible]	⊔
06	[illegible]	⊔	11	[illegible]	⊔

ފުރިހަމަ ކުރުމަށް ދެ ދަރަނި ބޭނުންކުރާ ގޮތް

1 - ގޮތް ބަދަލުކުރުން 2 - ތަކެތި ވަގުތުކޮށް ބަދަލުކުރުން 3 - ތަކެތި ދަރަނި/ ގަންނަ ގޮތް 4 - ތަކެތި ކަނޑައެޅި ދަރަނިން ގަންނަ ގޮތް 5 - ހަމަ ތަކެތި ދެ ދަރަނި ގަންނަ ގޮތް 6 - ތަކެތި ހިލޭ

ކުރިއަށް	ތަކެތީގެ ނަން	ކުރިއަށް	ތަކެތީގެ ނަން
	ގެއްލުނު ތަކެތީގެ ތަފްޞީލް		
12	ހައްދު	52	ސަބަނދުރު
13	ގަސް	53	ދަށު ކަނޑުގަ
14	ދަށު ގަސް	54	ގަސް
15	ގަސް ބަދަލުކުރުން / ގަސް ކެނޑުން	55	ހައްދު
16	ގަސް ކެނޑުން	56	ގަސް
17	ތަކެތި ގެއްލުނު ގަސް ގެ ތަފްޞީލް	57	ތަކެތި ގެއްލުނު
		58	ކަނޑައެޅި ދަރަނި
	ގަސް ހަދާ ގޮތް ތަފްޞީލް	59	ކަނޑައެޅި ދަރަނި
18	ހައްދު ގަސް	60	ތަކެތި ގެއްލުނު ގަސް ގެ ތަފްޞީލް
19	ކަނޑައެޅި		
20	ހަދާ		ކަނޑައެޅި ދަރަނި
21	ގަސް ގަސް	61	ގަސް ކަނޑައެޅި
22	ތަކެތި ގެއްލުނު ގަސް ހަދާ ގޮތް	62	ކަނޑައެޅި ދަރަނި
		63	ތަކެތި ގެއްލުނު ގަސް
	ކަނޑައެޅި ދަރަނި	64	ކަނޑައެޅި
23	ކަނޑައެޅި	65	ކަނޑައެޅި ދަރަނި
24	ގަސް		
25	ކަނޑައެޅި ދަރަނި		ދަށު
26	ދަށު	66	ދަށު ތަކެތި ގަސް
27	ކަނޑައެޅި ދަށު	67	ދަށު
28	ކަނޑައެޅި	68	ކަނޑައެޅި
29	ގަސް ކަނޑައެޅި	69	ދަށު ދަށު
30	ކަނޑައެޅި	70	ތަކެތި ގެއްލުނު ގަސް
31	ކަނޑައެޅި ކަނޑައެޅި		
32	ދަށު ގަސް ދަށު		ކަނޑައެޅި ދަށު
33	ގަސް ދަށު ކަނޑައެޅި	71	ދަށު
34	ކަނޑައެޅި	72	ކަނޑައެޅި
35	ދަށު ގަސް	73	ގަސް ކަނޑައެޅި
37	ކަނޑައެޅި ދަށު	74	ތަކެތި ގެއްލުނު
38	ދަށު		
39	ކަނޑައެޅި ދަށު		ތަކެތި ގެއްލުނު ގަސް ގެ ތަފްޞީލް ކަނޑައެޅި ދަރަނި
40	ކަނޑައެޅި	75	ދަށު
41	ގަސް	76	ކަނޑައެޅި ގަސް
42	ކަނޑައެޅި ކަނޑައެޅި	77	ތަކެތި ގެއްލުނު ގަސް
43	ގަސް ގަސް ދަށު	78	ކަނޑައެޅި ކަނޑައެޅި
44	ދަށު ގަސް		
45	ތަކެތި ގެއްލުނު ގަސް ކަނޑައެޅި ގަސް ގެ ތަފްޞީލް		ގަސް ކަނޑައެޅި
		79	ކަނޑައެޅި
	ދަށު	80	ދަށު
46	ގަސް ކަނޑައެޅި	81	ގަސް ދަށު
47	ދަށު ގަސް	82	ކަނޑައެޅި ގަސް ދަށު
48	ގަސް	83	ގަސް ދަށު
49	ދަށު ގަސް	84	ގަސް
50	ކަނޑައެޅި ދަށު	85	ތަކެތި ގެއްލުނު
51	ގަސް		

ޤިރާޢަތުގެ ޤައުމީ މުބާރާތް 1991

ބައިވެރިވާ ކުއްޖާގެ މަޢުލޫމާތު

1- ނަން [ ] 2- ގޯއްޗެއް [ ]

3- އުފަން ތާރީޚް ---/---/--- 4- ....

5- .... 6- ...... ގަޑި ...... މިނިޓް ......

7- ...... ގަޑި ...... މިނިޓް ......

މުބާރާތުގެ ޤަވާޢިދު

[illegible]

[illegible]

[illegible]

ނަތީޖާ

	ނަން	ސޮއި
1-	....	....
2-	....	....
3-	....	....

ސެކްޝަން IV

[illegible]

4.1 [illegible]

1- ދިވެހިބަސް　　2- އިނގިރޭސި

4.2 [illegible] ....

4.3 [illegible]

1- [illegible]
2- [illegible]
3- [illegible]
4- [illegible]
5- [illegible]
6- [illegible]
7- [illegible] / [illegible]
8- [illegible] / [illegible]
9- [illegible]
10- [illegible]

4.4 [illegible]?

1- [illegible]　　2- 1:5 [illegible]　　3- [illegible]

4.5 [illegible]

[illegible] ---/---/--　　[illegible] ---/---/--

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]									[illegible]	
01	[illegible]	2							01	[illegible]	2
02	[illegible]	2							02	[illegible]	2
03	[illegible]	1							03	[illegible]	1·
04	[illegible]	2							04	[illegible]	2
05	[illegible]	2							05	[illegible]	2
06	[illegible]	2							06	[illegible]	2
09	[illegible]	1							09	[illegible]	1
18	[illegible]	1							18	[illegible]	1
19	[illegible]	1							19	[illegible]	1
20	[illegible]	1							20	[illegible]	1
29	[illegible]	1							29	[illegible]	1
32	[illegible]	1							32	[illegible]	1
33	[illegible]	1							33	[illegible]	1
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38	[illegible]	1							38	[illegible]	1
40	[illegible]	1							40	[illegible]	1
42	[illegible]	1							42	[illegible]	1
75	[illegible]	3							75	[illegible]	3
76	[illegible]	3							76	[illegible]	3
78	[illegible]	3							78	[illegible]	3

[illegible] V

24 ގަޑިއިރުގެ [illegible]

[illegible]

1 - [illegible]
2 - [illegible]
3 - [illegible]
4 - [illegible]
5 - [illegible]
6 - އެހެނިހެން

މިންވަރު

1 - [illegible]
2 - [illegible]
3 - [illegible]

ތާރީޚު --- / --- / ---									އަގުތައް					
އަގުތައް														
އެހެނިހެން	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	މިން	[illegible]	ނަންބަރު	އެހެނިހެން	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
							[illegible]							
						2	ތާޒާ ކަނޑުމަސް	01						
						2	ހިކި ކަނޑުމަސް	02						
						1	[illegible]	03						
						2	ތާޒާ އެހެނިހެން [illegible]	04						
						2	ހިކި އެހެނިހެން [illegible]	05						
						2	އެހެނިހެން [illegible]	06						
						1	ކުކުޅު	09						
						1	[illegible]	18						
						1	[illegible]	19						
						1	[illegible]	20						
						1	މިރުސް	29						
						1	ހިކަނދިފަތް	32						
						1	[illegible]	33						
						1	ބިސް	34						
						1	ރޮށި	38						
						1	ހަކުރު	40						
						1	ކިރުގަނޑު	42						
						3	[illegible]	73						
						3	[illegible]	76						
						3	[illegible]	78						

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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2	[illegible]	04							2	[illegible]	04
3	[illegible]	75							3	[illegible]	75
1	[illegible]	38							1	[illegible]	38
1	[illegible]	54							1	[illegible]	54
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2	[illegible]	02							2	[illegible]	02
1	[illegible]	03							1	[illegible]	03
2	[illegible]	04							2	[illegible]	04
2	[illegible]	05							2	[illegible]	05
2	[illegible]	06							2	[illegible]	06
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1	[illegible]	40							1	[illegible]	40
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2	[illegible]	02							2	[illegible]	02
1	[illegible]	03							1	[illegible]	03
2	[illegible]	04							2	[illegible]	04
2	[illegible]	05							2	[illegible]	05
2	[illegible]	06							2	[illegible]	06
2	[illegible]	12							2	[illegible]	12
1	[illegible]	29							1	[illegible]	29
1	[illegible]	38							1	[illegible]	38
3	[illegible]	75							3	[illegible]	75
3	[illegible]	76							3	[illegible]	76
	[illegible]									[illegible]	
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1	[illegible]	87							1	[illegible]	87
1	[illegible]	18							1	[illegible]	18
1	[illegible]	19							1	[illegible]	19
1	[illegible]	20							1	[illegible]	20
1	[illegible]	21							1	[illegible]	21
1	[illegible]	88							1	[illegible]	88

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	2	[illegible]	04	
	3	[illegible]	75	
	1	[illegible]	38	
	1	[illegible]	54	
		[illegible]		
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	2	[illegible]	02	
	1	[illegible]	03	
	2	[illegible]	04	
	2	[illegible]	05	
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	1	[illegible]	30	
	1	[illegible]	38	
	1	[illegible]	40	
	1	[illegible]	54	
		[illegible]		
	2	[illegible]	01	
	2	[illegible]	02	
	1	[illegible]	03	
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	1	[illegible]	38	
	3	[illegible]	75	
	3	[illegible]	76	
		[illegible]		
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	1	[illegible]	87	
	1	[illegible]	18	
	1	[illegible]	19	
	1	[illegible]	20	
	1	[illegible]	21	
	1	[illegible]	88	

ތާރީޚު / /									ތާރީޚު / /		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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38	[illegible]	1							38	[illegible]	1
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67	[illegible]	2							67	[illegible]	2
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	[illegible]	2							86	[illegible]	2

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ޢަދަދު									ޢަދަދު					
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						2	[illegible]	69						
						2	[illegible]	67						
							[illegible]							
						3	[illegible]	79						
						3	[illegible]	80						
						3	[illegible]	81						
						2	[illegible]	82						
						2	[illegible]	83						
						2	[illegible]	84						
						1	[illegible]	85						
						2	[illegible]	67						
						2	[illegible]	86						

ތާރީޚު ---/--/---									ތާރީޚު ---/--/---		
			ޚަރަދު :								
ދިން	[illegible]	ނަންބަރު	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ދިން	[illegible]	ނަންބަރު
	[illegible]									[illegible]	
2	[illegible]	01							2	[illegible]	01
2	[illegible]	02							2	[illegible]	02
1	[illegible]	03							1	[illegible]	03
2	[illegible]	04							2	[illegible]	04
2	[illegible]	05							2	[illegible]	05
2	[illegible]	06							2	[illegible]	06
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	[illegible]									[illegible]	
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1	[illegible]	27							1	[illegible]	27
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1	[illegible]	29							1	[illegible]	29
1	[illegible]	30							1	[illegible]	30
1	[illegible]	31							1	[illegible]	31
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1	[illegible]	33							1	[illegible]	33

ތާރީޚު ..../..../...

[illegible]									[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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						2	[illegible]	01						
						2	[illegible]	02						
						1	[illegible]	03						
						2	[illegible]	04						
						2	[illegible]	05						
						2	[illegible]	06						
							[illegible]							
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						1	[illegible]	31						
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						1	[illegible]	33						

ތާރީޚު ...../...../.....

ނަންބަރު	[illegible]	ޖުމްލަ	[illegible] ސަބަބު	[illegible] ސަބަބު	[illegible]	[illegible] ސަބަބު	[illegible]	[illegible]
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	[illegible]							
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67	[illegible]	2						
68	[illegible]	2						
69	[illegible]	2						
70	[illegible]	2						

ތާރީޚު ...../...../.....

ނަންބަރު	[illegible]	ޖުމްލަ
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	[illegible]	
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68	[illegible]	2
69	[illegible]	2
70	[illegible]	2

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ނަންބަރު	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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69	[illegible]	2						
70	އަސްޕިރިން	2						

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35	[illegible]	1
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45	[illegible]	1
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47	[illegible]	1
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58	[illegible]	1
59	[illegible]	1
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62	[illegible]	3
63	އަސްޕިރިން	3
64	[illegible]	3
65	ސޯޕް	1
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67	[illegible]	2
68	[illegible]	2
69	[illegible]	2
70	އަސްޕިރިން	2

							ތާރީޚު / /							ތާރީޚު / /
		[illegible]									[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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						1	[illegible]	37						
						1	[illegible]	38						
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						1	[illegible]	41						
						1	[illegible]	42						
						1	[illegible]	43						
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						1	[illegible]	45						
							[illegible]							
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						1	[illegible]	47						
						1	[illegible]	48						
						1	[illegible]	49						
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						1	[illegible]	65						
							[illegible]							
						2	[illegible]	66						
						2	[illegible]	67						
						2	[illegible]	68						
						2	[illegible]	69						
						2	[illegible]	70						

Central Region:

Fly to	Kahdhoo	Saturday	5th Oct
Boat to	Isdhoo	Sunday	6th Oct
Work on	Isdhoo	Monday	7th Oct
Work on	Isdhoo	Tuesday	8th Oct
Boat to	Vandhoo	Wednesday	9th Oct
Work on	Vandhoo	Thursday	10th Oct
Work on	Vandhoo	Friday	11th Oct
Boat to	Kudahuvadhoo	Saturday	12th Oct
Boat to	Kudahuvadhoo	Sunday	13th Oct
Work on	Kudahuvadhoo	Monday	14th Oct
Work on	Mahibadhoo	Tuesday	15th Oct
Boat to	Thoddoo	Wednesday	16th Oct
Work on	Thoddoo	Thursday	17th Oct
Work on	Thoddoo	Friday	18th Oct
Boat to	Male'	Saturday	19th Oct

Southern Region:

Fly to	Gan	Monday	30th Sept
Boat to	Foammulah	Tuesday	1st Oct
Work on	Foammulah	Wednesday	2nd Oct
Work on	Foammulah	Thursday	3rd Oct
Work on	Foammulah	Friday	4th Oct
Boat to	Gadhdhoo	Saturday	5th Oct
Work on	Gadhdhoo	Sunday	6th Oct
Work on	Gadhdhoo	Monday	7th Oct
Work on	Gadhdhoo	Tuesday	8th Oct
Boat to	Vaadhoo	Wednesday	9th Oct
Work on	Vaadhoo	Thursday	10th Oct
Work on	Vaadhoo	Friday	11th Oct
Boat to	Gan	Saturday	12th Oct
Rest on	Gan	Sunday	13th Oct
Fly to	Male'	Monday	14th Oct
Boat to	Kaashidhoo	Wednesday	16th Oct
Work on	Kaashidhoo	Thursday	17th Oct
Work on	Kaashidhoo	Friday	18th Oct
Boat to	Male'	Saturday	19th Oct

Last page.

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] ---/--/---									[illegible] ---/--/---		
			[illegible]								
	[illegible]									[illegible]	
71	[illegible]	1							71	[illegible]	1
72	[illegible]	1							72	[illegible]	1
73	[illegible]	1							73	[illegible]	1
74	[illegible]	1							74	[illegible]	1
	[illegible]									[illegible]	
75	[illegible]	3							75	[illegible]	3
76	[illegible]	3							76	[illegible]	3
77	[illegible]	3							77	[illegible]	3
78	[illegible]	3							78	[illegible]	3
	[illegible]									[illegible]	
87	[illegible]	1							87	[illegible]	1
88	[illegible]	1							88	[illegible]	1

ތާރީޚު ..../..../....

ނަންބަރު	ތަކެތީގެ ނަން	މިން	ޢަދަދު						ޢަދަދު					
			ހޯދަން ފަސޭހަ	ބޭނުންކުރަން ފަސޭހަ	ހޯދުމުގެ ދަތިކަން	ބޭނުންކުރަން ފަސޭހަ	ހޯދުމުގެ ދަތިކަން	ބޭނުން ކުރުން	ހޯދަން ފަސޭހަ	ބޭނުންކުރަން ފަސޭހަ	ހޯދުމުގެ ދަތިކަން	ބޭނުންކުރަން ފަސޭހަ	ހޯދުމުގެ ދަތިކަން	ބޭނުން ކުރުން
	ކަކާއި ބޮރުން													
71	ބޮރުން	1												
72	ކަކު	1												
73	ބިސް ކުކުޅު	1												
74	އެސްޕިރިން	1												
	ތަކެތި ކުރުމުގެ ކަންތައްތަކާއި													
75	ތޫނު	3												
76	ދަވާއާއި ދިއުން	3												
77	އެސްޕިރިން ތަކެތި	3												
78	ކަރުދާސް ކުޑަ	3												
	ތަރިކަ ޖެހުން													
87	ހޮޅި	1												
88	ނުޖެހޭ ތަކެތި	1												

Appendices C, D, E

Appendix C

List of Agricultural Islands

Appendix D

List of personnel involved in the survey

Appendix E

Time-table

List of Agricultural Islands in the Maldives

Atoll	Island	Percentage	Population Engaged in Agriculture	Economicall Active Population
Haa Alifu	Kelaa	20	43	214
Haa Alifu	Filladhoo	10	15	145
Haa Alifu	Baarah	26	61	235
Haa Dhaalu	Nolhivaramu	22	53	236
Shaviyani	Feevah	76	128	168
Shaviyani	Bileffahi	22	37	166
Shaviyani	Foakaidhoo	28	42	151
Shaviyani	Narudhoo	26	17	65
Raa	Gaaudoodhoo	30	22	74
Baa	Kendhoo	16	27	170
Kaafu	Kaashidhoo	35	116	332
Alifu Uthuru	Thoddoo	83	199	241
Alifu Dhekunu	Dhigurah	16	17	105
Alifu Dhekunu	Maamigili	10	15	145
Meemu	Raiymandhoo	18	10	56
Meemu	Mulah	12	22	190
Faafu	Feeali	12	11	92
Dhaalu	Kudahuvadhoo	12	31	269
Thaa	Vandhoo	22	18	83
Thaa	Hirilandhoo	21	38	184
Thaa	Omadhoo	11	12	111
Laamu	Isdhoo	57	169	299
Laamu	Gan	15	61	405
Laamu	Maavah	10	34	334
Laamu	Hithadhoo	35	89	251
Gaafu Dhaalu	Hoadedhdhoo	27	40	107
Gaafu Dhaalu	Gadhdhoo	25	86	348
Gaafu Dhaalu	Vaadhoo	41	73	180
Gaafu Dhaalu	Fiyoari	21	38	180
Gnaviyani	Foamulah	20	191	963

Survey Team personnel

Northern Region:

1	Ibrahim Shakir	Fisheries Field Officer
2	Abdull Rahman Ali	Programmer Trainee (MPE)
3	Fathimath Sharmeela	Statistical Clerk

Central Region:

4	Mohammed Shareef	Agricultural Officer (Trainee)
5	Zuhuree Ali	Fisheries Field Officer
6	Mohammed Waheed	Clerk (Atolls Administration)

Southern Region:

7	Abdullah Shiham	Fisheries Field Officer
8	Aishath Zaahidha	Secretary
9	Pippin Gee	Statistician

Time - Table

Testing Questionnaire:

Boat to	Kaashidhoo	7th Sept
Boat to	Male'	7th Sept

Training of Interviewers:

Boat to	Nilandhoo	23rd Sept
Boat to	Male'	26th Sept

Northern Region:

Fly to	Hanimadhoo	Tuesday	1st Oct
Boat to	Filladhoo	Tuesday	1st Oct
Work on	Filladhoo	Wednesday	2nd Oct
Work on	Filladhoo	Thursday	3rd Oct
Boat to	Baarah	Friday	4th Oct
Work on	Baarah	Saturday	5th Oct
Work on	Baarah	Sunday	6th Oct
Boat to	Feevah	Monday	7th Oct
Work on	Feevah	Tuesday	8th Oct
Work on	Feevah	Wednesday	9th Oct
Boat to	Foakaidhoo	Thursday	10th Oct
Work on	Foakaidhoo	Friday	11th Oct
Work on	Foakaidhoo	Saturday	12th Oct
Boat to	Hanimadhoo	Sunday	13th Oct
Rest on	Hanimadhoo	Monday	14th Oct
Fly to	Male'	Tuesday	15th Oct