REPORT ON A VISIT TO BANGLADESH TO SUPERVISE THE RESEARCH STUDENTS UNDERTAKING THE RESEARCH PROJECT ENTITLED IMPROVEMENTS IN THE PRODUCTION OF LIVESTOCK PRODUCTS IN PERI-URBAN AREAS OF CITIES IN ASIA

1 to 23 May 1997

D Silverside
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Abbreviations

AMOD	Aid management Office, Dhaka
BBS	Bangladesh Bureau of Statistics
BAU	Bangladesh Agricultural University
BRAC	Bangladesh Rural Advancement Committee
CA	Cluster Analysis
DfID	Department for International Development (formerly ODA)
NRI	Natural Resources Institute
NRMD	Natural Resources Management Department, NRI
ODA	Overseas Development Administration
PCA	Principal component Analysis

Currency Conversion

£1.00 = Tk 68 (May 1997)

Summary

D Silverside, J Sherington and N Marsland visited Bangladesh to clean and analyse data collected by research workers during a survey of approximately 100 villages in Sylhet, Mymensingh and Pabna. They assisted with the completion of the first phase of the project, which is to define the urban, peri-urban and rural areas of three study towns. Terms of reference also included the establishment of a work programme for phase 2 and the monitoring of the progress of the research workers.

Phase 1 is now complete. The mauzas (small study areas of the towns) have now been defined according to a statistical technique based on census and primary data and may be classified as rural, peri-urban and urban. Phase 1 may now be written up by the researchers into a formal part for their PhD theses. A summary can be found in Appendix 3 of this report.

Protocols for Phase 2 have now been established and both questionnaires and checklists of questions have been finalised. These can be found in the Appendix 4 of this report. To conduct the work, enumerators will be required. Their numbers have been established and provision made for them in the budget.

A system of data handling has been set up. The researchers have been trained in preparation of forms in Access and this, combined with earlier work on the computers will enable them to enter, manipulate and print out data for the project using up-to-date software packages. Para 25 refers.

It was agreed that the researchers will be supervised on a regular basis by their BAU professors. During these supervisory sessions, researchers and professors will discuss project activities, outputs and problems. Communicate by Email with NRI in UK will take place every two weeks. Para 11 refers.

A work programme and schedule was left in Bangladesh to be completed before the next NRI team visit. This will take place in October/November 1997. The team will include a socio-economist and computer modeller. Para 27 refers

Background

1   The project was set up in 1995 under the DfID Livestock Production Programme. The major objective of the project is to examine the production and marketing of livestock products in peri-urban areas with a view to increasing their availability to urban markets.   Two students at the Bangladesh Agricultural University (BAU), Mymensingh, are conducting a four-phase study as follows:

  I   Define the urban, peri-urban and rural areas of three study towns, Sylhet, Mymensingh and Pabna

  II   Characterise the production and marketing systems for livestock and their products in the three areas of the three towns

  III Conduct case-studies of specific production and marketing systems in these towns and their surrounding areas

  IV Analyse the data and construct a simple model which will indicate the most useful interventions on the production and marketing systems which should bring about an improved supply of animal proteins to urban markets.

2   The project is at the end of phase one and on schedule. During a visit in September 1996, a statistical method for the determination of the three areas was hypothesised, based on census data. These data did not apply specifically to livestock production and marketing and the results were not conclusive in delineating the three areas. Community and market questionnaires, designed specifically to address these issues, were set up and left to be administered by the students in the communities closest to 40 points placed on a map of the three towns at 2, 5, 10, 15 and 20 km from the town centre along eight regular compass points.

3   A short visit to Bangladesh was made in January 1997 to monitor progress and change the questionnaires if necessary. Although some minor changes were discussed these related more to the understanding of the questions rather than the questionnaire itself. No changes were thought necessary. The students were left with five tasks to complete (reference para 7 of the Silverside/Sherington report 11 to 17 January 1997). At the time of the present visit, all but two questionnaires had been completed in the three towns. All data had been entered on computer for subsequent analyses. Some Principle Component Analyses and Cluster Analyses had been performed on the data. The purpose of this visit was to clean the data, perform the final analyses and complete phase 1, establish a work programme for phase 2 and monitor progress on the five tasks.

Phase 1:   Definition of Urban Peri-urban and Rural areas in the three study towns

4   Although data had been entered onto databases for all three towns, it soon became apparent that they needed considerable attention. There were many anomalies, data were incomplete, inaccurate etc and several days were spent putting matters right. Principle Component Analysis and Cluster Analysis of all three towns were completed, using census data. Summary analyses and analyses of variance were carried out on selected data collected by the students for the three

towns and the preliminary view expressed in January was confirmed for all areas ie differentiation of rural and urban areas was possible but peri-urban areas were more difficult, being mostly similar to rural. In general, the students' subjective assessment of urban and rural areas concurred with those of the statistical analyses of the census data but many mauzas categorised as peri-urban by the census data were classified as rural by the students in all three towns. To address the problem, two half-day visits were made to the areas in contention. At first sight the areas were obviously rural, but further questioning of residents and observation of the symbols of 'peri-urbanism' left the question open. A visit to peri-urban areas not in contention showed them to have similar characteristics as those in contention except that access to main roads was easier. It was concluded that the original classification, as determined by analysis of census data, was appropriate.

5   The summary analysis of selected data from the questionnaires completed by the students in the three towns showed logical progressions for average prices of various commodities, including rice straw, eggs and poultry, with the change from rural to urban areas. The prices varied between towns. Some of these data proved to be significantly different and a summary of results is given in Appendix 3. Given the time available in Bangladesh, these analyses were considered sufficient for both students to give a presentation of results to date to their professors and the rest of the team. Presentation notes are to be found on file.

6   At the time of these presentations, the team was considering the division of peri-urban areas into two groups ie urban/peri-urban and peri-urban/rural, and analyses had been undertaken on that basis. It was only at the very end of the visit that it was decided to return to the original concept of just one peri-urban area. On return to the UK, the data were re-analysed. Data for poultry, egg, rice straw and goat prices, and the cheapest method of transport to town for all three towns were tabulated alongside the census data. Additionally, milk price was added for Mymensingh and Pabna (data for Sylhet were patchy due to lack of milk marketing in the area). These commodity prices were selected as they were felt to be reliable data which should be able to distinguish between the three areas in the three towns. The Cluster Analyses and Principal Component Analyses were then re-run. It was shown that all new data made a contribution to mauza definition with the exception of goat prices in all three towns. The analyses showed that there is no need to re-define the classification of mauzas and the relevant table is given in Appendix 3.

7   Phase 1 is now considered complete. Students may write up the results and submit them as a chapter in their theses. Some care will be required to express the definition in terms of physical, social and economic detail rather than as a statistical result alone. For example, it should be possible to state that urban dwellers are mainly engaged in non-agricultural employment, whereas rural folk are mainly employed on the land. Approximately half of peri-urban dwellers are employed in towns.

8   Sufficient interest was aroused in the method developed for area definition that Professor Tareque agreed to detail some students who, as part of their degree courses, would enter on computer census data for all mauzas surrounding the three towns. The students would then run statistical analyses so that each mauza could be classified according to one of the three areas. As an extension to this project, data from previous censuses could be entered (assuming that equivalent data exist and

the data are still available in the Bangladesh Bureau of Statistics (BBS)). Urban encroachment could be then be demonstrated on a map.

Completion of outstanding programme for Phase 1

9   In January, the researchers were left with the following programme to complete before this visit took place:

- Complete collection, enter, validate and analyse data for Sylhet

- Collect, enter, validate and analyse data for Pabna

- Write up the philosophy of the project, project development and methods of collection of data for the three study towns

- Commence a literature search about peri-urban livestock production and marketing

- Discuss and list the data requirements of phase II and how the data should be collected.

10   The first two points were completed and have been discussed above. The third and fourth were presented in two reports, one written by each researcher. These documents can be found on file. Regrettably, they lack originality and are a little disappointing. The fifth point seemed not to have moved on from where it was left last January.

11   A meeting was held with Professors Tareque and Sattar Mandal to discuss supervision of the researchers. It was agreed that researchers and professors would meet on a regular basis, possibly weekly, to discuss project activities, outputs and problems. The timing would need to be flexible as the researchers will be undertaking a considerable amount of field work. Concern was expressed about the quality of the reports prepared by the researchers and their need to be more proactive. Communication by Email with NRI every two weeks was also stressed and agreed.

Phase 2:   Characterisation of the production and marketing systems for livestock and their products in the three areas of the three towns

12   Having determined that each town has three areas with differing infrastructure, social and economic characteristics, Phase 2 is concerned with closer examination of the production and marketing of livestock and their products within them. As these systems in the three areas were studied only in very general terms in Phase 1, a more structured approach was chosen. Questionnaires and checklists of questions were developed to address both systems.

13   The questionnaire for livestock producers was drawn up after team discussions about the nature of the information required to characterise the production system to the point where livestock or their products enters the marketing or further processing chain. As householders are also consumers, questions concerning household consumption were also included in the form. The researcher, Momotaz Moholl, was responsible for identifying the main headings required and all team members discussed the document at considerable length and made substantial modifications before testing it.

14   Testing revealed several points which will require careful attention when the questionnaire is administered.

- The questionnaire is drawn up in English but will be applied in Bangla. The enumerator must take particular care to translate the questions accurately. Thought was given to translation of the document into Bangla and this may prove to be prudent. But the results will need to be translated into English for data entry onto the computer. Errors are therefore possible whether translation is carried out before or after the questionnaire is used

- The definition of the 'household' and its demography proved extremely difficult as there are a number of Bangla words which could be used. Professor Sattar Mandal has the Bangla word which should be applied. It is important to get this definition correct and universally applied to ensure consistency of the data collected

- While the data to be collected might have been considered personal, the crowds present at the interview belied this fact. It is important that data collected relate to the identified household and not to a consensus of opinion of the crowd

- Land holding proved to be a difficult concept to include in the questionnaires and Professor Mandal promised to revise that part of the questionnaire with a standard series of questions which he had developed for another study.

15   The questionnaire took about 70 minutes to administer. This is generally considered to be too long. In the Bangladesh context, however, each householder was flattered to be given so much attention and this length of time seemed of no real concern to either the householder or the enumerator.

16   The mauzas to be used in the survey will be chosen from those determined in Phase 1. The selection of households, the method of data collection, notes governing the interpretation of the questions and a final revision of the questionnaire are to be found in Appendix 4.

17   The outcome of the producer's and consumer's questionnaire will be a report which describes individual production and consumption activities in the urban, peri-urban and rural areas of the three study towns.

18   The questionnaires and checklists of questions for market characterisation were drawn up after team discussions about the nature of the information required to characterise the marketing system from the point where livestock and their products leave the production system. The researcher, Monayem Miah, was responsible for the initial outline of the documents and all team members contributed to their development.

19   The first three documents were checklists addressed to the management of the markets, buyers and sellers of livestock and their products. After the first testing, it became apparent that a more structured format was required and that they should be directed at key informants in the market (eg market administrators); market traders; owners of restaurants and shops, and; milk processors. In total, four sets of questionnaires are to be administered: one for each of class of informant. With the

exception of key market informants, questionnaires are divided into two parts - one which investigates buying behaviour and one which investigates selling behaviour.

20 Testing revealed some points which will require attention when the questionnaire is administered. In particular, the points made about the language of administration of the producer's questionnaires (para 11 above) apply equally for the buyer's and seller's questionnaires

21 The questionnaires took between 30 and 60 minutes to complete. The target should be a maximum of 40 minutes because trades people have a business to run. They should not feel that valuable time has been taken up answering questions when there is money to be made.

22 Sample selection, explanatory notes and the final revisions of the questionnaires are to be found in Appendix 4.

23 The outcome from the exercise will be the production of quantified flow charts of each of the main livestock classes and their products as they feature in the urban, peri-urban and rural marketing environments. Demonstration flow charts were drawn up to assess the potential to achieve the major outcome of the exercise.

24 The quantity of data to be collected will be considerable. There will be approximately 900 forms from the producer questionnaires to be processed and up to 1200 for market characterisation. This quantity was thought to be beyond the capacity of the two researchers on their own. It was decided to use graduates as enumerators to administer the forms; six enumerators for the producer and four for the market. Enumerators will return completed questionnaires to the researcher to enter the data onto the computer. The researcher will manage data collection and manipulation. For the producer questionnaire, this will entail Momotaz selecting villages to study, deploying enumerators, visiting them during the day, following up with householders and making sure that collection goes accurately and according to plan. For the market questionnaire, Monayem will select markets to study, deploy enumerators but accompany them on their visits. He will need to have a daily de-briefing session to determine the leads which will need to be followed up later in the programme. He will also need to enter data but there will be no need to follow up on interviewees as he will be in the market the whole time. Nevertheless, he will still need to ensure that collection is accurate and goes according to plan. A budget of £5,000 was drawn up for this and subsequent agreement was obtained from the programme manager.

25 Data handling was considered. Data will be handled statistically in a manner somewhat similar to that for phase 1. The computers now being used by the researchers have the full suite of software to analyse the data derived from the questionnaires. Training in form design and data entry in Microsoft Access was given and the students should be in a position to take data from the forms directly to analysis with modern software.

Work Programme for Phase 2

26   Researchers were left with the following programme to complete before the next supervisory visit in October/November 1997.

Momotaz:

- Translate production and consumer questionnaires into Bangla (?)
- Complete data entry form in Access
- Plan questionnaire campaign for the three towns in terms of mauza selection, general area locations, enumerator requirement, dates, board and lodging, office for data handling, transport, enumerator supervision etc
- Employ enumerators
- Train and test enumerators
- Start and complete survey (include enumerator supervision). Allow 13 weeks to complete survey if six enumerators are employed full time. Two enumerators could complete one mauza in two days. Target survey completion date is end of September 1997
- Enter and analyse data
- Give considerable thought to the nature and logistics of Phase 3 of the project
- Complete project introduction (project philosophy, development, methods of collection for the three study towns, choice of statistics and show a general understanding of the concept of PCA and CA)
- Complete literature survey of peri-urban livestock production and marketing
- Write up results of Phase 1 as part of thesis

Monayem

- Translate marketing questionnaires into Bangla (?)
- Finalise data management system to enable agreed output
- Plan survey campaign for the three towns in terms of market selection, general area locations, enumerator requirement, dates, board and lodging, data handling system, transport, enumerator supervision etc
- Employ enumerators
- Train and test enumerators
- Start and complete survey.
- Enter and analyse data
- Give considerable thought to the nature and logistics of Phase 3 of the project
- Complete project introduction (project philosophy, development, methods of collection for the three study towns, choice of statistics and show a general understanding of the concept of PCA and CA)
- Complete literature survey of peri-urban livestock production and marketing

- Write up results of Phase 1 as part of thesis.

27 This programme of work should start as soon as possible and be completed by the time the NRI team next visits Bangladesh in October/November 1997. A programme for Monayem has already been prepared and is appended to the market questionnaires in Appendix 4. The visit towards the end of the year will be to conclude Phase 2 and start Phase 3. The team will include a socio-economist and computer modeller.

Conclusions

28 The project is on schedule. Phase 1 is finished and now needs to be formally written up. Mauzas have been defined and may be classified.

29 Phase 2 has been planned. Questionnaires and question checklists have been prepared and their administration finalised, including allocation of funds.

30 Each research student has prepared a first report but these need improvement. It was agreed that their supervision would undertaken on a regular basis by their respective professors.

31 Another visit to Bangladesh should be undertaken by the NRI team in October/November 1997. The team will include a socio-economist and computer modeller and their objectives will be to conclude Phase 2 and start Phase 3.

Appendix 1

Persons met

Professor AMM Tareque	Bangladesh Agricultural University
Professor MA Sattar Mandal	Bangladesh Agricultural University
Professor Ali Akhbar	Bangladesh Agricultural University
Dr MA Saadullah	Dean, Faculty of Animal Husbandry, BAU
Momotaz Moholl	Animal Nutrition Researcher BAU
Md Abdul Monayem Miah	Economist Researcher, BAU

Farmers and householders were too numerous to mention

Appendix 2

Itinerary

1 May 1997	JS & DS Depart Heathrow
2 May 1997	Arrive Dhaka, driven direct to Mymensingh
2 May to 11 May urban areas	In Mymensingh with two half days in nearby rural/peri-urban areas
11 May 1997	NM Depart Heathrow
12 May 1997	NM Arrive Dhaka, driven direct to Mymensingh
16 May	JS Depart Dhaka for Heathrow
12 May to 22 May urban areas	In Mymensingh with two half days in nearby rural/peri-urban areas
23 May 1997	NM & DS Depart Dhaka for Heathrow

APPENDIX 3
SUMMARY OF PHASE I FINDINGS

Analysis of census data

About 35 mauzas were selected for each of the three towns and 19 variables derived from the 1991 census were calculated for each mauza. Cluster Analysis and Principal Component Analysis were used to explore these data. This enabled mauzas to be classified into three main groups which appeared to correspond to urban, peri-urban and rural areas. At Sylhet, a fourth group consisting of tea gardens was revealed by the analysis.

The distinction between urban mauzas and the others was clear. The distinction between peri-urban and rural was less clear. The urban mauzas, as expected, had a relatively high proportion of households/ individuals with the following characteristics:

- cement roofs
- tap water
- sanitary toilet
- main income from non-agricultural sources
- higher literacy and school attendance rates
- landless
- ethnic minority

By contrast, the rural mauzas had a high proportion of households/ individuals with:

- straw roofs
- no toilet
- main income from agriculture

The peri-urban areas were intermediate between rural and urban in many of these characteristics, but similar to rural areas for some of them. Results, based on the agreed classification discussed below, are tabulated T(able 1).

When plotted on a map, the peri-urban areas were generally closer to the town centre than rural areas. There were a few exceptions, where peri-urban mauzas were adjacent to a main road, but relatively far from town.

In Sylhet, four mauzas, all tea gardens, had characteristics which differed from the other three groups. These did not fit the simple urban-rural continuum. They had a large number of landless households and agricultural labourers, low literacy and school attendance rates and a majority Hindu population.

In Pabna, two rural mauzas differed somewhat from other rural mauzas. One of these had a high proportion of landless households and agricultural labourers. During the survey (see below) this was found to be in an area where land had been lost to flooding.

Questionnaire results

The questionnaire was designed to be implemented in the same mauzas as used for the analysis of census data above. In two cases, the surveyed mauzas did not correspond with the mauzas used in the census data analysis due to confusion with the map locations. For Pabna, a number of the selected areas were part of Kushtia's hinterland which is separated from that of Pabna's by a large river which makes travel to Pabna very difficult and time consuming. These mauzas were, therefore, not considered as part of the Pabna area.

Simple summary statistics and boxplots showed that much of the data exhibited the expected trend from rural to urban (as defined by the census data), but there was considerable variation and overlap between the three areas.

For each selected mauza, the researchers made a subjective assessment of whether the mauza was urban, peri-urban or rural. This was cross-referenced with the classification derived from the Cluster Analysis of the census data. A number of discrepancies occurred between the two classifications. Most of these were where a mauza was classified as rural by the researchers but as peri-urban by the census results.

Agreed classification

Four of these discrepant mauzas in the Mymensingh area were visited to try to ascertain the reasons for the different classification. All of these had an apparent rural location. Three were some distance from a pucca (sealed asphalt-surfaced) road and surrounded by rice fields and other crops. However, in correspondence with the census data, electricity was available in parts of the mauzas and a considerable proportion of the population worked in Mymensingh whilst others also visited the town daily. The fourth mauza visited was close to the main Mymensingh-Dhaka road but not close to any large village. In contradiction to the census data, we were told that most people worked in agriculture in the locality.

A visit was made to an area classified as peri-urban by both the census and the researchers. This was found to have similar characteristics to the discrepant mauzas with the exception of access to a pucca road.

Additionally, the Principal Component Analysis and Cluster Analysis were re-run including data from the survey on prices of eggs, milk, chickens, goats and rice straw and the cost and time taken to travel to town. Milk price data for Sylhet were not included since there is very little marketing of milk in this town. These analyses gave very similar results to those based on the census data alone. Therefore, the classification based on the census data was used for the remainder of the analyses. This was modified for the two mauzas where the interview was conducted in a different mauza from the census data. In these cases, the researchers classification (one urban, one rural) was used.

Results

Based on the modified census classification, the questionnaire results were tabulated or graphed to examine differences between areas and between towns. An analysis of variance was also conducted for price data and other continuous measurements to confirm these differences. The results are given in Table 3.

As expected, agricultural produce such as milk, eggs and chickens tended to be more expensive in urban areas than in rural areas. In some cases, peri-urban prices were similar to rural prices, and in other cases similar to those in urban areas. Sylhet tended to be more expensive than the other two towns. Also in Sylhet, some prices were extremely variable eg chicken prices ranged from 55-115 T/kg. We do not have an explanation for this.

The milk marketing system varied from urban to rural areas, with direct delivery to customers being more prevalent in the urban areas and selling to a goala or at market more prevalent in rural and peri-urban areas. In Sylhet, there was no milk marketing in the majority of communities questioned.

Rice straw was more expensive in urban than in rural areas and dairy farmers in urban areas relied more heavily on purchased straw than those in rural areas.

Conclusion

The analysis of census results alone gave a clear division between urban and other areas, with a good indication of a distinction between peri-urban and rural areas. The researchers visit helped to clarify the situation. This classification of mauzas into these three types of area is reflected in livestock prices and production systems.

In retrospect, for rural and peri-urban areas, it would have been useful to have included questions relating to off-farm employment and income sources and to the relation between the visited community and the town centre.

Table 1 : Means of variables from 1991 census data, classified by town and area.

Town	Area	Population density '000s/km	Literacy rate (%)	Houses with straw roof (%)	Houses with cement roof (%)	Children attending school (%)	Population engaged in House-work (%)	Population engaged in Not working (%)	Population engaged in Agriculture (%)	Houses using Tap water (%)	Houses using River water (%)
Mymensingh	Rural	3.75	23.27	65.67	.24	29.70	39.96	14.67	68.78	0.03	3.60
	Peri-urban	5.29	28.99	43.01	1.19	31.06	34.86	20.56	41.23	0.36	3.79
	Urban	20.15	55.55	18.44	22.15	53.51	29.77	29.73	3.03	24.40	0.78
Pabna	Rural	2.66	14.44	52.16	.16	23.09	40.38	13.19	72.69	0.00	3.90
	Peri-urban	5.87	25.67	28.74	4.72	33.70	36.03	22.18	26.58	0.64	0.94
	Urban	5.04	48.20	19.25	29.87	48.91	31.80	25.80	8.28	1.57	6.66
Sylhet	Rural	2.14	28.89	43.73	5.15	32.31	38.78	16.01	65.63	0.04	79.92
	Peri-urban	5.20	40.25	18.15	3.98	42.31	34.69	20.42	22.83	0.16	41.03
	Urban		66.62	4.30	21.43	47.90	30.24	23.09	0.38	51.03	0.50
	Tea garden	0.93	14.90	79.26	0.00	12.10	12.47	19.21	33.05	0.17	0.00

Table 1 (continued): Means of variables from 1991 census data, classified by town and area.

Town	Area	Wells which are tubewells (%)	Households				Households whose main income				. Hindu population (%)
			Sanitary toilet (%)	No Toilet (%)	Electricity (%)	Landless (%)	Farming (%)	Agricultural labour (%)	Non-agricultural labour (%)	Other (%)	
Mymensingh	Rural	79.21	2.67	52.79	2.08	42.41	51.18	24.16	2.66	22.0	2.79
	Peri-urban	86.05	8.45	49.45	14.19	56.05	33.24	15.04	7.44	44.2	3.20
	Urban	97.16	53.90	6.17	70.28	70.43	3.11	.77	3.11	93.0	7.56
Pabna	Rural	94.16	3.72	29.65	4.71	48.14	44.33	31.77	4.26	19.6	2.22
	Peri-urban	97.43	12.68	39.89	18.96	69.87	15.71	14.81	10.78	58.7	1.17
	Urban	93.26	38.28	20.29	58.27	69.69	7.89	3.97	7.30	80.8	10.97
Sylhet	Rural	95.08	16.51	7.52	.94	37.18	52.95	20.71	4.53	21.8	4.38
	Peri-urban	98.46	21.17	5.50	27.88	65.69	17.85	8.10	5.35	68.7	5.85
	Urban	97.72	77.70	1.48	80.21	66.30	.41	.18	1.71	97.7	9.19
	Tea garden	58.99	1.04	93.21	4.38	97.58	.00	33.87	.69	65.4	85.33

Table 2: List of selected mauzas, classified by town and area.

		Thana		Union		Mauza	
		Name	geo-code	Name	geo-code	Name	geo-code
Mymensingh	Rural	Fulbaria	20	Balian	23	Balian	98
		Fulbaria	20	Kushmail	59	Kushmail	633
		Gauripur	23	Gauripur	31	Chander Satia	172
		Ishwarganj	31	Tarundia	90	Sakhua	859
		Ishwarganj	31	Uchahila	94	Golla Joypor	363
		Mymensingh	52	Borar Char	27	Borar Char	201
		Mymensingh	52	Char Ishwardia	33	Char Haripur	269
		Mymensingh	52	Char Nilakshmia	40	Mahazzampur	665
		Mymensingh	52	Dapunia	47	Katla Sen	576
		Mymensingh	52	Khagdahar	67	Jelkhanar Char	516
		Mymensingh	52	Paranganj	88	Hasadia	493
		Mymensingh	52	Sirta	94	Char Bhabanipur	239
		Mymensingh	52	Sirta	94	Gobindapur	448
		Muktagachi	65	Kumarghata	69	Kumarghata	613
		Muktagachi	65	Mankon	77	Bade Majhira	22
		Phulpur	81	Balikhan	9	Rautanbari	868
		Phulpur	81	Kakni	40	Guatala	448
		Phulpur	81	Kamaria	49	Kamaria	551
		Phulpur	81	Rampur	72	Terasia	964
		Phulpur	81	Rupasi	76	Naihati	720
		Trishal	94	Rampur	66	Rampur	872
	Peri-urban	Gauripur	23	Bokainagar	22	Rasulpur	817
		Mymensingh	52	Akua	10	Barera	127
		Mymensingh	52	Bhabkhali	20	Panghagra	770
		Mymensingh	52	Char Ishwardia	33	Char Ishwardia	276
		Mymensingh	52	Char	40	Char Ragurampur	293

District	Type	Upazila		Union		Mauza	
				Nilakshmia			
		Mymensingh	52	Dapunia	47	Dapunia	366
		Mymensingh	52	Khagdahar	67	Kalikapur	538
		Trishal	94	Bailar	9	Kanhar	599
	Urban	Mymensingh	52	Ward 02	2	Goalkandi (part a)	311
		Mymensingh	52	Ward 06	6	Baghmara	29
		Mymensingh	52	Ward 06	6	Uttar Sehara	946
		Mymensingh	52	Akua	10	Akua (part)	14
Pabna	Rural	Atgharia	5	Debottar	31	Dhaleshwar	277
		Atgharia	5	Ekdanta	47	Gopalpur	367
		Chatmohar	22	Danthia	25	Dakshin Bamangram	317
		Chatmohar	22	Mulgram	77	Bhabanipur	168
		Ishwardi	39	Dashuria	10	Manikair	695
		Pabna	55	Ataikula	8	Kanklakhali	527
		Pabna	55	Bharara	17	Char Bharara	186
		Pabna	55	Bharara	17	Khas Char Dhubraku	562
		Pabna	55	Bharara	17	Pirpur	812
		Pabna	55	Dapunia	34	Bara Digsail	63
		Pabna	55	Dogachhi	43	Dubkhola	336
		Pabna	55	Dogachhi	43	Radhakantapur	836
		Pabna	55	Gayeshpur	51	Machhimpur	646
		Pabna	55	Maligachha	77	Gharlagra	384
		Pabna	55	Sadullahpur	94	Char Adanga	245
		Kumarkhali	71	Jadu Boyra	34	Bilkati	174
		Kumarkhali	71	Shelaidaha	94	Kalyanpur	530
		Santhia	72	Ataikula	8	Gangahati	305
		Pangsha	73	Bahadurpur	5	Suklambadia	934
		Kushtia ST	79	Hatas Haripur	44	Ragunathpur	867

	Peri-urban	Bheramara	15	Bahir Char	27	Paschim Bahir Char	902
		Ishwardi	39	Malduli	42	Chak Naricha Bagba	276
		Pabna	55	Dogachhi	43	Balarampur	59
		Pabna	55	Dogachhi	43	Dakshin Ramchandra	275
		Pabna	55	Dogachhi	43	Mahendrapur	665
		Pabna	55	Hemayetpur	60	Kismat Pratappur	590
		Kushtia ST	79	Ailchara	12	Bara Ailchara	85
		Kushtia ST	79	Hatas Haripur	44	Boaildaha	178
		Kushtia ST	79	Jagati	50	Jagati	459
	Urban	Pabna	55	Ward 05	5	Chak Chatiani	189
		Pabna	55	Maligachha	77	Radhanagar (part)	840
		Kumarkhali	71	Ward 01	1	Kundu Para	383
Sylhet	Rural	Balaganj	8	Dayamir	27	Khagdiar	480
		Balaganj	8	Dewan Ba	33	Bashirpu	121
		Biswanat	20	Alankari	10	Rahimpur	826
		Biswanat	20	Biswanat	21	Raj Moha	839
		Biswanat	20	Deokalas	42	Daudpur	259
		Biswanat	20	Khazanch	63	Madanpur	596
		Chhatak	23	Saila Af	90	Rarigaon	813
		Companig	27	Telikhal	71	Taiya Pa	938
		Golabgan	38	Lakshmi	60	Nimadal	805
		Golabgan	38	Lakshana	69	Lakshana	706
		Gowaingh	41	Rustampu	73	Sakar Pe	867
		Sylhet	62	Daudpur	19	Daulatpu	262
		Sylhet	62	Hatkhola	22	Bara Kap	118
		Sylhet	62	Hatkhola	22	Jainkark	391
		Sylhet	62	Jalalpur	28	Burunda	202
		Sylhet	62	Khadimna	35	Kalagul	420

	Sylhet	62	Mogla Ba	60	Naikhai	658
Peri-urban	Golabgan	38	Bagha	8	Bagha	119
	Kanaigha	59	Rajaganj	85	Mirzargh	644
	Sylhet	62	Khadimpa	40	Khidirpu	529
	Sylhet	62	Kuchai	45	Kuchai	549
	Sylhet	62	Kuchai	45	Manipur	618
	Sylhet	62	Kuchai	45	Sreeramp	886
	Sylhet	62	Mollarga	65	Sadharkh	811
	Sylhet	62	Titli	85	Baldi	89
Urban	Sylhet	62	Ward 01	1	Police Line	758
	Sylhet	62	Ward 02	2	Bilpar	148
	Sylhet	62	Ward 04	4	Ambar Kh	28
	Sylhet	62	Ward 04	4	Kumar Pa	492
	Sylhet	62	Ward 05	5	Darjee P	200
Tea Garden	Sylhet	62	Khadimna	35	Charagan	212
	Sylhet	62	Tuker Ba	90	Daldali	247
	Sylhet	62	Tuker Ba	90	Keoya Ch	485
	Sylhet	62	Tuker Ba	90	Tarapur	935

Table 3 : Adjusted means (and standard errors) for different variables for the three areas within each of the towns

		Distance to road			Distance to town			Transport cost to town (Taka)			Travel time to town (min)		
		Mean	n	SE	Mean	n	SE	Mean	n	SE	Mean	n	SE
Pabna	Rural	1.72	18	±0.43	13.7	18	±1.59	6.78	18	±1.39	59	18	±8.9
	Peri-urban	0.20	5	±0.82	6.2	5	±3.02	2.80	5	±2.64	22	5	±16.9
	Urban	0.00	2	±1.30	1.8	2	±4.77	0.00	2	±4.18	6	2	±26.7
Mymensingh	Rural	2.92	22	±0.39	15.4	22	±1.44	4.76	22	±1.26	53	22	±8.0
	Peri-urban	1.11	7	±0.69	6.5	7	±2.55	4.43	7	±2.23	26	7	±14.7
	Urban	0.00	4	±0.92	1.1	4	±3.37	2.50	4	±2.96	9	4	±18.9
Sylhet	Rural	1.97	16	±0.46	16.9	16	±1.69	12.88	16	±1.48	73	16	±9.4
	Peri-urban	0.78	8	±0.65	10.2	8	±2.39	8.63	8	±2.09	36	8	±13.3
	Urban	0.00	5	±0.82	1.7	5	±3.02	2.00	5	±2.64	60	5	±16.9
F-probabilities	Town	0.103			0.251			0.000			0.31		
	Area	0.000			0.000			0.002			0.00		
	Interaction	0.927			0.959			0.350			0.94		

Table 3 : Adjusted means (and standard errors) for different variables for the three areas within each of the towns

| | | Farmers obtaining rice straw from different sources (%) | | | | | | | | | | |
| | | Own local straw | | | Transporting straw | | | Purchasing straw | | | Own + Purchased | | |
		Mean	n	SE	Mean	n	SE	Mean	n	SE	Mean	n	SE
Pabna	Rural	30.89	18	±6.70	0.00	18	±1.08	21.72	18	±4.59	47.67		±6.66
	Peri-urban	5.20	5	±13.27	0.00	5	±2.05	60.80	5	±8.72	34.00		±12.63
	Urban	0.00	2	±20.98	2.50	2	±3.24	95.00	2	±13.78	2.50		±19.97
Mymensingh	Rural	47.73	22	±6.33	0.00	22	±0.98	7.27	22	±4.16	45.00		±6.02
	Peri-urban	41.43	7	±11.21	0.00	7	±1.73	9.29	7	±7.37	49.29		±10.68
	Urban	0.00	4	±14.84	20.00	4	±2.29	78.50	4	±9.75	1.50		±14.12
Sylhet	Rural	63.13	16	±7.42	0.00	16	±1.14	5.94	16	±4.87	30.94		±7.06
	Peri-urban	75.88	8	±10.49	0.00	8	±1.62	8.13	8	±6.89	12.88		±9.99
	Urban	0.00	5	±13.27	1.00	5	±2.05	79.00	5	±8.72	0.00		±12.63
F-probabilities	Town	0.000			0.066			0.000			0.036		
	Area	0.000			0.000			0.000			0.001		
	Interaction	0.169			0.000			0.040			0.598		

Table 3 : Adjusted means (and standard errors) for different variables for the three areas within each of the towns

| | | Average price (Taka/kg) of various feeds | | | | | | | | | | |
| | | Rice straw | | | Mustard oil cake | | | Rice bran | | | Wheat bran | | |
		Mean	n	SE	Mean	n	SE	Mean	n	SE	Mean	n	SE
Pabna	Rural	1.54	18	±0.17	6.89	18	±0.20	1.71	18	±0.13	7.78	18	±0.37
	Peri-urban	1.52	5	±0.32	7.50	5	±0.39	2.50	5	±0.25	6.99	5	±0.71
	Urban	1.28	2	±0.50	-	0	-	2.56	2	±0.40	8.22	2	±1.12
Mymensingh	Rural	1.25	21	±0.15	7.27	22	±0.18	1.83	18	±0.13	7.58	21	±0.35
	Peri-urban	1.62	7	±0.27	7.36	7	±0.33	1.50	6	±0.23	7.21	7	±0.60
	Urban	1.63	4	±0.35	7.06	4	±0.43	2.50	2	±0.40	6.94	4	±0.79
Sylhet	Rural	2.10	14	±0.19	7.25	3	±0.50	2.34	15	±0.15	7.16	7	±0.60
	Peri-urban	2.33	5	±0.32	9.17	3	±0.50	2.20	8	±0.20	8.42	6	±0.65
	Urban	3.38	4	±0.35	7.25	2	±0.61	2.12	5	±0.25	6.33	5	±0.71
F-probabilities	Town	0.000			0.052			0.026			0.885		
	Area	0.059			0.065			0.414			0.464		
	Interaction	0.169			0.135			0.011			0.273		

Table 3 : Adjusted means (and standard errors) for different variables for the three areas within each of the towns

| | | Average price of Molasses (Taka/kg) | | | Distance to nearest market (km) | | | | | | | | |
| | | | | | Nearest market | | | 7-day market* | | | Livestock market | | |
		Mean	n	SE	Mean	n	SE	Mean	n	SE	Mean	n	SE
Pabna	Rural	5.25	18	±0.33	2.41	18	±0.45	2.41	18	±0.46	4.27	18	±0.43
	Peri-urban	4.75	5	±0.62	1.20	5	±0.86	1.70	5	±0.88	1.88	4	±0.91
	Urban	5.50	2	±0.98	0.88	2	±1.36	0.88	2	±1.39	4.80	2	±1.29
Mymensingh	Rural	7.07	11	±0.42	1.63	22	±0.41	2.04	20	±0.44	3.33	19	±0.42
	Peri-urban	6.75	2	±0.98	1.21	7	±0.73	1.21	7	±0.74	2.33	6	±0.74
	Urban	5.69	4	±0.69	0.31	4	±0.96	0.31	4	±0.98	-	0	-
Sylhet	Rural	7.98	9	±0.46	3.28	16	±0.48	3.84	16	±0.49	3.00	11	±0.55
	Peri-urban	8.17	3	±0.80	1.76	8	±0.68	1.89	8	±0.70	3.00	3	±1.05
	Urban	7.00	5	±0.62	0.80	5	±0.86	0.80	5	±0.88	1.33	3	±1.05
F-probabilities	Town	0.000			0.053			0.038			0.124		
	Area	0.197			0.008			0.002			0.095		
	Interaction	0.707			0.846			0.757			0.202		

* 7-day market = Open every day of the week

Table 3 : Adjusted means (and standard errors) for different variables for the three areas within each of the towns

		Price of milk (Taka/kg)											
		Sold to Goala			Sold at market			Sold at farmgate			Delivered to consumer		
		Mean	n	SE	Mean	n	SE	Mean	n	SE	Mean	n	SE
Pabna	Rural	10.5	11	±0.44	14.4	17	±0.36	-	0	-	13.6	14	±0.49
	Peri-urban	11.0	1	±1.44	14.0	4	±0.75	-	0	-	14.4	5	±0.82
	Urban	-	0	-	13.5	2	±1.06	-	0	-	15.0	2	±1.30
Mymensingh	Rural	12.0	13	±0.40	15.1	20	±0.34	14.3	4	±0.80	15.6	16	±0.46
	Peri-urban	13.0	7	±0.55	17.0	6	±0.61	16.0	1	±1.60	15.7	6	±0.75
	Urban	-	0	-	-	0	-	-	0	-	20.3	4	±0.92
Sylhet	Rural	-	0	-	-	0	-	20.0	1	±1.60	15.0	2	±1.30
	Peri-urban	18.5	2	±1.02	-	0	-	20.7	3	±0.92	21.3	3	±1.06
	Urban	21.0	2	±1.02	-	0	-	22.5	4	±0.80	20.7	3	±1.06
F-probabilities	Town	0.000			0.011			0.004			0.000		
	Area	0.087			0.170			0.194			0.000		
	Interaction	0.704			0.039			0.684			0.007		

Table 3 : Adjusted means (and standard errors) for different variables for the three areas within each of the towns

		Price of different fish species (Taka/kg)										
		Rui			Katla			Hilsa			Carpio		
		Mean	n	SE	Mean	n	SE	Mean	n	SE	Mean	n	SE
Pabna	Rural	104	18	±5.2	96	18	±5.2	87	18	±2.8	64	18	±5.8
	Peri-urban	108	5	±10.0	86	5	±9.8	90	5	±5.3	68	5	±11.0
	Urban	118	2	±15.8	110	2	±15.5	83	2	±8.4	58	2	±17.3
Mymensingh	Rural	80	19	±5.1	76	19	±5.0	63	12	±3.4	73	12	±5.6
	Peri-urban	84	6	±9.1	80	6	±8.9	64	5	±5.3	80	5	±11.0
	Urban	119	4	±11.2	110	4	±11.0	68	4	±5.9	79	4	±12.2
Sylhet	Rural	130	14	±6.0	122	14	±5.9	94	16	±3.0	125	16	±6.8
	Peri-urban	116	8	±7.9	100	8	±7.8	79	8	±4.2	95	8	±8.7
	Urban	136	5	±10.0	124	5	±9.8	92	5	±5.3	108	5	±11.0
F-probabilities	Town	0.000			0.000			0.000			0.000		
	Area	0.014			0.009			0.293			0.516		
	Interaction	0.260			0.256			0.150			0.155		

Table 3 : Adjusted means (and standard errors) for different variables for the three areas within each of the towns

		Price of 4 Eggs*			Price of Chicken (live) (T/kg)			Price of Goat (live) (T/10kg)		
		Mean	n	SE	Mean	n	SE	Mean	n	SE
Pabna	Rural	10.0	18	±0.26	81	18	±2.6	106	18	±4.9
	Peri-urban	11.6	5	±0.49	83	5	±4.8	112	5	±9.4
	Urban	12.8	2	±0.78	79	2	±7.6	107	2	±14.9
Mymensingh	Rural	10.2	22	±0.24	67	22	±2.3	107	22	±4.5
	Peri-urban	11.0	7	±0.42	68	7	±4.1	107	7	±7.9
	Urban	13.1	4	±0.55	733	3	±6.2	-	0	-
Sylhet	Rural	11.4	16	±0.28	91	16	±2.7	156	16	±5.3
	Peri-urban	12.8	8	±0.39	97	8	±3.8	134	6	±8.5
	Urban	15.5	5	±0.49	95	5	±4.8	144	5	±9.4
F-probabilities	Town	0.000			0.000			0.000		
	Area	0.000			0.496			0.578		
	Interaction	0.394			0.861			0.266		

* Eggs are always sold in clutches of 4

APPENDIX 4

QUESTIONNAIRES DEVELOPED DURING THE VISIT

PRODUCER'S QUESTIONNAIRE

SELECTION OF HOUSEHOLDS

At the first stage, a selection of 10 mauzas (or mahallas) will be made at random in each of three strata: urban; peri-urban; and rural. Where there is more than one village per mauza, as recorded in the 1991 census, one village per mauza will be selected at random. If the selected village has less than 100 households, a second village will be selected additionally.

A sample of 10 households is required for each Urban, Peri-urban and Rural mauza/mahalla. (If two villages are selected, half the sample will be taken from each village).

Urban and (possibly) some peri-urban areas

In these areas there is no list of individual households. For the Pourshava, and possibly some other areas, a list of 'holdings' exists for taxation purposes. This list will allow random selection of 'holdings'.

However, this list includes properties which are not dwellings, such as shops and offices. The list includes a column for 'type of structure', but it is not clear, at this stage, whether this refers to the use of the building or to the method of construction or some other characteristic.

A random selection of holdings will be made and any that are not dwellings will be eliminated. It may be possible to do this in the office or it may be possible only when the property is visited.

Each selected dwelling will be visited and the number of households living there will be determined **and recorded on the questionnaire form.** The first household contacted by the interviewer will be selected for the survey.

Rural areas and other areas not included above

For the selected villages/mauzas, the survey team will ascertain whether a list of households or dwellings exists. Such a list may be just a simple numbering system, provided the households can be physically identified in practice.

If the list is of households, a random selection will be made (using random numbers or systematic sampling).

If the list is of dwellings, proceed as in the urban section above.

If no list is available, a well-informed local person will be asked to indicate or map all the household clusters in the village/mauza.

Five clusters will be selected at random, and two households per cluster selected at random. This can be done by visually numbering the houses and using the random number tables supplied.

With less than five clusters, all clusters will be used, with the required number of houses per cluster being selected at random. For example, with three clusters, the largest will have four households selected and the two smallest have three households selected in each.

The Questionnaire:

Objectives:

- To characterise livestock production systems in urban, peri-urban and rural areas in terms of nature & intensity of present production (management), potential for further expansion and constraints to further development
- To select appropriate case-study locations for Phase 3.

Method

1   Data will be collected through the administration of a questionnaire to 400 householders in each of the three towns. Ten householders will be selected at random in each of 10 urban, 10 rural and 20 peri-urban mauzas. It should be noted that livestock owners are not specifically targeted as it is intended to determine the number of owners in each area. A full description of householder selection was given previously.

2   As householders are also consumers, some questions about consumption of livestock products have been included in the questionnaire.

3   Visits should be made to properties chosen according to the selection criteria given above and interviews conducted with the householder, if available, or a knowledgeable member of the household. If there is any uncertainty about the standing of the person prepared to talk in the absence of the householder, the interviewer will indicate that s/he will call back later and an appointment should be made.

4   The interview is a personal view of the householder's activity and is not a matter for public curiosity. The respondent should not have to seek advice from anybody outside of the household so it is important to secure the privacy and confidence of the respondent. Indeed, s/he might not wish to give answers to some of the questions if other people are present. Please follow the questionnaire completely, and follow all the notes carefully.

5   Please sort out any difficulties which arise in the field while you are with the respondent as you will not get a second chance to do so. If necessary, write your concerns/questions/method of resolution etc on the form.

6   Please return completed questionnaires promptly to Momotaz who will enter the data on the data base.

7   Momotaz: please communicate with NRI frequently over any problems by Email:

David.Silverside@NRI,org
Neil.Marsland@NRI.org

Thank you

Explanatory notes

These notes have been prepared to assist completion of the questionnaire correctly. If you have any difficulties which are not resolved here, write these on the form and discuss them with Momotaz.

Questionnaire:

General: The heading 'highest' price means the highest **non-festival** price. Depending on the question, please tick the box where indicated, circle either Yes or No or any other answer as directed. This is particularly important where units of measure are concerned.

1 **Identification:** Please complete before starting the interview but the occupation of the head of household may not become known until the interview is underway. Take care to determine exactly who is in the household. This may be different from 'family'.

2 **Household Demography:** The question seeks to determine the potential economically active members of the household. Please remember that this questionnaire relates only to those who feature in this section. If the Respondent starts to give information about others outside of those who feature in this section, it must be drawn to his attention. You must be aware that this might happen at all times during the interview.

3 **Length of time in the area:** The question seeks to determine a level of migration of the population. As towns develop, an area once considered rural may have become peri-urban or even urban since the householder moved there. For the purposes of the interview, 'peri-urban' means that the Respondent could get to town fairly easily whereas 'rural' means that it was difficult to get to town for the day. Respondents may need some prompting to find out why they moved, especially if it was along time ago.

4 **Farming activity & purpose:** The questions seek to determine the importance which the Respondent considers the activity and perhaps a level of intensification when considered with other questions. During this section, the occupation of the householder may be asked and fitted in the identification box above. A cow in a shed may constitute farming, and fish is included too.

5 **Landholding:** The questions seek to determine the scale of farming activity and perhaps potential for expansion. This may or may not include livestock. Zero might be an appropriate answer. A person letting his own land to someone else is not farming it himself and is not to be included in the answer. A person sharecropping land is not considered to be a holder of that land and is not included in the answer. All resources of his landholding must be available to him. If a Respondent says s/he has a few cattle in a shed, please record that. Some urban farmers might bring feed or cattle from a distant farm to the town farm. We need to know.

6 **Source of capital investment:** The questions seek to determine indebtedness (or otherwise) which might be a constraint to further development. BRAC, Proshika and Grameen Bank are examples of money lenders to the landless to start small livestock enterprises. An enterprising individual who borrows may represent potential for development

7 **Type of farming system:** The first question seeks to separate the agriculturist from the livestock farmers. Some farmers grow food exclusively for their own consumption, others exclusively for cash and others for both purposes. Some prompting for reasons might be necessary. The next question divides the type of farmer. If he keeps no livestock, we pass on to the consumer survey. The table of numbers of animals kept should be completed carefully. It is a snapshot question, and should describe the current situation only. If a cow was lactating the week before the interview is dry at the time of the interview then it should be recorded under 'dry'. All the cattle under the phrase 'Of these:' to 'calves' should add to the cattle (not buffalo) total. The number of lactating buffalo will probably not equal buffalo (total) and the draught animal number is independent and may include any of the cattle and buffalo given in the answers above.

8 **Livestock housing:** The housing question seeks to identify a management system, a measure intensity of production or security. Please try to find out which.

9 **Cattle:** If the Respondent does not keep cattle move on to ask about poultry. We need to know something about the management and performance of his cattle and some of the constraints to expansion of his herd and, perhaps, potential for development. NB The feeding question relates only to cows should they be lactating (although they may not be at the time of the interview). The Respondent may need some prompting to answer some of the questions about constraints (eg what stops you?). The question on hired labour may be given to the nearest 20%

10 **Poultry and Fish:** Similar points to cattle raising are made

11 **Livestock Products:** The questions measure a degree of output from the farming enterprise. The question is difficult to answer as sometimes the cow is in milk and the hens in lay, other times not. Try to obtain any answer with a unit and time, eg No Litres/lactation or eggs/year on average. If the Respondent keeps no records and does not know, please say there are no records. If the Respondent gives some products away or exchanges them for something else please make a note. The question regarding the sale of cattle/goat/sheep is almost a 'checklist' question. The Respondent may have sold different animals at different times for different prices at different liveweights. Please try to tease details.

12 **Access to Services:** This section is about constraints and potential for development.

Questionnaire for Livestock Producers

Objectives:
- To characterise livestock production systems in Urban, peri-urban and rural areas
- To select appropriate case study locations for Phase 3

IDENTIFICATION

Town: Pabna/Mymensingh/Sylhet Questionnaire Number: _____ Date: _____

Form completed by: _____ Interview conducted by: _____

Mauza: _____ Community/Village Name: _____ House number _____

Name of Interviewee: _____ Occupation of Head of Household _____

Name of Householder _____

HOUSEHOLD DEMOGRAPHY

1   How many people rest in this household at night?

Males under 15 years	Females under 15 years
Males 15-55 years	Females 15-55 years
Males over 55 years	Females over 55 years

LENGTH OF TIME LIVING IN THIS LOCATION/ELSEWHERE

2   Were you born in this neighbourhood?   Yes/No
      If Yes, go to Question Number 7

3   If No, when did you move here?   19

4   Did you move from an Urban /Peri-urban/Rural area?

	(tick one)	
Urban	Peri-urban	Rural

5   When you moved, was this area Urban/Peri-urban/Rural?

Urban	Peri-urban	Rural

6   Why did you move here? Please give reasons

FARMING SYSTEM ACTIVITY & PURPOSE

7   Does anybody in this household farm (*including fish*)?   Yes/No

8   If Yes, would you regard farming as this household's main source of income?
      Yes/No

LAND HOLDING

9   How much land do you own and farm?

	(tick one)		
	Acres	Bigha	Decimals

10	How other much land do you farm?		Acres	Bigha	Decimals

11	How much land do you own but do NOT farm?		Acres	Bigha	Decimals

12   Is land available nearby to rent and farm, if you should want it?   Yes/No

SOURCE OF CAPITAL INVESTMENT

13   Do you borrow money for your farming?   Yes/No

14   If Yes, where do you go for it?

_____

15   On what farming activities do you spend the money? Please describe

TYPE OF FARMING SYSTEM

16   What are your three most important farming activities in terms of household food production and cash income and why?

Food Production Activity	Reason(s)
1	
2	
3	
Cash Income Activity	
1	
2	
3	

17   Do you keep any livestock (*Including fish*)   Yes/No

18   If Yes, how many animals do you keep?
         If No proceed to Question Number 54

	Number			Number
Cattle (not buffalo)- total		Total poultry		
of these:		Total hens		
Lactating cows (deshi)		Total cocks		
Lactating cows (crossbreed)		Total chicks		
Dry cows (deshi)		Ducks		
Dry cows (crossbreed)		Goats		
Adult bulls		Sheep		
Calves		Fish		decimals water area
Buffalo - total				
of these:				
Lactating buffalo				
Draught animals				

This is a snapshot question. Enter the animal type according to present condition

LIVESTOCK HOUSING

19   Where do you keep your livestock?   (See key below)

	Day	Night
Lactating cows (deshi)		
Lactating cows (crossbreed)		
Dry cows (deshi)		
Dry cows (crossbreed)		
Adult bulls		
Calves		
Lactating buffalo		
Other buffalo		
Draught animals		
Poultry for eggs		
Cocks		
Ducks		
Sheep & Goats		

Key:
F = Field/verges,   H = Housed in pen, shed, cage etc,   B = Backyard, other (specify)

CATTLE

If householder does not keep cattle move to question Number 28

20   How do you breed your cows? Please circle

         AI   Natural Insemination   Either/both

21   Do your breeding cows give a calf each year?   Yes/No

22   Do you have any breeding problems?   Please describe

23   Do you feed your cattle concentrates?   Yes/No

24   If Yes, please tell me what you feed to your cows while they are lactating? What else do you feed?

Name of concentrate fed	Other feeds given

25   Would you like to increase cattle production on your farm?   Yes/No

26   If Yes, what stops you?. Please list the relevant reasons in the following table in rank order:

Cash	Credit	Land	Labour	Market	Price for product	Disease	Other

27   How much hired labour helps you raise your cattle and how much is family? Give percentages

Hired Labour   %   Family Labour   %   Total = 100%

POULTRY
If farmer does not keep poultry, go to Question 37

28   Do you buy day-old chicks?   Yes/No

29   If Yes, from what sort of trader do you buy them, where are they located and how much do they cost? _____

30   Do you buy pullets?   Yes/No

31   If Yes, from what sort of trader do you buy them, where are they located and how much do they cost? _____

32   Do you feed your poultry concentrates?   Yes/No

33   If Yes, please tell me what you feed to your layers, what else you feed and in what quantities

Name of concentrate fed	Other feeds given

34   Would you like to increase poultry production on your farm?   Yes/No

35   If Yes, what stops you?. Please list the relevant reasons in the following table in rank order:

Cash	Credit	Land	Labour	Market	Price for product	Disease	Other

36   How much hired labour helps you raise your poultry and how much is family? Give percentages

Hired Labour   %   Family Labour   %   Total = 100%

FISH
If farmer does not keep fish, go to Question 45

37   What breed of fish do you produce? Give details

38   Do you buy young fish to grow?   Yes/No

39   If Yes, at what stage are they, from what sort of trader do you buy them, where are they located and how much do Rui, Katla and Carp cost?

40   Do you feed your fish concentrates?   Yes/No

41   If Yes, please tell me what you feed to your fish, what else you feed and in what quantities

Name of concentrate fed	Quantity concentrate fed/decimal/day	Other feeds given	Quantity other fed/decimal/day

42   Would you like to increase fish production on your farm? Yes/No

43   If Yes, what stops you?. Please list the relevant reasons in the following table in rank order:

Cash	Credit	Land	Labour	Market	Price for product	Disease	Other

44   How much hired labour helps you raise your fish and how much is family? Give percentages

Hired Labour   %   Family Labour   %   Total = 100%

LIVESTOCK PRODUCTS

45   What livestock products do you produce and sell?

Product	Quantity produced	Quantity sold	Unit (eg kg/day)
Milk			
Eggs			
Table poultry			
Fish: type			
Other			

46   When did you sell your last Cattle/goat/sheep? Please give details of all breeds

47   How much did you receive for them? Please give details

48   Where do you sell your livestock products and how much do you receive?

Products	Where sold*	Location	Price received**			Unit (eg kg)
			H	L	P	
Milk						
Eggs						
Table poultry						
Fish: type						
Other						

* eg market, processor, home delivery, farm collection, goala
**over the last 12 months H =Highest, L = Lowest, P = Present

ACCESS TO SERVICES

49   When did you last see an extension worker (from Government of NGO) to talk about raising livestock? Please circle. Please add the name of the NGO, if applicable

     A week ago   A month ago   Other: Never   NGO Name:

50   Who looks after the health of your animals? Please circle   (more than one permitted)

Veterinarian   Extension worker   Local animal doctor   Farmer himself   Nobody
Other (please specify)

51   What sort of illnesses have your animals had in the last year (please specify)

52   Have you ever had any formal training in raising livestock?   Yes/No

53   Would you like any training?   Yes/No

CONSUMPTION

54   How often do you eat the following foods in your household? Please tick

Food	Daily	Weekly	Monthly	Other
Beef				
Mutton				
Chicken				
Milk				
Eggs				
Fish				

55   Please indicate the quantities of livestock products consumed by your household:

Product	Quantities consumed	Unit (eg kg/day)
Beef		
Mutton		
Chicken		
Milk		
Eggs		
Fish		

56   For each of the following livestock products, please indicate:

- From where you get the products, (give up to three sources)
- How far away from your home you get them
- How often you obtain them
- What % of total consumption of each food comes from each different source

Food	Where (a)	kms	Direction (b)	How Often (c)	% of total consumption (d)	Remarks
Beef						
Mutton						
Chicken						
Milk						
Eggs						
Fish						
Sweet meats						
Ghee						
Curd						

note a)	note b)	note c)	note d)
1 = Home 2 = Local market 3 = Local Shops 4 = Doorstep Delivery 5= In study Town 6 = Other	1 = Towards/in study town 2 = Away from study town 3 = Neither towards nor away from study town	1 = Every day 2 = Ever few days 3 = Every week 4 = Every month 5 = Less frequently than every month 6 = Occasionally	This is % total of total consumption from each source listed in column a). For each product, all sources should total 100%

NOTES:

57   Out of all the foods listed above, which three do you regard as being most important, and why do you regard them as being the most important?

Food	Reason for Importance
1	
2	
3	

58   If you had a little more money, which of the following products would you buy more of and why? (please rank in order of importance).

ENUMERATOR: The rows numbered 1, 2 and 3 in this table are to be completed with the same foods as those given in the table used to answer Question 57.

Food	Rank	Reasons
1		
Rice		
2		
Lentils/pulses		
3		
Vegetables		

40

59   For each of the three foods, please indicate:

- During which periods of the year are purchasing prices at their highest / lowest.
- The actual lowest and highest prices in each product over the last year
- The reasons for price fluctuations in each of the products?

ENUMERATOR: This second question should not be asked for fish

	Food 1:	Food 2:	Food 3:
High price period			
Reasons			
Actual high price over last year*			
Reasons			
Low price period			
Reasons			
Actual low price over last year*			
Reasons			

*   ENUMERATOR: Units should be stated in the table eg kgs

60   If applicable, please answer the following:

- Do you ever face any problems in purchasing the three foods listed in answer to question 55? Answer Yes or No in left column under each food
- What sort of problems do you face?: please choose from the following list and rank the importance of each problem in the right column under each food

Factors	Food 1:		Food 2:		Food 3:	
	Y/N	Rank	Y/N	Rank	Y/N	Rank
Price						
Availability						
General appearance						
Other (specify)						

INCREASING URBAN PROTEIN SUPPLY IN BANGLADESH

PHASE II

MARKET CHARACTERISATION

Objectives:

- To identify the location and functions of key players in the marketing chains of various livestock and livestock products

- To identify key constraints in the marketing chain and potential for alleviation of constraints

- To select appropriate products and locations for case studies in Phase III

Instruments:

- Market characterisation questionnaire

- Market trader buying and selling questionnaire

- Restaurant buying and selling questionnaire

- Milk processors buying questionnaire and selling checklist

- Livestock producer questionnaire (sections on livestock products and consumption)

Data Collection Procedures:

1   A total of around 430 questionnaires will be administered in each of the three towns refer to paragraph 3 for details). In practice, the total figure per town is likely to be considerably less than this, although the total cannot be stated at this stage *as it will depend on the number of markets in which livestock / livestock products produced by farmers in the selected mauzas are traded.* This is necessary as (i) not all mauzas have a market, and (ii) in phase I it was discovered that in some cases produce from farmers from one mauza where there *was* a market was actually traded *elsewhere.* In order to identify relevant markets, it is intended that Monayem will visit the mauzas selected for the production survey and consult UP chairmen and some farmers. These consultations can be cross-checked to some extent with information gained from phase I. The key question to be asked is: 'Which markets would farmers in this mauza go to if they wished to sell their livestock, fish, poultry, milk and/or eggs'.

2   It has been decided to limit the number of markets to a maximum of one per mauza for rural and peri-urban mauzas. Thus the maximum number of markets pertaining to producers in rural mauzas will be 10, as will the maximum number of markets pertaining to producers in peri-urban mauzas. As far as urban mauzas are concerned, it has been decided that *three* main markets in the centres of each town will be visited.

3   In each selected rural and peri-urban market, a total of two traders per product will be interviewed wherever possible. In the main urban markets, three traders per product will be interviewed. In addition, the market administrator in each market will also be interviewed. If we assume a maximum of 8 products per market[1] then this will mean a maximum total market sample size of :

8 products x 2 traders per product + market administrator = 17 (rural and peri-urban)

and

8 products x 3 traders per product + market administrator = 25 (urban)

Added to this, we will be interviewing three milk processors (maximum), 5 urban restaurants, 5 urban grocery shops and 5 urban sweetmeat shops per town. Thus within each town, the maximum sample size will be:

Urban markets:		
3 x 25	=	75
plus		
Peri-urban markets:		
10 x 17	=	170
plus		
Rural markets:		
10 x 17	=	170
plus		
Milk processors	=	3
plus		
Urban restaurants	=	5
plus		
Urban sweetmeat shops	=	5
plus		
Urban groceries	=	5

Total   433

4   Random sampling will be necessary in the case of urban restaurants, sweetmeat shops and groceries. The sample should be taken from the lists held by the Porsheva authorities.

5   Data collection will take place over a three month period, one month per town

6   All questionnaires should be checked by Monayem 'on the spot', with any uncertainties as to the validity of the information being resolved on site wherever possible.

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[1]   Mutton, beef, chicken, fish, e.g., milk, cattle / buffalo, goat / sheep.

7   It will be necessary to devise a **data entry programme** for the market trader questionnaires **only**. The other questionnaires - a maximum of 41 per town - can be analysed manually.

Explanatory Notes

These notes have been prepared to assist completion of the questionnaires correctly. Any difficulties should be referred to Monayem.

I. General:

1 At the start of each questionnaire, there is a section entitled 'Classification'. It is **imperative** that this section is filled in correctly for each and every questionnaire. Enumerators should familiarise themselves with each classification section. Each questionnaire will be checked personally by Monayem.

2 In each questionnaire, words written in *italics* are instructions for the enumerators. These instructions appear throughout the questionnaires, helping enumerators to navigate through the questions.

3 A major feature in all questionnaires is the use of tables. Instructions in *italics* are given for the benefit of the enumerator in each questionnaire. It is important to ensure that each column in each table is filled in with the correct data. Enumerators are required therefore to practice filling in the tables before starting the survey.

II Market Key Informants: Market Characterisation Questionnaire.

4 The objective here is to gain an overview of the structure and conduct of the various market places where livestock and livestock products produced by farmers in the selected mauzas are traded. Key elements of this overview include: numbers and types of traders, historical trends, costs and facilities in the market, and constraints to market efficiency.

5 The interviewee should be a market key informant. This may be the market administrator. If the administrator is not available, then some other knowledgeable person may be interviewed.

6 **Section B. Market Days, Numbers and Types of Traders**. This is straightforward. Please note the instructions for completion of the table.

7 **Section C. Historical Trends**. Enumerators should ensure that good reasons for any increase or decrease in the number of traders are given in the table. Please note the different symbols for increasing, decreasing, constant and don't know. Try to ensure that the respondent gives an honest answer by probing. We should also probe in relation to the ranks given in question 5.

8 **Section D. Costs and Facilities**. Please note the instructions for completion of the table, including the notes under the table

III   Market Traders: Buying and Selling Questionnaires.

9   The objective of these questionnaires is to understand the role of wholesale and retail traders in the marketing chain of livestock and livestock products. Key elements of this include: (a) the types of actors who traders buy from and sell to - who are the actors?, how far do traders travel to interact with them? ; (b) problems which traders experience when buying and selling, and ; (c) seasonal variations in prices and volumes bought and sold.

Buying Questionnaire

10   **Section B.   Products and Sources**. This section is quite complicated and demands high levels of concentration from the enumerator. The guidance notes written on the questionnaire should be studied carefully to avoid mistakes.

11   If the trader trades in more than one product, question 1(b) should be asked. The idea is to focus on the most important type of livestock/livestock product only. This is important as the questionnaire is designed to accommodate **only one** animal/animal product per trader. Questions 2, 3 and 4 apply to producer - retailer and/or producer - wholesalers only. If the trader answers yes to question 3, then enumerators should go straight to the selling questionnaire. Answers to questions 5, 6, and 7 should be entered in the table below question 7. Answers to questions 9, 10 and 11 should be entered in the table below question 11.

12   **Section C.   Problems With Buying**. This section aims at getting a ranked list of constraints that traders face in buying. It is important that enumerators probe here. We want the **real** problems and the **correct** rankings. We do not want general answers like 'everything is too expensive' or 'I am too poor', we want specific answers. We also want specific suggestions for solutions to problems (Question 16(b)).

13   **Section D.   Seasonal Variations**. This section aims to understand the buying capacity of the trader and seasonal gluts and shortages in products that he buys. A key thing to remember about this section is that we should not attempt to get price information for fish as this has proven to be too complicated.

Selling Questionnaire

14   **Section B.   Products, Buyers and Outlets**. As in the buying questionnaire, question 1(b) is asked when the trader is selling more than one product, so that the subsequent questioning can focus on the most important product. Answers to questions 2, 3(a), 3(b), and 3(c) should be recorded in the table under question 3(c). Note the instructions under question 4. Answers to questions 5, 6(a), 6(b) and 7 should be recorded in the table under question 7.

15   **Section C.   Problems with Selling**. The points made in para. 12 above apply for this section also.

16   **Section D.   Comparisons Between Buying and Selling Problems**. This is a vital section for the whole market characterisation exercise as it tries to capture the key constraints faced by traders. Enumerators should be careful to probe thoroughly on

both question 13 - to ensure that they get the right answer, and also question 14 - to ensure that sound reasons are given.

17   **Section E.   Seasonal Variations.** This section aims to understand the selling capacity of the trader and seasonal gluts and shortages in products that he sells. A key thing to remember about this section is that we should not attempt to get price information for fish as this has proven to be too complicated.

18   **Section F.   Losses and Processing Problems.** This section aims at gathering information on problems and losses that occur between the time that the trader buys the animal / animal product, and the time that he sells it.

IV   Restaurants and Shops: Buying and Selling Questionnaires.

19   The objective of these questionnaires is to understand the role of urban restaurants, grocery shops and sweetmeat shops in the marketing chain of livestock and livestock products. Key elements of this include: (a) the types of actors who restaurant and shop owners buy from and sell to; (b) problems which restaurant and shop owners experience when buying and selling, and ; (c) seasonal variations in prices and volumes bought and sold.

Buying Questionnaire

20   **Section B.   Products and Sources.** This section combines sources of products with seasonal variations. Question 2 seeks to find the three most important animals/animal products for each restaurant and shop. This is a key question. Remember that 'importance' is defined in terms of contribution to livelihood. Answers to questions 3, 4 and 5 should be recorded in the table under question 5. Answers to questions 6 and 7 should be recorded in the table under question 7.

21   **Section C.   Problems with Buying.** The points made in para. 12 above apply here also.

Selling Questionnaire

22   **Section B.   Products, Buyers and Outlets.** Note that this section is quite different from Section B in the traders selling questionnaire. Note that question 1 is asking for **food items** e.g. sweetmeats, chicken biriani etc and **not** for actual animals or animal products - milk, eggs, beef etc. Question 2 needs to be re-worked.

23   **Section C.   Problems with Selling.** Refer to para 12 above.

24   **Section D.   Comparisons Between Buying and Selling Problems.** This is a vital section for the whole market characterisation exercise as it tries to capture the key constraints faced by restaurants and shops. Enumerators should be careful to probe thoroughly on both question 10 - to ensure that they get the right answer, and also question 11 - to ensure that sound reasons are given.

25   **Section E.   Losses and Processing Problems.** This section aims at gathering information on problems and losses that occur between the time that the restaurant/shop owner buys the animal/animal product, and the time that he sells his final product.

V   Milk Processors: Buying Questionnaire and Selling Checklist.

26   The objective of these questionnaires is to understand the role of large industrial milk processing units in the marketing chain of milk and milk products.

Buying Questionnaire

27   **Section B.   Sources.** This section follows a similar format to that in Section B of the traders buying questionnaire, although it is simpler, as there is no need to worry about producer-traders. Answers to questions 3, 4 and 5 should be entered in the table under question 5. Answers to questions 6, 7, 8 and 9 should be entered in the table under question 9.

28   **Section C.   Problems with Buying.   Refer to para. 12 above.

Selling Questionnaire

29   This questionnaire is quite different from other selling questionnaires in that it is less structured. This has been done deliberately, as the complexity of milk and milk product marketing demands a more flexible approach

30   **Section B.   Products and Buyers.** This section is straightforward.

31   **Section C.   Destination and Financing of Products.** This section aims at finding out where the various milk products go after they leave the processing plant. Question 10 addresses the issue of financing of products.

32   **Section D.   Problems with Selling.** Refer to para 12 above.

33   **Section E.   Comparisons Between Buying and Selling Problems.** This is a vital section for the whole market characterisation exercise as it tries to capture the key constraints faced by milk processors. Enumerators should be careful to probe thoroughly on both question 13 - to ensure that they get the right answer, and also question 14 - to ensure that sound reasons are given.

34   **Section F.   Losses and Processing Problems.** This section aims at gathering information on problems and losses that occur between the time that the processor buys the milk and the time that he sells his final product.

MARKET KEY INFORMANTS
MARKET CHARACTERISATION QUESTIONNAIRE

A.   Classification:

Town: Pabna / Mymensingh / Sylhet   Questionnaire Number:.........

Interview conducted by:...   Date:.................

Interview checked by:...   Date:.................

Mauza: Market name: Name of informant:

Occupation of informant:

B.   Market Days, Numbers and Types of Traders

1.   Can you please estimate how many traders in this market are selling livestock or livestock products?
Use column 2 in table under question 3

2.   How many of the traders are retail, how many are wholesale, and how many are both retail and wholesale?
Use columns 3, 4 and 5 in table under question 3

3.   How many days per week does the market operate for sale of each of these livestock / livestock products?
Use column 6 in table

Types of traders and products:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Item	Total	Retail	Wholesale	Retail / Wholesale	Days per week
Fresh Milk					
Eggs					
Beef					
Mutton					
Chicken					
Fish					
Cattle and Buffalo					
Goats and Sheep					
Sweet meats					
Powdered milk					
Ghee					
Butter					

C. Historical Trends

4. In this market, has the **number of traders** for livestock, livestock products and processed products increased, decreased, or remained roughly the same over the last 5 years? Please indicate:
- the trends for each of the following categories
- the reasons for the trends

Item	Trend*	Reasons
Fresh Milk		
Eggs		
Beef		
Mutton		
Chicken		
Fish		
Cattle and Buffalo		
Goats and Sheep		
Sweet meats		
Powdered milk		
Ghee		
Butter		

* CODE FOR TREND: + = INCREASED   0 = CONSTANT
                     - = DECREASED   DK = DON'T KNOW

5.   For which **three** products have there been the **largest increases** in numbers of traders over the last 5 years? please rank these.

Item	Rank

D.   Costs and Facilities

6(a).   What types of municipal charges / levies / taxes / licence costs apply in this market?

Use column 1 in table under question 7

6(b).   What is the cost of each charge to traders?

Use column 2 in table under question 7

7.   Can you estimate the proportion of livestock / livestock product traders who actually pay these costs?

Use column 3 in table

Column 1	*Column 2*		*Column 3*
Type of charge*	Cost per unit**		% of traders paying
	Taka	Unit	

* Tax, licence etc

** The unit might be expressed as a unit of time (eg per month or per year), or a unit of space (eg sq. metres)

REMARKS:

8.   Which of the following facilities are available for traders in this market:
Refrigeration
Storage facilities
Security
Waste disposal
Water
Use column 1 in table under question 11

9.   Are any other facilities available?
Use column 2 in table under question 11

10.   What is the cost of these facilities to traders?
Use column 3 in table under question 11

11.   Roughly what proportion of livestock / livestock product traders use these facilities
Use column 4 in table

Column 1	Column 2	Column 3	Column 4
Facility (Y/N)	Cost per unit*	% of traders using	Remarks
Refrigeration			
Storage Facility			
Security			
Waste disposal			
Water			
Other (specify)			
Other (specify)			

* The unit might be expressed as a unit of time (eg per month or per year), or a unit of space (eg sq. metres)

12.   Do trading associations operate in the market?
Use column 2 in table under question 13

13.   What proportion of traders belong to these associations?
Use column 3 in table

Column 1	Column 2	Column 3
Item	Trading association (Y/N)	Proportion of traders
Fresh Milk		
Eggs		
Beef		
Mutton		
Chicken		
Fish		
Cattle and Buffalo		
Goats and Sheep		
Sweet meats		
Powdered milk		
Ghee		
Butter		

14.   Are there any general problems which reduce the capacity of this market to operate efficiently? *(eg shortages of space, position of market place in town)*
Use column 1 in table under question 15

15.   Do you have suggestions as to how these constraints might be alleviated?
Use column 2 in table

Column 1	Column 2
Problems	Solutions
1.	
2.	
3.	

MARKET TRADERS

I.   BUYING QUESTIONNAIRE

A.   Classification:

Town: Pabna / Mymensingh / Sylhet   Questionnaire Number:

Interview conducted by:..............................   Date:.............................

Checked By:...   Date:............................

Name of Market:

Mauza:

Name of informant:

Occupation of informant:

Producer - retailer   ....

Producer - wholesaler   ....

Non - producer wholesaler   ....

Non - producer retailer   ....

Other (specify)   ....

B.   Products and Sources

1(a).   Which type(s) of livestock product / livestock do you trade in?

....

*If the trader is trading in fish, write down the types of fish. If trader is trading in cattle, write down whether cattle are **deshi** and/or **crossbreed**.*

If the trader trades in only one type of livestock / livestock product, go to question 2, if he trades in more than one, continue with question 1(b).

1(b).   What is the most important type of livestock / livestock product in terms of its contribution to your livelihood?

....

All subsequent questions in this questionnaire apply only to this most important type of livestock / livestock product.
If the respondent is a producer-trader, continue with question 2. If he is a non-producer, go straight to question 5.

****

For producer - retailers and producer - wholesalers only:

2.   How many kilometres is your farm from here? Please tell me the name of the village and mauza

Use table

Distance to Farm (kms)	Village	Mauza

3.   Do you sell **only** those livestock / livestock products which come from your own farm?   y / n

If yes, go straight to question 1 in the sellers questionnaire. If no, continue with question 4.

4.   Roughly speaking, what **percentage** of your total sales are from your own farm?

....

****

5.   **Who** do you purchase from? *(farmers, bapunias, goalas, pikers, other traders etc) Maximum of 5.*

Use column 1 in table under question 7

6(a).   What **percentage** of your total supply do you get from each of the types of supplier that you have mentioned?

Use column 2 in table under question 7

6(b).   For each **type** of supplier, do you normally buy from the **same individuals**, or do you normally buy from **different individuals** each time?

Use column 3 in table under question 7

7.   For each type of supplier that you have mentioned, how do you finance your purchases? *(cash, credit, credit **and** cash)*

Use column 4 in table

Column 1	Column 2	Column 3	Column 4
Supplier Type	Percentage	Regular or Non-regular suppliers	Financing
1.			
2.			
3.			
4.			
5.			

8.   Do you do **all** your purchasing in **this** market, do you do **some** of it here and some of it elsewhere, or do you do **all** of it **elsewhere?**

Tick relevant box

All purchasing in this market	
Some here and some elsewhere	
All elsewhere	

If the answer to this question is "all in this market", proceed to question 13. If the answer is "some of it here and some of it elsewhere", or "all of it elsewhere" continue with question 9.

9.   What is / are the **names of the place(s),** and the **name(s) of the mauza(s)** where you do some or all of your purchasing?   *Maximum of 5*

Use columns 1 and 2 in table under question 11

10.   What is the **distance in kms** from here to the place(s) where purchasing takes place, and what form of transport do you use to get there?.

Use columns 3 and 4 in table under question 11

11.   What **percentage** of your total supply do you buy from each of the **places** that you have mentioned?
Use column 5 in table overleaf

Column 1	Column 2	Column 3	Column 4	Column 5
Place name	Mauza	Kms	Transport type	%
1.				
2.				
3.				
4.				
5.				

12.   For each of the **places** that you have mentioned, who are the main types of **suppliers**? *(farmers, bapunias, goalas, pikers, other traders etc)*

Place Name	Main Supplier Type
1.	
2.	
3.	
4.	
5.	

13.   Over the last 5 years, have you experienced any changes in either the types of supplier that you buy from or the places that you buy from?   yes / no

If yes:

14.   Please describe the changes, what reasons can you give for the changes?
....
....
....
....

C.   Problems with buying

15(a). Do you ever face difficulties related to buying ?   yes / no

If yes continue with 15(b). If no go to 17(a) :

15(b). What are the difficulties?

Maximum of 5 difficulties. Use column 1 in the table under question 15.

16(a). Please rank the difficulties in order of importance

Use column 2 in the table overleaf

Name of Animal / Animal Product:	Rank
Problem 1:	
Problem 2:	
Problem 3:	
Problem 4:	
Problem 5:	

Remember to probe on the answers to ensure that the rankings are correct

16(b)   What specific solutions can you suggest for the problems that you have listed?

....
....
....
....

D.   Seasonal Variations

If the trader is selling fish, ask only questions 17(a), 18(a), 19(a) 20 (a) and 21(a): Do not attempt to get price information for fish.

17(a).   How much of the animal / animal product did you purchase last week?

*Indicate **number** and **units of measurement** eg kgs, animals etc*

If the trader is trading in fish, write down estimates of amounts of different types of fish if possible. If trader is trading in cattle, write down numbers of different types of cattle (i.e. deshi or crossbreed).

....

17(b). How much did you pay for each unit?

....

18(a). **Apart from festivals,** at what time(s) of the year do you purchase the most?

....

.

18(b). How many units do you purchase **per week** at such times of peak purchasing?

....

19(a). **Apart from festivals,** at what time(s) of the year do you pay the most per unit?

....

19(b). How much do you pay per unit at such times?

....

20(a). At what time(s) of the year to you purchase the least number of units?

....

20(b). How much do you purchase per week at such times of low purchasing?

....

21(a). At what time(s) of the year do you pay the least per unit?

....

21(b). What price do you buy at during such times?

....

MARKET TRADERS
II.   SELLING QUESTIONNAIRE

A.   Classification:

Town: Pabna / Mymensingh / Sylhet   **Questionnaire Number:**

Date:

B.   Products, Buyers and Outlets

1(a).   Which type(s) of livestock product / livestock are sold by you?

....

If the trader sells only one product, go to question 2, if he sells more than one product, continue with question 1(b).

1(b).   What is the most important type of livestock / livestock product in terms of its contribution to your livelihood?

....

All subsequent questions in this questionnaire apply only to this most important type of livestock / livestock product.

2.   Who are your customers? Are they: other traders, general public, hotels / restaurants, other (specify)
Use column 1 in the table under question 3(c)

3(a).   What percentage of your total sales do you make to each of the types of customer that you have mentioned?
Use column 2 in the table under question 3(c)

3(b).   For each **type** of customer, do you normally sell to the **same individual** customers, or do you normally sell to **different individual** customers each time?
Use column 3 in table under question 3(c)

3(c).   How does each type of customer that you have mentioned finance their purchases from you? *(cash, credit, credit and cash)*
Use column 4 in table

Column 1	Column 2	Column 3	Column 4
Customer Type	Percentage	Regular or non-regular customers	Financing
1.			
2.			
3.			
4.			
5.			

4.   Where do you do your selling? Do you do:

All your selling in **this** market.............................

Some of it here and **some** of it elsewhere.....................

Tick only 1.

If the answer to this question is "all in this market", proceed to question 9. If the answer is "some of it here and some of it elsewhere", continue with question 5.

5.   What is / are the names of the place(s), and the name(s) of the mauza(s) where you do some or all of your selling?
Maximum of 5 places. Use columns 1 and 2 in table under question 7

6(a).   What is the distance in kms from here to the place(s) where selling takes place?
Use column 3 in table under question 7

6(b).   What form(s) of transport do you use to reach the place(s) where selling takes place?
Use column 4 in table under question 7

7.   What percentage of your total supply do you sell in each of the places that you have mentioned?
Use column 5 in table

Column 1	Column 2	Column 3	Column 4	Column 5
Place name	Mauza	Kms	Transport type	%
1.				
2.				
3.				
4.				
5.				

8.   For each of the **places** that you have mentioned, who are the main types of **customers**? *(other traders, general public, hotels / restaurants, other (specify))*

Place Name	Customer Type
1.	
2.	
3.	
4.	
5.	

9.   Over the last 5 years, have you experienced any changes in either the types of buyer that you sell to or the places that you sell in?   yes / no

If yes continue with question 10, if no go to question 11(a):

10.   Please describe the changes, what reasons can you give for the changes?

....
....
....
....

C.   Problems with selling

11(a). Do you ever face difficulties related to selling ?   yes / no

If yes:

11(b). What are the difficulties?
Maximum of 5. Use the table under question 12.

12(a). Please rank the difficulties in order of importance
Use the table

Name of Animal / Animal Product:	Rank
Problem 1:	
Problem 2:	
Problem 3:	
Problem 4:	
Problem 5:	

Remember to probe on the answers to ensure that the rankings are correct

12(b)   What specific solutions can you suggest for the problems that you have listed?

D. Comparisons between buying and selling problems

13. If you compare the buying problem that you have ranked number 1 *(see buying questionnaire: question 16)* and the selling problem that you have ranked number 1 *(see above table)* which is the **most important** problem: is it the buying problem or the selling problem?

Most important overall problem: Buying problem ranked no.1..............................

                                             Selling problem ranked no.1.............................

Tick one

14. What reasons can you give for your choice of most important overall problem?:

....

....

....

....

E. Seasonal Variations

If the trader is selling fish, ask only questions 15(a), 16(a), 17(a) 18 (a) and 19(a): Do not attempt to get price information for fish.

15(a). How much of the animal / animal product did you sell last week?

Indicate number and units of measurement eg kgs, animals etc

....

15(b). How much did you sell each unit for?

Total:.........................
Per unit:....................

16(a). **Apart from festivals**, at what time(s) of the year do you sell the most?
....

16(b). How much (*how many units*) do you sell per week at such times of peak purchasing?
....

17(a). **Apart from festivals**, at what time(s) of the year do you charge the highest prices per unit?
....

17(b). What price per unit do you charge at such times?

....

18(a). At what time(s) of the year to you sell the least number of units?

....

18(b). How much do you sell per week at such times of low purchasing?

....

19(a). At what time(s) of the year do you charge the least per unit?

....

19(b). What price do you sell at during such times?

....

F.   Losses and Processing Problems (If not already mentioned)

20.   Do you experience any problems (eg processing problems, losses) between time of purchase and time of sale?   y / n

If yes continue with question 21, if no, the questionnaire is finished.

21.   What kind(s) of problem do you experience?

Maximum of 5. Use the table below

22.   Please rank these problems in order of importance

Type of Problem	Rank

MILK PROCESSORS
I.   BUYING QUESTIONNAIRE

A.   Classification:

Town: Pabna / Mymensingh / Sylhet   Questionnaire Number:

Interview conducted by:...............................   Date:...........................

Checked By:...   Date:.........................

Name of Processor:

Mauza:

Name of informant:

B.   Sources

1.   From whom do you purchase your milk? (individual farmers, farmers co-operatives, bapunias, goalas, pikers, traders etc)
Maximum of 5. Use table under question 2

2.   What percentage of your total supply do you are get from each of the types of supplier that you have mentioned?

Supplier Type	Percentage

3.   On average, how much milk would you buy in a week?
Use column 1 in table under question 5

4.   What would be the most amount of milk that you would buy in a week (excluding festivals such as Eid)?
Use column 2 in table under question 5

5.   What would be the least amount of milk that you would buy in a week?
Use column 3 in table

Column 1 (Ave.)		Column 2 (Most)		Column 3 (Least)	
No.	Unit	No.	Unit	No.	Unit

Note: Units should be specified, eg litres or kgs

6.   Where does the milk that you use come from? Please indicate the names of the place(s), and the name(s) of the mauza(s)
Maximum of 5. Use columns 1 and 2 in table under question 9

7.   What is the distance in kms from here to the place(s) where the milk comes from?
Use column 3 in table under question 9

8.   What percentage of your total supply do you buy from each of the places that you have mentioned?
Use column 4 in table under question 9

9.   For each of the places that you have mentioned, who are the main types of suppliers?
Use column 5

Column 1	Column 2	Col. 3	Col. 4	Column 5
Place name	Mauza	Kms from here	%	Main supplier type
1.				
2.				
3.				
4.				
5.				

10.   Over the last 5 years, have you experienced any changes in either the types of supplier that you buy from or the places that you buy from?   yes / no
If yes continue with question 11, if no go to question 12(a).

11.   Please **describe** the changes, what **reasons** can you give for the changes?
....
....
....
....

C.   Problems with buying

12(a). Do you ever face difficulties related to buying ? yes / no
If yes, continue with question 12(b), if no the questionnaire is finished.

12(b). What are the difficulties?   MAXIMUM OF 5.
Use the table under question 13

13(a). Please rank the difficulties in order of importance

Use the table below

Problem:	Rank
Problem 1:	
Problem 2:	
Problem 3:	
Problem 4:	
Problem 5:	

Remember to probe on the answers to ensure that the rankings are correct

13(b)   What specific solutions can you suggest for the problems that you have listed?

MILK PROCESSORS
II.   SELLING QUESTIONNAIRE

A.   Classification:

Town: Pabna / Mymensingh / Sylhet   **Questionnaire Number:**

Date:

B.   Products and Buyers

1.   What products do you sell?
Use column 1 in table under question 3

2.   Can you rank the importance of each of the products that you have mentioned in terms of their contribution to your sales?
Use column 2 in table under question 3

3.   Roughly speaking, how much milk do you require per month to produce each of the products that you have mentioned?
Use column 3

Column 1	Column 2	Column 3	
Product	Rank	Milk Requirement	
		No.	Unit
1.			
2.			
3.			
4.			
5.			

4.   Who are your main customers for each of the different types of product that you have mentioned?
Hint: customer types may include: Wholesale traders, Retail traders, Hotels / restaurants, Sweet meat shops, Groceries, General public.

Use column 1 in table under question 7

5.   How **many** customers of each **type** that you have mentioned do you sell to *(eg how many sweetmeat shops, how many wholesale traders etc).*

Use column 2 in table under question 7

6.   How would you describe the majority of your customer base for each customer type? would you describe them as regular customers? (ie do you get repeat orders from the same customers week after week and month after month?) or do you get different customers from week to week and month to month?

Use column 3 in table under question 7

7.   Can you rank the importance of each of the customer types *(column 1)* that you have mentioned in terms of their contribution to your sales?

Use column 4

Column 1	Column 2	Column 3	Column 4
Customer type	Number of customers	Regular or non-regular	Rank
1.			
2.			
3.			
4.			
5.			

C.   Destination and Financing of Products

8.   What are the main destinations for each of your most important products *(see question 2 above)*, Would you describe the destinations as urban, peri-urban or rural?

Destination	Urban / Peri -urban / Rural

9.   What methods of transport are used to move the products from here to your customers. Do you provide the transport, or do your customers use their own transport?

Method of transport	Who provides transport?

10. Do you offer any credit facilities to your customers, or do you accept cash payment only?

....
....
....
....
....

11. Please describe any changes that you have experienced over the past 5 years in either the types of buyer that you sell to or the destinations of your products?. What are the reasons for such changes?

....
....
....
....
....

D. Problems with selling

12 (a). Do you ever face difficulties related to selling ?,
If yes,

12 (b). What are the difficulties?

12 (c). Please rank the difficulties in order of importance.

Use the table below

Problem:	Rank
Problem 1:	
Problem 2:	
Problem 3:	
Problem 4:	
Problem 5:	

Remember to probe on the answers to ensure that the rankings are correct

12 (d). What specific solutions can you suggest for the problems that you have listed?

....
....
....
....
....

E.   Comparisons between buying and selling problems

13.   If you compare the buying problem that you have ranked number 1 *(see buyers questionnaire: question 13)* and the selling problem that you have ranked number 1 *(see above table)* which is the **most important** problem: is it the buying problem or the selling problem?

Most important overall problem: Buying problem ranked no.1..............................
                              Selling problem ranked no.1..............................

Tick one

14.   What reasons can you give for your choice of most important overall problem?:

....
....
....
....

F.   Losses and Processing Problems (If not already mentioned)

15.   Do you experience any problems (eg processing problems, losses) between time of purchase and time of sale? If yes, what kind(s) of problem do you experience? Please rank these problems in order of importance.

Type of Problem	Rank
1.	
2.	
3.	
4.	
5.	

RESTAURANTS AND SHOPS:

I.   BUYING QUESTIONNAIRE

A.   Classification:

Town: Pabna / Mymensingh / Sylhet   Questionnaire Number:

Interview conducted by: Date:

Checked By: Date:

Type of Outlet:

Grocery Shop:..........................

Sweetmeat shop:.......................

Hotel /restaurant:....................

Name of Restaurant / Hotel / Shop:

Mauza:

Name of informant:

B.   Products and Sources

1.   Which type(s) of livestock product / livestock do you purchase for your business?
....
....
....

2.   Which are the **three most important** animals / animal products in terms of their contribution to your livelihood? Please rank them in order of importance:

1. Most important:	
2. Second most important:	
3. Third most important:	

3.   On average, how much of each of these items would you buy in a week?

Use column 2 in table under question 5

4.   What would be the most amount of each item that you would buy in a week (excluding festivals such as Eid)?

Use column 3 in table under question 5

5.   What would be the least amount of each item that you would buy in a week?

Use column 4 in table

Column 1	Column 2		Column 3		Column 4	
Item	Average		Most		Least	
	No.	Unit	No.	Unit	No.	Unit
1.						
2.						
3.						

REMARKS:

6.   What are your sources of supply (farmers, processors, market traders, bapunias, goalas, pikers etc) for each of these three items?

Maximum of 5 per item. Use table under question 7

7.   What percentage of your total supply do you are get from each of the suppliers that you have mentioned?

Use table

Item 1		Item 2		Item 3	
Supplier Type	%	Supplier Type	%	Supplier Type	%

8.   Over the last 5 years, have you experienced any changes in the types of supplier that you buy from ?   yes / no

If yes, continue with question 9, if no go to question 10:

9.   Please **describe** the changes, what **reasons** can you give for the changes?

....
....
....
....

C.   Problems with buying

10(a). Do you ever face **difficulties** related to buying of any of the three items mentioned above?
        yes / no
If yes continue with question 10(b), if no, there are no further questions

10(b). Which **items** do you experience difficulties with?

....

11.   What are the difficulties?

Maximum of 5 difficulties. Use the table under question 12, remember to write the name of the item(s) to which the problem(s) apply in the table.

12(a). Please rank the difficulties in order of importance

Use the table

Problem	Rank
Problem 1:	
Problem 2:	
Problem 3:	
Problem 4:	
Problem 5:	

Remember to probe on the answers to ensure that the rankings are correct

12(b). What specific solutions can you suggest for the problems that you have listed?

RESTAURANTS AND SHOPS:
II.   SELLING QUESTIONNAIRE

A.   Classification:

Town: Pabna / Mymensingh / Sylhet   **Questionnaire Number:**

Date:

B.   Products, Buyers and Outlets

1.   Which types of foods are made from the three most important items that you purchase for your business? *(refer to question 1 of buying questionnaire for most important items)*

Item 1:

....

Item 2:

....

Item 3:

....

2.   Who are your customers? are they:

Poor people (van/rickshaw puller, tempo driver, petty traders, poor farmers, wage labourers etc)............

Students.................

Common people...............

Institutes (govt. offices, educational institutions, hospitals) ....

Rich customers (big businessmen, officers, rich farmers, local leaders)........................

Other (specify)................

Tick one or more

3.	Can you estimate what **percentage** of your total sales you make to each of the types of customer that you have mentioned?

Customer Type	Percentage
1.	
2.	
3.	
4.	
5.	

4.	Over the last 5 years, have you experienced any changes in the types of customer that you sell to?		yes / no

If yes, continue with question 5, if no, go to question 6.

5.	Please **describe** the changes, what **reasons** can you give for the changes?

....
....
....
....

## C.	Problems with selling

6.	Do you ever face difficulties when you are selling any of the foods that you have mentioned earlier? *(see answers to question 1)*		yes / no

If yes, continue with question 7, if no go to question 12.

7.	Which foods do you experience difficulties with?

....

8.	What are the difficulties?		MAXIMUM OF 5.

Use the table under question 9, remember to write the name of the foods to which the problem(s) apply in the table.

9(a).	Please rank the difficulties in order of importance

Use the table overleaf

Problem	Rank
Problem 1:	
Problem 2:	
Problem 3:	
Problem 4:	
Problem 5:	

Remember to probe on the answers to ensure that the rankings are correct

9(b).   What specific solutions can you suggest for the problems that you have listed?

D.   Comparisons between buying and selling problems

10.   If you compare the buying problem that you have ranked number 1 *(see buying questionnaire)* and the selling problem that you have ranked number 1 *(see above table)* which is the **most important** problem: is it the buying problem or the selling problem?

Most important overall problem: Buying problem ranked no.1..............................
                                              Selling problem ranked no.1..............................

Tick one

11.   What reasons can you give for your choice of most important overall problem?:
....
....
....

E.   Losses and Processing Problems (If not already mentioned)

12.   Do you experience any problems (eg processing problems, losses) between time of purchase and time of sale?   y / n

If yes continue with question 13, if no, there are no further questions and the questionnaire is finished.

13. What kind(s) of problem do you experience?

Maximum of 5. Use the table below

14. Please rank these problems in order of importance

Type of Problem	Rank
1.	
2.	
3.	
4.	
5.	