

Char Development and Settlement Project Phase IV Bangladesh

Annual Outcome Survey 2014

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Implementing Government Agencies:

- Bangladesh Water Development Board (BWDB)
- Ministry of Land (MoL)
- Local Government Engineering Department (LGED)
- Department of Public Health Engineering (DPHE)
- Department of Agriculture Extension (DAE)
- Forest Department (FD)

and NGOs

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1. Introduction

As part of the M&E systems of CDSP-IV, the annual outcome monitoring survey gathers detailed information on log frame goal and purpose level indicators (plus a couple of output indicators– see below). The survey is carried out on an annual basis. This provides continuous information on project outcomes and helps avoid relying on results from a single year with abnormal weather or other external events. Annual surveys also provide evidence for RIMS level II performance ratings.

Table 1.1 Indicators for Outcome Monitoring Survey

Impact	Indicators	Data to be collected
Goal	* No. of HH with improved food security disaggregated by gender of HH head	Months of food scarcity Frequency of consumption of meat, eggs and milk
	* No. of HH with improved water & sanitation disaggregated by gender of HH head	Distance to potable water source, own sanitary latrines, use sanitary latrines
	* No. of HH with improved housing disaggregated by gender of HH head	Materials for construction of roof and walls, number of rooms, number of times of flooding each year
	* No. of HH and number of assets owned disaggregated by gender of HH head	Ownership/ tenure of land, livestock, farm equipment, boats, vehicles, furniture, radio, TV
	No. of HH with women owning assets, and with increased mobility	Land and livestock owned Frequency of visits to market, town, hospitals
	Household expenditure	Annual expenditure on housing, health, festivals and education Annual expenditure on clothing by male and female HH members
Outcome	* Increase in crop production and sales of crops	No. of HH reporting increased crop production and sales Area, cropping intensity, yield, and sales of key crops Area of HYV paddy Months of food supply derived from own land
	Increase in livestock ownership	Number of households owning livestock and numbers owned by type of livestock. Number of households selling livestock products and value of sales
	Increase in number of homestead trees	Number of trees (timber, fruit) owned.
	* Income and employment	No. of people (m/f) in each household earning an income, sources of income (occupational mobility index). Numbers migrating out. Amount of cash income earned each year.
	Improved communications	Reduction in travel time to education and health facilities
	No. of HH maintaining possession of land.	Area of land occupied, status of land title. No. of HH still in occupation each year following granting of title.
Output	* Reduced salinity and flooding of land	No. of HH reporting reduced salinity and flooding

	No. of new enterprises and employment created.	Sales of homestead enterprises
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* log frame indicators

1.1 Objective of the Survey

Overall objective of outcome monitoring survey is to gather information on purpose and goal level log frame indicators, which are not covered adequately by RIMS impact monitoring. Specifically,

- to collect evidence for a “results chain” with changes in physical environment and/ or improved technology, leading to changes in cropping patterns, resulting in increased crop yields and/ or income, which in turn results in increased sales and improved food security, leading finally to reduced poverty and
- in addition, to gather information on the project services received by respondents.

1.2 Sampling Procedure

The mid-term outcome survey has been carried out with a sample of 1080 households drawn from the five chars- Char Ziauddin, Char Nangulia, Noler Char, Caring Char and Urir Char. A two stage stratified random sampling are applied for selecting the samples for conducting the field survey. In the 1st stage, a total of 36 (22%) *Shomaj*¹ has been selected randomly from 161 *Shomaj* of the five different chars. In the 2nd stage, 1080 (4%) households have been selected randomly from these 36 *Shomaj* (30 HHs from each *Somaj*). Table 1.2 shows the sample distribution of the survey.

Table 1.2 Sample Distribution

Name of Char	Total Area (ha)	Total Population	Total Shomaj	Sample Shomaj	% of Total Somaj	Total HHs	Sample HHs	% of Total HHs
Char Ziauddin	1,943	11,000	12	3	25	2,000	90	5
Char Nangulia	8,990	67,000	82	18	22	12,000	540	5
Noler Char	2,690	33,000	32	8	25	6,000	240	4
Caring Char	3,000	16,800	15	4	27	3,249	120	4
Urir Char	10,300	11,000	20	3	15	2,000	90	5
Total	26,923	138,800	161	36	22	25,249	1,080	4

1.3 Survey Questionnaire

In order to fulfil the survey objectives, a household survey questionnaire was carefully prepared for the base line survey. CDSP IV developed and used a questionnaire for the recent mid-term RIMS survey. The same questionnaire has been used for the present outcome survey 2014. (Refer to Annex 1 for the questionnaire).

¹The smallest geographical unit of chars

1.4 Field Data Collection and Data Analysis

CDSP-IV outcome survey data has been gathered during October-November 2014. Data have been collected from sampled HHs by 14 (8-males and 6-females) hired enumerators and supervised by a temporarily hired Survey Supervisor along with two M&E Officers of CDSP-IV. The enumerators were trained on use of the survey questionnaire and interviewing process. After computerization of the collected data, analysis has been done using MS Access and SPSS during December 2014. For this report anthropometric data not analyzed and presented which has been used only for mid-term RIMS report.

2. Results and Discussions

2.1 Settlement Status

In the CDSP-IV area, the settlement activities have not yet been completed; most of the field activities including Plot to Plot Survey (PtPS) and hearing with the char people based on PtPS findings, have been completed. Survey data reveals that only 8.24% of the sample households have received the land titling (*khatian*) during last one year period whereas 82.04% of the sample HHs are occupying *khas* land.

Table 2.1 Settlement Status (% of HH)

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Settled under CDSP settlement program	0	0	0	8.24
Settled through purchasing land	0	0	0	9.35
Occupying <i>khas</i> land	100	100	100	82.04
Inherited	0	0	0	0.37

2.2 Changes in Occupational Profile of the Respondents

A comparison of principal occupation of the HH heads between CDSP-IV baseline and status of CDSP IV across years i.e. 2012 to 2014 has been presented in Table 2.2. The principal occupation is the one which provides the main part of their annual income. The principal occupation of HH heads was mainly agriculture that ranges 45% to 48% across years 2012 through 2014 and day labour ranges between 20% to 29%. When compared with the baseline and the present status shows very interesting results. The proportion of household heads involved with agriculture as a principal occupation has an increasing trend and highest (48%) in 2014. Similar trend has been in petty trading (12%) compare to baseline 9% with exceptional e.g. decreasing trend in case of day labour (20% in 2014) and 29% in 2012 and 2013 compared to baseline of 31%.

Table 2.2 Principal Occupation of Household Head (%)

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Agriculture	37	45	45	48
Day Labour	31	29	29	20
House keeping	3	2	2	4
Fisherman	3	5	5	2
Job	3	2	2	5

Petty trading	9	9	9	12
Rickshaw/ Van/ Boat puller	4	4	4	4
Old age	6	3	3	2
Others	5	2	2	3

2.3 Changes in Housing Pattern of the Households

The survey data reveals that average sizes of the main houses under CDSP-IV are increasing across years over baseline average size of 253 sq. ft. Data shows that there has been highest increase of 315 sq. ft in 2014 compared to 271 sq. ft in 2012 and 295 sq. ft in 2013. Such status indicates char dwellers are living comparatively better housing. No significant changes have been observed in the areas of the types of floor, but there have been significant changes (improvement) in the areas of types of wall of houses and types of roofs. For example, there have been increases by 18%,30% and 55% for wall of made of CI sheet (*tin*)in 2012, 2013 and 2014 respectively over baseline 13% in 2011. Similarly, there have been increases by 18%, 27% and 51% for roof made of CI sheet (*tin*) in 2012, 2013 and 2014 respectively over baseline 16% in 2011. These indicate that CDSP-IV households are living in better housing conditions than that before. For more details refer to Table 2.3.

Table 2.3 Housing Condition

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Average size of main house (sq. ft)	253	271	294	315
Type of floor (%)				
Mud (earth)	99	99	98	99.40
Bricks	1	1	1	0.2
Pacca	-	0	1	0.4
Type of Wall (%)				
Leaf	4	7	6	1.2
Straw	34	19	15	8.8
Mud	0	3	1	1.0
Bamboo	50	40	35	20.7
Tin	13	31	43	67.8
Pacca	0	0	0	0.5
Type of Roof (%)				
Leaf	2	0	2	0.2
Straw	82	66	55	32.8
Tin	16	34	43	66.8
Pacca	0	0	0	0.2

2.4 Changes in Water and Sanitation Status

The incidence of household drinking water sources has increased slightly compared to the baseline situation. Table 2.4 shows96% households of CDSP-IV area collect drinking water from deep tube wells installed by CDSP-IV. Some changes have taken place in the char area. In the past, they have to collect water from an average distance of 345 meter and 418 meter in the dry and rainy seasons respectively; but now the average distance

becomes to 120meter and 135 meter in the dry and rainy seasons respectively. Due to easier access, HHs especially women are can invest their saved time for other gainful household works.

Table 2.4 Water and Sanitation

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Source of Drinking Water (%)				
Shallow Tube well	3	2	2	3
Deep Tube well	96	97	97	96
Dug well	0	0	0	0
Rain Water	0	0	0	0
Pond Sand Filter	0	0	0	0
Untreated pond water	2	1	1	0.37
River/Canal water	0	0	0	0
Ownership of tube well (%)				
Owned by HH	5	3	3	1
Jointly owned	5	0	0	3
Neighbour	27	13	8	5
Govt./Community	63	42	35	9
From CDSP	0	42	55	82
Distance of water sources				
Dry Season (meter)	345	154	112	120
Rainy Season (meter)	418	183	133	135
Type of latrine used by HH (%)				
No latrine	5	0	3	1
Hanging/open	77	58	36	33
Ring slab (unhygienic)	14	28	29	18
Hygienic	6	14	33	49
Source of ring slab or hygienic latrine				
Purchased from market	61	50	22	31
Purchased from NGO/other organization	8	8	0	1
Donated by GO/NGO/other organization	31	17	11	3
Installed by CDSP	0	25	68	65

It is observed from the analysis that the use of ring slab and hygienic latrine has significantly increased compared to the baseline situation i.e. ring slab 4% and hygienic latrine 43% in 2014. It is alarming that still 33% HHs of CDSP-IV are using hanging/open latrines. Sixty five percent of the households have received sanitary latrines from CDSP-IV. It is expected that by the end of the year 2015 most of the households of CDSP-IV area will be using hygienic latrines.

2.5 Changes in Health and Family Planning Issues

The study investigated four areas of health practices of the char dwellers. These were:

- Washing hands before taking food and after returning from latrine,
- Immunization of the children
- Regular visit of Community Health Workers and

- Use of family planning method

Compared to the baseline of CDSP-IV no change has taken place in the areas of immunization of children. On the other hand, the visits of Health Workers to the community have increased compared to the baseline situation and it is also noticed that the CDSP-IV HHs are getting quality supports from partner NGOs than 2012 and 2013 years. It is due to the intensive support from the CDSP-IV partner NGOs (Table 2.5 and 2.6). It is noticed that the visits of the health workers has an impact on the health and family planning situation, in 2014, use of family planning method has increased 52% compared to the baseline.

Table 2.5 Washing Hands Before Taking Food and After Return from Latrine (%)

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Washing hand before taking food				
Wash by plain water	96	83	91	90
Wash by Soap	04	17	9	10
Washing hand after return from latrine				
Wash by plain water	94	66	68	56
Wash by soap	0	34	32	44
Wash by ash	6	0	0	0

Table 2.6 Health and Family Planning

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Immunization of the children (% of HH)				
Yes	52	57	57	57
No	48	43	43	43
Regular visit of Govt./NGO health worker in the community (% of HH)				
Yes	6	79	89	85
No	94	21	11	15
Use of Family Planning Method (% of HH)				
No	66	41	13	10
Temporary method	32	56	82	84
Permanent method	2	3	5	6

2.6 Household Assets

A long list of family assets was examined including furniture, electrical and electronic goods, gold, agricultural and fishing instruments, transport, trees and poultry and livestock (Table 2.7). There are significant changes in asset values across CDSP-IV implementation years (2012 to 2014) over baseline asset value recorded in 2011. For example increase of 25% in 2012, 75% in 2013 and 174% in 2014. Major increments/changes in various assets of HHs of CDSP-IV are due to weights/share of the value of assets like solar panel (owned by 30.8% HHs compared to 0% in baseline), mobile phones (owned by 88% HHs compared to 46% in baseline), mechanized boats, boats, power tillers, buffalos, cows and ornaments (Refer to Table 2.7).

Table 2.7 Household Assets (HH in Percentage and Values in Taka)

Assets	Baseline 2011		Outcome 2012		Outcome 2013		Outcome 2014	
	HH	Value	HH	Value	HH	Value	HH	Value
Cot/ Khaat	90	1,411	95	1533	93.5	2,139	98	1054
Almira	05	2,540	11	1900	14.0	2,435	16	2227
Chair/Table	28	1,061	39.5	971	50.0	1,260	60	436
Shinduk(Wooden box)/Trunk	36	1,990	38.5	2040	52.0	2,118	54	2303
Alna	22	1,113	7.5	840	10.0	725	13	556
Ceiling/Table Fan	.21	833	1	500	1.5	900	3	682
Radio/Cassette Player	01	421	0.5	1000	0	0	1	833
B&W TV	.71	4,120	1.5	3500	1.0	3,250	1	2225
Color TV	0	0	1.5	9000	0	0	0	6250
Mobile Phone	46	1,984	68	1844	78.5	2,400	88	1333
Sewing machine	02	4,013	3	6250	4.0	6,625	3	3264
Ornaments	54	6,687	94	8287	89.0	10,780	95	1907
Bicycle	07	2,962	12	2312	15.5	2,970	10	2086
Rickshaw/Van	01	5,900	2	7000	3.0	4,083	1	5325
Solar Panel	0	0	0	0	17.5	27343	30.8	21738
Boat	.49	9,500	0.5	12000	0.5	7,000	1	37111
Mechanized boat	01	94,928	2.5	75000	2.5	44,000	1	53867
Power tiller/Husking Machine	03	26,155	2	53375	2.0	41,250	3	20875
Pump Machine	0	0	0.5	8000	1.5	13,000	2	19954
Fishing net	40	3,377	45.5	2476	63.5	3,014	44	887
Trees	24	10,765	64	8252	84.5	13,453	83	390
Cow	61	23,328	59	25390	63.0	32513	58	14114
Buffalo	02	216,204	0.5	120,000	1.0	3,725	1	28306
Goat	36	3,533	30	2765	21.5	2,765	15	2317
Sheep	01	21,988	1	50500	0	0	2	3834
Chicken	90	903	94	1479	92.5	1,390	96	145
Duck	81	1,269	85.5	1899	83.0	1,877	84	179
Others	-	35,162	13.5	12,383	7.0	1,471	6	4050
All (average)	-	35,162		43,797		61,485		96,437

2.7 Changes in Household Annual Income from Different Sources

The following table shows the average annual income of the households from different sources. The survey data reveals that the average annual incomes of the sampled households are Tk. 79,800, Tk. 107,771, and Tk. 109,207 in 2012, 2013 and 2014 respectively. The survey data shows that average annual household income increases by 11% in 2012, 50% in 2013 and 52% in 2014 over CDSP-IV baseline recorded in 2011. Major increment of the HH income is contributed by the income generating events like wage/salary, field crops, petty trading, livestock & poultry rearing (Refer to Table 2.8).

Table 2.8 Annual Household Income from Different Sources

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Wage/Salary	33,378	24,089	29,788	38,018
Field Crops	15,617	19,538	20,031	13,111
Petty Trading	6,879	7,898	17,510	12,971
Homestead Gardening	3,115	9,727	7,721	6,128
Rickshaw/Van Pulling	2,749	2,210	1,325	4,694
Pond Aquaculture	2,713	3,476	10,483	3,986
Livestock Rearing	2,666	3,883	5,065	8,133
Fishing/PL Catching	2,093	4,404	5,607	7,042
Poultry Rearing	1,887	3,515	8,326	7,340
Remittance	601	850	1,620	7,042
Handicrafts	252	210	295	742
Total	71,951	79,800	107,771	109,207

2.8 Field Crop Cultivation

2.8.1 Changes in Cropping Intensity

Cropping intensity is considered to be a good indicator for land use. It is directly proportional to the land use. The survey data reveals that there is gradual increase of average cropping intensity for the years of 2012, 2013 and 2014. For example, 14% increase of cropping intensity in 2012, 23% in 2013 and 35% in 2014. This is due to more cultivation of *amon* and other cash crops during *robi* season. Table 2.9 also shows that rice cultivation in Boro/Robi season is very little in all areas. This is due to the high salinity during the dry season and lack of irrigation facilities in the new chars.

Table 2.9 Cropping Intensity and Average Area by Crops

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Average cultivable land (Deci) per family	154	137	126	116
Average cultivated land (Deci) per family	163	163	174	162
Cropping intensity (%)	105	119	138	140
Average cultivated land by crop				
Aush (HH in %)	06	06	13	05
Average area (Deci)	98	77	86	75
Amon (HH in %)	87	83	74	71
Average area (Deci)	165	171	155	120
Boro/Robi (HH in %)	01	03	03	27
Average area (Deci)	98	84	215	65

2.8.2 Changes in Average Production, Consumption and Sale of Field Crops

Rice is the staple food for the char dwellers. Another crop group like pulses etc are considered important dietary needs next to rice for them. The average production per hectare (yield) of rice is given in kg and for pulse and other crops in taka (Table 2.10). The production rate (yield) of other crops like pulse, oil seed, ground nut and water melon etc are difficult to measure because of the different productivity and the farmers can't clearly estimate the total production in units. So the production and income of other crops is presented in the following table in taka. According current survey average rice production per hectare is 2.2 MT, which is 0.3 MT more than the CDSP-IV baseline yield. Survey data also reveals that there is an increasing trend of rice production since 2012 till 2014. Though few HYV demonstration plots were established by the DAE under the CDSP-IV program, still the CDSP-IV farmers are cultivating the local variety namely *Rajashail*. Consumption of both rice and pulses and others has increased in CDSP-IV area compared to the baseline. It is also noticed that sale proceeds of production are not the household surplus, because they sell it to meet up the production cost. The respondents of food security section mention that on average 6.6 months in a year households can meet up the household needs from their own production. For the rest 5.5 months have to meet from other sources of income or loan as microcredit provided by partner NGOs. There have been increases in sales of 183% in 2013 and 106% in 2014 with exception to a decrease of 23% in 2012 over baseline recorded in 2011.

Table 2.10 Production and income from field crops

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Rice				
Production (MT/ha)	1.9	2.0	2.1	2.2
Average Production (kg/HH)	1,261	1,208	1,358	862
Consumption (kg/HH)	877	990	995	847
Average Income (Taka/HH)	17,744	18,120	19,012	11,302
Pulses and other crops				
Average Sales(taka/HH)	2,128	1,633	6,027	4,388
Consumption (Taka/HH)	1,126	3,745	4,459	1,499
Total Income (Taka)	3,254	5,378	10,486	5,887

2.9 Changes in Production and Income of Homestead Gardening

From the survey it reveals that both vegetables and fruits are grown as practice of homestead gardening. Quite a good amount of cash is earned from homestead gardening. CDSP-IV baseline recorded that about 84% HHs practiced vegetable gardening. Data reveals that there has been 10% increase of vegetable growers in 2013 where there has been only 2% increase in 2012 and 2014 compare to 2011.

Households are growing fruits as cash crops and their own consumption. There are three common fruits grown in the study area: banana, guava and papaya. Compared to the CDSP-IV baseline data the percentage of households growing banana, papaya and guava has remarkably increased. Consumption of vegetables and fruits grown in homesteads is common behaviour. It is observed that in 2012 and 2013, there have been increases of 17% and 16% fruit grown HHs, but a decrease of 14% in 2014 compare to baseline 2011.

In regards to consumption and selling of fruits by HH members, survey data reveals that there have been significant changes in consumption and selling pattern. For example, HHs have consumed 40% and sold the rest 60% of their fruits grown in 2011 baseline and in 2012 and 2013 the ratio between consumption and selling becomes i.e.58% :42%, therefore more consumption than before in 2011. Interestingly in 2014 it becomes 41% and 59% which is very close to baseline status (refer to Table 2.11). It has been observed that in most cases female HH members are doing homestead gardening.

Table 2.11 Production and Income from Homestead Gardening

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Vegetable (% of HH)	84	86	94	86
Consumption (Taka)	1,488	4,756	3,402	1,759
Sold (Taka)	2,254	1,398	3,124	3,107
Total Income (Taka)	3,742	6,155	6,526	4,866
Banana (% of HH)	33	51	55	18
Consumption (Taka)	878	739	811	1280
Sold (Taka)	1,656	737	1,993	2473
Total Income (Taka)	2,534	1,476	2,804	3195
Guava (% of HH)	7	22	7	8
Consumption (Taka)	346	277	2,342	317
Sold (Taka)	479	106	432	492
Total Income (Taka)	825	383	2,774	809
Papaya (% of HH)	11	29	38	13
Consumption (Taka)	486	324	737	1241
Sold (Taka)	484	123	338	1122
Total Income (Taka)	970	447	1,065	2363
Avg. Fruit Prod HH (%)	17	34	33	13
Total Fruit Consumption-Taka (%)	1710 (40%)	1340 (58%)	3890 (58%)	2838 (41%)
Total Fruit Sold-Taka (%)	2619 (60%)	966 (42%)	2763 (42%)	4087 (59%)

2.1 0Changes in Poultry Rearing Status

There is no denying factor that poultry rearing is considered as an important income generating activities of rural poor community like char dwellers of CDSP-IV. Households met up a significant part of their demand of meat and eggs from rearing poultry birds like chicken and ducks. Table 2.12 shows that number of households rearing poultry has an increasing trend through years 2012 to 2014. There has been an increase of 5% over baseline (89% HHs) in 2012 and in 2013. But, 7% increase in 2014. The average number of chicken for each household has increased from 6 to 10 and the average number of ducks remains as 7 in 2012, 9 in 2013 and 8 in 2014. Average egg production per HH has also an increasing trend which is 9% in 2012,34% in 2013 and 28% in 2014 compared to the baseline recorded in 2011.

At the same time the consumption of egg and meat has also increased in the CDSP-IV area. For example consumption of eggs increased by 6% in 2012, huge 157% in 2013 and 70% in 2014 Over baseline156 numbers

in 2011. The female HH members reported that they do the rearing of poultry birds. In a few cases the male members do some tasks and women assist.

Table 2.12 Poultry Rearing Status, Production, Consumption and Income

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Rearing status				
HH rear poultry (%)	89	94	94	96
Average Nos. of Chicken	06	7	10	09
Average Nos. of Duck	07	7	9	08
Annual production of eggs (Nos./HH)	156	170	209	200
HH consumption of eggs (Nos./HH)	47	50	121	80
Income from eggs (Tk/HH)	817	1,105	1,358	979
Annual production of meat (Kg/HH)	36	42	50	32
HH consumption of meat (Kg/HH)	06	8	20	10
Income from meat (Tk/HH)	4,949	5,880	7,500	6,392

2.11 Changes in Livestock and Aquaculture Practices, Production and Income

Livestock rearing (rearing of milking cows) is another important income generating activity taking place at field levels of CDSP-IV areas in many ways. This is considered also an important source of nutrition. Table 2.14 shows that in 2012 and 2013, 90% households from CDSP-IV area have been rearing livestock compared to baseline of 75% and in 2014 this has been same as of baseline. Production and income from milk has increased significantly during 2012 to 2014 in CDSP-IV area compared to the baseline data. Average milk production has increased by 12% in 2012 and 76% in 2013 and 158% in 2014 over baseline. Remarkable change have taken place in goat rearing 77% increase in 2012 and 2013 but, there has been very low production 12% less than baseline 17 goats per HH.

Percentage of household with **pond for aquaculture** has remarkably increased by 15% in 2012 and 2013, and no increase in 2014 compare to baseline. Fish production and consumption per household has increased in CDSP-IV area remarkably (production 1.74 kg/decimal to 7.7 kg/decimal and consumption 29 kg/HH to 61 kg/HH in 2014). (Refer to Table 2.13).

Table 2.13 Livestock Rearing and Aquaculture Status, Production and Income

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Nos. of HH rearing livestock (%)	75	90	90	75
Avg. milk production (Lt)	114	125	201	294
Avg. milk consumption (Lt)	64	52	111	85
Avg. income from Milk (Tk)	2,850	4,107	8,040	8,485
HH with goat (%)	17	30	30	15
Aquaculture				

HH with pond/ditch (%)	99	96	96	96
HH culture pond/ditch (%)	51	91	91	76
Average Production (kg/HH)	43	48	96	80
Production (kg/deci)	1.74	2.4	4.0	7.7
Average Consumption (kg/HH)	29	32	57	61
Average income from pond (Tk/HH)	4,515	5,120	11,520	15,852

2.12 Food security

There are four key dimensions of food security-**physical availability of food, economic & physical access to food, food utilization and stability of the other dimensions over time**. In regards to both availability and access to food, the respondents were asked how many months of a year they can meet their basic food needs from their own production, like as done in CDSP-IV baseline survey 2011. Table 2.14 shows that on average the households can meet their basic food needs from their own production for a period of 7 months for 2012 and 2013, but 6 months in 2014 having 7 months recorded in baseline 2011.

The respondents were also asked whether they normally face any situation during a year when the household members have to eat less than the usual quantity of food or inferior quality of food due to financial or other reasons. If they face this situation they were asked to specify the month(s) when it occurs as per *Bangla* calendar. Fifty three percent of the respondents replied that they face such a situation in different months of the year in CDSP-IV area which is 29% less than the baseline situation. The survey data reveals that there is gradual improvement of situation because the households of CDSP-IV are facing fewer problems in regards to food by quantity or by quality. For example, 66% HHs reported about their problems in 2012, 60% in 2013 and 53% in 2014 when they reported 82% during baseline about problems having necessary quantity and quality food. (Refer to 2014).

In mapping months of crisis for (in regards to availability of food), the respondent households reported that in general they face food crisis in the beginning of July-August to Jan-Feb of each year. Survey data also reveals that situation has improves reasonably than the baseline situation in the year 2011.

Table 2.14 Food Security

	CDSP-IV Baseline 2011	CDSP-IV Outcome 2012	CDSP-IV Outcome 2013	CDSP-IV Outcome 2014
Avg. months in a year HH meet the basic food needs from own prod.	7	7	7	6
HH faced acute crisis (% of HH)	82	66	60	53
Crisis Months (% of HH)				
<i>Boisakh (Apr-May)</i>	05	03	7	9
<i>Joistho (May-Jun)</i>	16	03	7	8
<i>Ashar (Jun-Jul)</i>	33	16	11	11
<i>Srabon (Jul-Aug)</i>	35	19	17	23

<i>Vadro (Aug-Sep)</i>	44	22	43	35
<i>Ashin (Sep-Oct)</i>	54	42	51	39
<i>Kartic (Oct-Nov)</i>	50	24	30	37
<i>Agrohayoun (Nov-Dec)</i>	09	02	03	35
<i>Powsh (Dec-Jan)</i>	02	01	02	31
<i>Mug (Jan-Feb)</i>	03	01	01	22
<i>Falgun (Feb-Mar)</i>	04	01	03	15
<i>Chaitro (Mar-Apr)</i>	06	01	03	9

2.13 Accessibility to Schools and Hats/Bazaars

The mobility of the HH members was assessed through asking the respondents whether any member of their household needs to go to specific places: one is primary school/ madrasha and another one is local market (hat/bazaar). If they did go, they were asked about the distances, mode(s) of transportation and time taken for the trip during rainy as well as dry season for each of the visited places.

Table 2.16 shows that schools and *madrashas* are within 1 km. About existence of road, 11%-19% households reported that situation has improved than the baseline status when 26% HHs reported that there was no road. Most of the households reported that they can move easily in both rainy and dry season and can save more than 50% time than before. Communication has improved significantly in 2014 than 2012 & 2013 compare to baseline year. It is also notable that due to improved communication and locally established new market places, the distance of markets from homesteads has significantly reduced.

Table 2.15 Accessibility to Schools/Madrashas and Hats/ Bazaars (Rural Market)

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Primary Schools/Madrashas				
Average distance (km)	01	01	0.4	01
No road (% of HH)	26	11	15	19
<i>Kancha</i> road (% of HH)	74	49	77	72
Brick (% of HH)	0	0	0	24
<i>Pacca</i> Road (% of HH)	0	03	08	3
Average time taken in rainy season	38	26	16	18
Average time taken in dry season	30	22	12	22
Hats /Bazaar				
Average distance (km)	16	13	02	1
No road	33	06	08	33
<i>Kancha</i> road	67	62	60	74
Brick	0	0	0	26
<i>Pacca</i>	0	32	31	35
Average time taken in rainy season	62	58	32	25
Average time taken in dry season	49	46	25	21

2.14 Shocks and Crisis

Incidence of shocks and crisis are of normal phenomenon of coastal char dwellers. They have to learn, practice and adapt different kinds of coping strategies against shocks and strategies. Each household was asked with sufficient probing whether the household or its members have faced any kind of accidents, losses or shocks from disasters during last one year period and if they faced, they were requested to identify coping strategies they have taken to face and solve the crisis and shock. They were given a list of initially identified 13-coping strategies and if not covered then the list is updated with the new coping strategy responded by the household.

Table 2.16 shows that loss of crop due to flood and other natural calamities has been reduced drastically. For example, only 2% HHs reported that they had crop loss in 2012 where during baseline reported 47% crop loss due to flood or draught. There was no crop loss during 2014 in CDSP-IV area. Similarly, there have been significant reductions of threats from dacoity/mastanies etc. For example, 1% HHs reported reduction of threats from dacoity/mastanies in 2012, 2% in 2013 and 7% in 2014 compared baseline of 15% recorded in 2011.

Table 2.16 Type of Shocks or Crises Faced by the HH Last One Year (%)

	Baseline 2011	Outcome 2012	Outcome 2013	Outcome 2014
Death/invalidity of earning member	4	02	2	6
Serious disease of any member	20	12	24	0
Displacement due to Flood/cyclone/ tornado	42	36	8	44
River erosion	8	1	0	0
Loss of crop due to flood/drought	47	2	1	0
Loss/ death/theft of livestock/poultry	15	4	2	9
Dacoity/ Theft/ Mastanies in house/business	15	1	2	7
Loss of business/investment	1	1	0	3
Divorce/separation	1	0	1	5
Dowry	3	1	5	0
Socio-political harassment, including bribe and tolls	1	0	1	5
Women harassment (Violence)	0	1	0	0
House destroyed by fire or other reason	2	8	0	9

2.15 Comparison of Indicators of CDSP-IV Outcome Surveys against Baseline Survey

In Table 2.17 some key selected indicators has been presented with 1st, 2nd and 3rd CDSP-IV outcome surveys against CDSP-IV baseline survey recorded in 2011. The table 2.17 shows that there have been positive changes observed in the CDSP-IV implementing years of 2012, 2013 and 2014 compare to base line recorded in 2011.

Table 2.17 Comparison Between 1st, 2nd and 3rd Outcome Surveys against Baseline

Indicators	CDSP-IV Baseline (Oct- Nov 2011)	First Outcome Survey Dec- 2012	Second Outcome Survey Dec- 2013	Third Outcome Survey Dec 2014	Change 1 st outcome to the baseline survey	Change 2 nd Outcome to the baseline survey	Change 3 rd Outcome to the baseline survey
1. Agriculture as principal occupation of household head (%)	37	45	45	48	8% increase	8% increase	11% increase
2. Day labour as principle occupation of household head (%)	31	29	29	20	2% reduced	2% reduced	11% reduced
3. Straw made roof of main house (%)	82	66	55	33	16% decrease	27% decrease	49% Decrease
4. Tin made roof of main house (%)	16	34	43	67	9% increase	27% increase	51% increase
5. Average distance of drinking water source in -dry season (m) -rainy season (m)	345 418	154 183	112 133	120 135	55% reduced 56% reduced	68% reduced 68% reduced	65% reduced 68% reduced
6. Average value of HH assets (BDT)	35,162	43,797	61,485	99,204	25% increase	75% increase	1 82% increase

7. Annual HH income (BDT)	71,951	89,800	107,771	109,207	25 % increase	50% increase	52% increase
8. Cropping intensity (%)	105	119	138	140	14% increase	33% increase	35% increase
9. Rice production (MT/ha)	1.9	2.0	2.1	2.2	5% increase	11% increase	16% increase
10. Income from homestead gardening (BDT/HH)	3,742	6,155	6,526	4,866	25% increase	65% increase	30% increase
11. HH faced acute food crisis (%)	82	66	60	53	16% reduced	22% reduced	29% increase

3. Summary of Conclusions

The observations, findings and results documented in this outcome survey report, have been done based on 3rd outcome survey conducted during October to December 2014 including two outcomes survey reports (Technical Report 5 and Technical Report 7) published in April 2013 and April 2014 respectively and CDSP-IV baseline survey conducted in 2011. The mid-term outcome survey has been carried out with a sample of 1080 households drawn from the five chars under CDSP-IV. A two-stage stratified random sampling is applied for selecting the samples for conducting the field survey. In the 1st stage, a total of 36 (22%) *Shomaj*² selected randomly from 161 *Shomaj* and in the 2nd stage, 1080 (4%) households selected randomly from those 36 *Shomaj* (taking 30 HHs randomly from each *Somaj*).

In the results and discussion sections, the values of outcome indicators and survey variables obtained from three outcome surveys have been basically compared with baseline indicators recorded in 2011. As when necessary annual outcome results have been compared annually i.e. 2012, 2013 and 2014. Comparison of selected indicators of CDSP-IV outcome surveys against baseline survey of 2011 has been presented in Table 2.17.

Settlement status: Only 8.24% sampled HHs received land titling (*khatian*) in 2014. But, Plot to Plot Survey (PtPS) has been completed in most areas.

Changes in occupational profile: The principal occupation in all years was mainly agriculture (45% to 48%) and day labour (20% to 29%). The proportion of household heads involved with agriculture as a principal occupation has an increasing trend and highest (48%) in 2014. Similar trend has been in petty trading (12%) with exceptional i.e. decreasing in case of day labour (20% in 2014) and 29% in 2012 and 2013 compared to baseline of 31%.

3.1 Changes in housing patterns of the households:

No significant changes have been observed in the areas of the types of floor, but there have been significant changes towards improvement in the areas of types of wall of houses and types of roofs. Survey data indicates that HH members are now using highly durable materials like corrugated iron (CI) sheet for walling and roofing of their houses. These indicate that CDSP-IV households are living in better housing conditions than before.

3.2 Changes in Water and Sanitation Status:

The incidence of household drinking water sources has increased slightly compared to the baseline situation. Now 96% households of CDSP-IV area collect drinking water from deep tube wells installed by

²The smallest geographical unit of chars

CDSP-IV. The important change is that earlier (in 2011) they used to collect water on an average 345 meter and 418 meter in the dry and rainy seasons respectively. Now the average distance is 112 and 135 meter in the dry and rainy seasons respectively. Due to easier access, HH members especially women are saving more than before and they can invest their saved time for other gainful works.

3.3 Changes in health and family planning Issues:

The study investigated four areas of health practices of the char dwellers- (i) washing hands before taking food and after returning from latrine, (ii) Immunization of the children, (iii) regular visit of Community Health Workers and (iv) use of family planning method. Compared to the baseline of CDSP-IV no change has taken place in areas of immunization of children. It is noticed that the visits of the health workers has an impact on the health and family planning situation; and use of family planning method has increased 52% compared to the baseline.

3.4 Household Assets:

A long list of family assets was examined including furniture, electrical and electronic goods, gold, agricultural and fishing instruments, transport, trees and poultry and livestock (Table 2.7). There are significant changes in asset values across CDSP IV implementation years (2012 to 2014) over baseline asset value of CDSP IV recorded in 2011. Major increments/changes in various assets of HHs of CDSP-IV is contributed by the value of assets like mechanized boats, boats, power tillers, buffalos, cows, solar panels and ornaments.

Changes in Household Annual Income: Annual household income plays a vital role in life style of char dwellers. The survey data reveals that the average annual incomes of the sampled households are Tk. 79,800, Tk. 107,771, and Tk. 109,207 in 2012, 2013 and 2014 respectively. The survey data also shows that average annual household income increases by 11% in 2012, 50% in 2013 and 52% in 2014 over CDSP-IV baseline recorded in 2011. Major increment of the HH income in CDSP-IV is contributed by the income generating events like wage/salary, field crops, petty trading, livestock & poultry rearing.

Household Production and Income: Rice is the staple food for the char dwellers. Another crop group like pulses etc are considered important dietary needs next to rice for them. **Cropping intensity** is considered to be a good indicator for land use. It is directly proportional to the land use. The survey data reveals that there is gradual increase of average cropping intensity for the years of 2012, 2013 and 2014 (refer to Table 2.9). According to current outcome survey of 2014, **average rice production** per hectare is 2.2 MT, which is 0.3 MT more than the CDSP-IV baseline yield. Consumption of both rice and pulses and others has increased in CDSP-IV area compared to the baseline.

In rural char areas **homestead gardening** is a common and important agricultural practice. HHs members especially women actively grow vegetables and fruits (e.g. Banana, Guava and Papaya) in their own homesteads and sometimes fellow land. The number of households growing banana, papaya and guava has remarkably increased. Consumption of vegetables and fruits grown in homesteads is common behaviour. It is observed that in 2012 and 2013, on average more than 28% HHs (compare to baseline 2011) HHs have grown fruits, but in 2014 fruit grown HH reduced by 4% (compare to baseline 2011).

In regards to consumption and selling of fruits by HH members, survey data reveals that there have been significant changes in consumption and selling pattern. HHs have consumed 40% and sold the rest 60% of their fruits grown in 2011 baseline and in 2012 and 2013 the ratio between consumption and selling becomes i.e.58% and : 42%, therefore more consumption than before in 2011. Interestingly in 2014 it becomes 41% and 59% which is very close to baseline status (refer to Table 2.11). It has been observed that in most cases female HH members are doing homestead gardening.

Households in Poultry Rearing: There is no denying factor that poultry rearing is considered as an important income generating activities of rural poor community like char dwellers of CDSP-IV. Households met up a significant part of their demand of meat and eggs from rearing poultry birds like chicken and ducks. There has been an increase of 5% over baseline (89% HHs) in 2012 and in 2013. But, 7% increase in 2014. The average number of chicken for each household has increased from 6 to 10 and the average number of ducks remains as 7 in 2012, 9 in 2013 and 8 in 2014. Average egg production per HH has also an increasing trend which is 9% in 2012, 34% in 2013 and 28% in 2014 compared to the baseline recorded in 2011.

At the same time **the consumption of egg and meat** has also increased in the CDSP-IV area. For example consumption of eggs increased by 6% in 2012, huge 157% in 2013 and 70% in 2014 Over baseline 156 numbers in 2011. The female HH members reported that they do the rearing of poultry birds. In a few cases the male members do some tasks and women assist.

Livestock rearing (e.g. rearing of milking cows) is another important income generating activities taking place at field levels in many ways. This is also an important source of nutrition. Average milk production has increased by 12% in 2012 and 76% in 2013 and 158% in 2014 over baseline. Remarkable change have taken place in goat rearing 77% increase in 2012 and 2013 but, there has been very low production 12% less than baseline 17 goats per HH.

Percentage of household with **pond for aquaculture** has remarkably increased by 15% in 2012 and 2013, and no increase in 2014 compare to baseline. Fish production and consumption per household has increased in CDSP-IV area remarkably (production 1.74 kg/decu to 7.7 kg/decu and consumption 29 kg/HH to 61 kg/HH in 2014).

Household Food Security: There are four key dimensions of food security-*physical availability of food, economic & physical access to food, food utilization and stability of the other dimensions over time*. In regards to both availability and access to food, the respondents were asked how many months of a year they can meet their basic food needs from their own production, like as done in CDSP-IV baseline survey 2011. Table 2.14 shows that on average the households can meet their basic food needs from their own production for a period of 7 months for 2012 and 2013, but 6 months in 2014 having 7 months recorded in baseline 2011. The survey data reveals that there is gradual improvement of **food security situation** because the households of CDSP-IV are facing fewer problems in regards to food by quantity or by quality. For example, 66% HHs reported about their problems in 2012, 60% in 2013 and 53% in 2014 when they reported 82% during baseline about problems having necessary quantity and quality food. (Refer to 2014).

In mapping months of crisis for (in regards to availability of food), the respondent households reported that in general they face food crisis in the beginning of July-August to Jan-Feb of each year. Survey data also reveals that situation has improved reasonably than the baseline situation in the year 2011.

3.5 Accessibility to Schools and Hats/Bazaars: Schools and madrasahs are within 1 km. About existence of road, 11%-19% households reported that situation has improved than the baseline status when 26% HHs reported that there was no road. Most of the households reported that they can move easily in both rainy and dry season and can save more than 50% time than before. Communication has improved significantly in 2014 than 2012 & 2013 compare to baseline year. It is also notable that due to improved communication and locally established new market places, the distance of markets from homesteads has significantly reduced.

3.6 Shocks and Crisis: Incidence of shocks and crisis are of normal phenomenon of coastal char dwellers. They have to learn, practice and adapt different kinds of coping strategies against shocks and strategies.

Loss of crop due to flood and other natural calamities has been reduced drastically. For example, only 2% HHs reported that they had crop loss in 2012 where during baseline reported 47% crop loss due to flood or draught. There was no crop loss during 2014 in CDSP-IV area. Similarly, there have been significant reductions of threats from dacoity/mastanies etc.

Annex 1 Char Development and Settlement Project (CDSP) IV
Outcome Survey Questionnaire-2014

Section A: Household Composition:

1. Name of Household Head:.....
Father/Husband:.....
2. Address: Para/Moholla/Somaj:.....Char:.....
3. Name of Respondent..... Relation with HH:.....
4. Household members details:

Sl	Name	Sex(Male-1/Female-2)	Age	Marital Status(Use code)	Educa tional Status (Use code)	Occupation (Code)		Information of Children below 5 years					
						Prim ary	Sec ond ary	Dat e of birth	Age		Hei ght/ Len gth (cm)	Weight (kg)	
									Mo nth	D a y			
01	Household head												
02													
03													
04													
05													
06													
07													
08													
09													
10													

Marital Status Code: Married-1, Unmarried-2, Divorced-3, Widow/Widower-4, Separated -5.

Education Code: Illiterate-1, Can sign only-2, Can read and write -3, Primary -4, Secondary -5, HSC -6, Graduate and above-7,

Occupation Code: Agriculture/ Crop farming -1, Day Labor-2, Job-3, House Keeping-4, Student-5, Unemployed-6, Fishing-7, Fish/Poultry/Livestock rearing-8, Handicrafts-9, Petty trading-10, Rickshaw/Van puller/Boat man-11, Driver-12, Retired person/ old man-13, Disable-14, Others (Specify).....-15

Section B: Socio-economic Status

1. Land holding:

Did you get the land from Government under settlement program?	Yes/No	If Yes amountDeci.
If no, how do you occupy the land?	Occupy by myself-1, Lease/Share taken-2, Given by landowner to live-3, Others..... 4	 Deci
Total own land (in deci):.....			
Homestead		Pond/ditch	
		Agri. Land	
		Fallow land	

2. Housing Condition, Health, Water and Sanitation:

2.1 Housing condition

Type of House	Size (Length X Width) Feet	Type of Floor	Type of Wall	Type of Roof
Main House				
Kachari/Baithakkhana				
Kitchen				
Animal Shade				

Floor Type Code: Mud-1, Bricks-2, Pacca-3, **Wall Type Code:** Leaf-1, Straw-2, Mud-3, Bamboo-4, Tin-5, Brick wall-6 **Roof Type Code:** Leaf-1, Straw-2, Tin-3, Pacca-4, Others-5

2.2 Drinking Water and Sanitation:

Sources of drinking water:	Shallow Tube Well -1, Deep Hand Tube Well-2, Dug Well-3, Rain Water-4, Protected Pond Water (PSF)-5, Untreated Pond Water-6, Normal pond water-7, Untreated River/Canal Water-8, Others (specify).....9.	
Ownership:	Installed by CDSP -1, Own-2, Jointly Owned-3, Neighbour-4, Govt./Other Sources-5	
How far do you go for collecting Water:	Dry Season..... Meter	Rainy season.....Meter
Source of water for bathing and washing:	Shallow Tube Well -1, Deep Hand Tube Well-2, Dug Well-3, Pond Water-4, River/Canal Water-5, Others (specify).....8.	
Type of latrine used by HH:	No Latrine-1, Hanging/Open-2, Ring-slab (unhygienic)-3, Ring-slab (water sealed)-5, Sanitary Latrine -6.	
If the type of latrine is Ring-slab (unhygienic)/Ring-slab (water sealed)/Sanitary Latrine, where did you collect?	Installed by CDSP-1 Buy myself -2 Donated by NGO/other organization-3	

2.4 Health and Family planning:

Do you and your family members wash hand by soap before taking meal? Yes/No	
Do you and your family members wash hand by soap or ash after using latrine? Yes/No	
Do all the children of your family properly immunize? (all six) Yes/No	
If yes, how you managed it?	Upazila Health Center-1, Union Health Center-2, CDSP-NGO Clinic-3, Local Doctor-4, Through government special program-5

If no, Why?	Lack of awerness-1, Support not available Localy-2, Due to bad road communication couldn't attend in the camp/center-3
Do you use mosquito net? Yes/No	If no, why?: Not needed-1, Lack of awerness-2, Lack of money-3
Is there any Health Worker (Govt/NGO) visited regularly in your area? Yes/No	
Do you use any family planning method? Yes/No, If yes, which method: Permanent-1, Temporary-2	
If no, Why: Lack of awerness-1, Service not available locally-2, Materials are costly-3	

3. Household Assets:

Sl	Type of Assets	Put Tick	Qnt.	Present Value (Taka)	Sl	Type of Assets	Put Tick	Qnt.	Present Value (Taka)
1	Cot/ Khaat				16	Auto Rickshwa			
2	Almira				17	Solar Panel			
3	Chair/Table				18	Boat			
4	Shinduk				19	Mechanized boat			
5	Alna				20	Power tiller/Husking Machine			
6	Ceiling/Table Fan				21	Pump Machine			
7	Radio/Cassette Player				22	Fishing net(.....)			
8	B&W TV				23	Trees			
9	Color TV				24	Cow			
10	Mobile Phone				25	Buffalo			
11	Sewing machine				26	Goat			
12	Ornaments				27	Sheep			
13	Bicycle				28	Chicken			
14	Rickshaw/Van				29	Duck			
15	Motor Cycle				30	Others (Specify).....			

4. HH annual income from different sources:

Sources of Income	Taka (Last one year)			Sources of Income	Taka (Last one year)		
	Taka	%			Taka	%	
		M	F			M	F
Wages/Salary				Fishing			
Petty Trading/Business				Remittance			
Rickshwa/Van/Boat				Handicrafts			
Lease/Share Cropping				Others			

5. Migration Issues

01	Whether any member of your HH temporarily goes outside for work during any part of the year? Yes-1, No-2	
----	--	--

02	If yes, tick the months when goes outside	01-Boishak, , 2- Joishto, 03- Ashar, 04- Srabon, 05- Bhadro, 06- Ashin, , 7- Kartik, 08- Agrahaion, 09- Poush, 10- Magh, 11- Falgun, 12- Choitro
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6. Culture Status, Production and Income from Different On Farm Activities:

6.1 Cropping intensity:

Total cultivable land (Deci.).....						
Aus (Deci)		Amon (Deci)		Boro/Robi (Deci)		Total (Deci)

6.2 Production and Income from Field Crops (Last one year)

Crop	Production Cost (Taka)	Consumption		Sales	
		kg	Taka	Kg	Taka
Paddy					
Pulse					
oil seeds					
Vegetable					

6.3 Homestead gardening

Type	Consumption		Sales		Market price Tk/Kg
	Kg	Taka	Kg	Taka	
Leafy & other vegetable					
Fruits					

6.4 Use of fertilizer a pesticide

Type	Yes-1, No-0	Type	Yes-1, No-0
Urea		Cow dung	
Guti Urea		Compost	
TSP		Pest Control	
MP		Pesticide	
Zink		IPM	

7. Production and Income of Poultry Birds:

Birds	Egg Production & Income (last one year)				Meat Production & Income (Last one year)			
	Consum e (Nos.)	Use for breeding (No)	Sales (nos.)	Income from sales (Tk)	Sales (kg)	Consume (kg)	Income from sales (Tk)	Prese nt Stock (kg)
Chicken								
Duck							***	
Pigeon								

8. Production and income of livestock:

Animals	Nos. of milking animals	Nos. of Other animals	Production & Income last one year				Present value of existing animals (Tk)
			Milk sales (kg)	Income from Milk sales (Tk)	Milk Consume (kg)	Income from animal selling (Tk)	
Cow							

Goat							
Buffalos							
Sheep							

9. Pond Aquaculture (Production and Income)

Type of Culture		1. Not Cultured, 2. Traditional Method (Only stocking and Harvesting no feeding fertilizing, Species combination and density not followed properly) 3. Semi Intensive (Species combination and density followed properly but irregular feeding fertilizing) 4. Intensive (Species combination and density followed properly and regular feeding fertilizing)			
No. of Ponds	Area (Deci)	Production Cost (Taka)	Fish sale (kg)	Home consumption (kg)	Income from sale (Taka)

10. Food Security, Quality and Self Sufficiency:

10.1 How many months you are able to meet the basic food (Rice/Pulse) needs from your own production:.....

10.2 Does it happen that in certain months of the year your family members have to take less amount or low quality of food than usual? Yes/No, If Yes, how many months

1	2	3	4	5	6	>6
---	---	---	---	---	---	----

10.3 Please mention the food items cooked and eaten by the HH members yesterday and last one week?

Yesterday		Last week	
Type of food	Put tick	Type of food	Number of days? [Don't know=9]
1. Cereals		1. Any kind of milk	
2. Roots/Tubers		2. Liquids other than water/milk	
3. Legumes/Pulse		3. Food made from wheat/maize/rice	
4. Vegetables		4. Egg	
5. Eggs		5. Fish	
6. Milk/Milk product		6. Poultry meat	
7. Beef/Meat/Poultry meat		7. Beef/Meat	
8. Fish		8. Vegetables	
9. Oil/Fat		9. Pulses	
10. Sugar/Molasses/Honey		10. Fruits	
11. Fruits		11. <i>Others</i>(<i>Specify</i>)	
12. <i>Others</i>(<i>specify</i>)			

11. Accessibility to key services:

<i>[Please ask the question in the 1st column for each institution. if applicable, then ask next column]</i>						
Institutions	Distance from your household (Km)	Type of Road	Rainy season		Winter/dry season	
			Usual mode of transport (*code)	Usual time taken to reach..... (minutes)	Usual mode of transport (*code)	Usual time taken to reach (minutes)
1 Primary school						
2 Local market						
3 Health Clinic						
Road Code: No Road-1, Kancha-2, Brick-3, Pacca-4, Canal/River-5 Transport Code 1-On foot, 2- Bicycle, 3- By boat, 4- Rickshaw/van, 5- By engine boat, 6- By Taxi/ tempo, 7- By launch, 8- By motor cycle, 9- By bus						

12. Gender roles and participation in Community Activities

12.1 Gender role in household domestic works

Activities		Who do it? %	
		Male	Female
1	Who do the household chores (cleaning and sweeping)		
2	Who usually fetch water for household		
3	Take care of children (Bathing, Feeding..)		
4	Collect fire wood		

12.2 Participation of women in decision-making process at family level :

Sl #	Issues	Who decides? (Male-1, Female-2, Both-3)
1	Family Expenses, buy furniture/ornaments	
2	Treatment of diseases	
3	Education of children and marriage	
4	Farming/Poultry and Live stock rearing	
5	Adoption of family planning	
6	Joining with NGO or other organization by the female members	
7	Use of loan	

12.3 Women mobility:

Places		1- Yes, 2- No	If yes, Seldom-1, Yearly 1-2 times-2 Occasionally-3, Frequently-4
1.	Local Market /Hat		
2.	Health center/ clinic		
3.	NGO Office/ CBO office		

13. Shocks and coping strategy

Did your household experience any kind of shocks or crisis during the last one year?					Yes-1, No-0
Types of shocks and crisis					
How it was coped					
<p>Shocks and Crisis Code: 1. Death/invalidity of earning member, 2. Displacement due to Flood/cyclone/ tornado, 3. Loss/ death/theft of livestock/poultry, 4. Dacoity/ Theft/ Mastanias in house/business, 5. Loss of business/investment, 6. Dowry, 7. Socio-political harassment, including bribe and tolls, 8. House destroyed by fire or other assets, 9. Others</p> <p>Cooping Strategy Code: 1- By selling land, 2- By selling domestic animals/birds, 3- By selling trees 4- With own savings, 05- By mortgaging land, 06- By mortgaging other properties 07- With help from relatives, 08- By taking cash credit, 09- By taking inputs in credit, 10- Aid/relief, 11- Complain with police, 12. <i>Salish</i> with the UP, By mobilization of community groups/CBO/ NGOs, 13- 13. Others (specify).....</p>					

☺Thank you for your kind cooperation

Name of Field Investigator:.....

Signature:..... Date:.....

Checked by:.....Name:.....Date.....

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