



Government of the People's Republic of Bangladesh
Ministry of Housing and Public Works
Urban Development Directorate (UDD)

Preparation of Development Plan for Fourteen Upazilas

Package-04

(Saghata Upazila, District: Gaibandha; Sariakandi Upazila and
Sonatala Upazila, District: Bogra)

FINAL SURVEY REPORT
FORMAL-INFORMAL ECONOMIC SURVEY
Of
Sariakandi Upazila, Bogra

June, 2017



Modern Engineers Planners & Consultants Ltd.

Letter of Transmittal

Ref No.: MEPC/UDD/2017/53

Date: 04.06.2017

To

The Project Director

“Preparation of Development Plan for Fourteen Upazilas” Project

Urban Development Directorate (UDD)

82 Segun Bagicha, Dhaka-1000.

Subject: Submission of the Final Formal-Informal Economic Survey Report of Sariakandi Upazila, Bogra.

Dear Sir,

I have the pleasure to submit herewith the Final Formal-Informal Economic Survey Report of Sariakandi Upazila, Bogra District under “**Preparation of Development Plan for Fourteen Upazilas Project**” Package No: 04 (Saghata Upazila, District- Gaibandha; Sonatala Upazila and Sariakandi Upazila, District- Bogra) for your kind information and further action.

Thanking you and assuring you of our best services.

Best Regards

.....
(Engr. A. Sobahan)

Managing Director of MEPC

.....
(Shamim Mahabubul Haque)

Team Leader, Package-4

Executive Summary

This Economic Report on Sariakandi Upazila, District Bogra has been prepared as a part of the requirements set out in the Terms of Reference (ToR) of the Project, “Preparation of Development Plan for Fourteen Upazilas” signed between the UDD and Modern Engineering and Planning Consultant (MEPC).

The report presents necessary economic information, including discussion findings derived from the survey results of various aspects of Sariakandi Upazila under Bogra District. The survey on Land Use, Physical Features, Topography, Hydrology, Environment, Agriculture, Socio-Economic Conditions, Drainage and Flood Control, Market, Trading, Transportation etc. provided useful data and information for use in preparing development plan for the Upazila.

The stakeholders’ views gathered through meetings at Upazila and Union levels PRA have been reported for consideration in the planning decisions. Based on the analysis of survey information, critical planning issues of the Upazila have been identified. Identification and estimates on the future growth pattern for different potential sectors are expected to be useful in future planning decisions and land use allocations following planning standards.

There are various national policies for sector development purposes. These policies have important implications in the implementation of physical plans at various levels of local governments. For example, agriculture policy suggests for preserving the valuable agricultural lands through minimizing the use of land for non-agricultural purposes. Like-wise, in every aspect and Action Area Plan, the national policies have distinctive value and implications in the plan preparing process. These policies have been reviewed and their values are judged and are expected to be applied in the preparation of the proposed Plans at different levels for the upazila.

In this context, it may be mentioned that, the planning standards help rationalize the allocation of lands for various land uses and minimize the loss of valuable agricultural lands, which is seriously required for food safety and environmental preservation in a land-hungry country, like Bangladesh. In the present land use practices in Sariakandi Upazila, agriculture contains the highest quantum of land on which majority of the population of the Upazila maintains their livelihood.

The development proposals, prepared on the basis of planning standards will be provided for land uses in different sectors of the Upazila for various phases of plan period in the Project Upazila. Some major development projects, with possible guidelines will be proposed in the plan based on the findings of this report. The possible sources for supporting the projects will also be identified in the plan.

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List of Abbreviations and Acronyms

AEZ	Agro-Ecological Zone
AEO	Agriculture Extension Officer
CBO	Community Based Organization
DAE	Department of Agricultural Extension
EIA	Environmental Impact Assessment
FAO	Food and Agricultural Organization
FY	Fiscal Year
FYP	Five Year Plan
GD	Group Discussion
GDP	Gross Domestic Product
GoB	Government of Bangladesh
Ha	Hectare
HH	Household
HHS	Household Survey
HYV	High Yielding Variety
ICZP	Integrated Coastal Zone Plan
KAP	Knowledge, Attitude and Practices
KII	Key Informant Interview
LV	Local Variety
LL	Low Land
LLP	Low Lift Pump
MDG	Millennium Development Goals.
MEPC	Modern Engineers Planners & Consultants
mt	Metric Ton
NCA	Net Cultivable Area
NGO	Non-Government Organization
NOC	No Objection Certificate
SAAO	Sub-Assistant Agricultural Officer
SME	Small Medium Enterprise
SDG	Sustainable Development Goals
SPSS	Statistical Package for the Social Sciences
sq.km.	Square Kilometer

T.Aman	Transplanted Aman
T.Aus	Transplanted Aus
ToT	Training of Trainers
ToR	Terms of Reference
UAO	Upazila Agricultural Officer
UDD	Urban Development Directorate
UMMC	Upazila Market Management Committee
UN	United Nations
UNO	Upazila Nirbahi Officer
UP	Union Parishad
W&S	Winter and Summer

CHAPTER ONE: INTRODUCTION

1.1 Introduction

The conservative estimates by the national and international organizations including UN agencies indicate that about 50% population in Bangladesh will live in the urban areas within next 15-20 years. According to an estimate, by 2020, nearly every other man, woman and child will live in an urban area (World Bank, 2007). This is alarming given the existing conditions in physical infrastructure and socio-economic system over the geographical space in the country. Preparation for a planned development approach to achieve the long-term economic and social goals is an urgent need of the time. In the wake of globalization and advancement in technology worldwide, a concerted effort for comprehensive development is a necessity. The impacts of climate change and natural disasters in the recent decades have raised further concerns for an integrated urban development policy with strategies of inclusion of urban and rural areas in the physical planning processes. Bangladesh has made significant socio-economic progress over more than last 20 years in increasing income and reducing poverty. The Perspective Plan¹, 2010 aspires to transform Bangladesh from a low income economy (at 2010) to the first stages of a middle-income nation by the year 2021². The Plan further expected the economy to grow at 8% per annum by 2015 and 10% by 2021 along with improving other economic and social indicators i.e. equality in income distribution and women empowerment, per capita income to increase to \$2,000 (\$923 in 2013), and the poverty head count rate to decline from the current 31.5% to 14% by 2021.³To sustain the progress in the future, a planned development is of paramount importance.

The analysis of socio-economic features and condition of an area is a prerequisite to development planning process, which provides required background information on growth culture which has great impact on the other facts of planning, including land use, drainage, environment, traffic and transportation, essential services etc.

¹GED, Planning Commission, 2012

² “As of 1 July 2014, low-income economies are defined as those with a GNI per capita, calculated using the *World Bank Atlas* method, of \$1,045 or less in 2013; middle-income economies are those with a GNI per capita of more than \$1,045 but less than \$12,746; high-income economies are those with a GNI per capita of \$12,746 or more. Lower-middle-income and upper-middle-income economies are separated at a GNI per capita of \$4,125. Note that low- and middle-income economies are sometimes referred to as developing economies.” (World bank, 2016)

³Perspective Plan of Bangladesh 2010-2021

1.2 Sample Design

The primary data has been collected through different data collection tools. As the purpose and unit of the data collection is different, for different tools different sampling technique has been used.

Sampling Design for the Socio-economic Survey

As per our discussion held at Project Director's office, we conducted the survey following the standard sampling procedures of 95% confidence level at 5% precision (standard error), based on the following formula:

$$N = (z)^2 \cdot pq / d^2$$

Where,

N = Desired sample size

z = Standard normal deviation set at 95 percent confidence interval

p = Proportion in the target population estimated to have a particular characteristic

q = 1.0 – p

d = Degree of accuracy desired set at 0.07

The survey was designed to assess the perception levels of the population on knowledge, attitude and practices (KAP) and their preferences and priorities related to the essential services and facilities and development issues. It is considered that the findings available on such issues derived through a qualitative investigation and survey are very much important for incorporating in the development plan.

Considering the 5% Household from each union as p value the following sampling distribution has been set up. Within the each union the selection of the HH has been done following randomized sampling technique. As in the rural area the HH do not have any holding no. the following randomized sampling distribution through the whole union was a challenge. The information from the local NGO HH listing and also UP office provided the list of the household which was the basis for the practice.

Table 1.1: Household Distribution for Sampling of Socio-Economic Survey in Rural Areas of Sariakandi Upazila

SL. No.	Sariakandi rural Area Union	Total Population	Sample Size at 3% Precision (Accuracy) Level with 97% Confidence level
1	Bhelabari Union	16723	69
2	Bohail Union	23339	96

SL. No.	Sariakandi rural Area Union	Total Population	Sample Size at 3% Precision (Accuracy) Level with 97% Confidence level
3	Chaluabari Union	17382	71
4	Chandan Baisha Union	10537	43
5	Fulbari Union	33361	137
6	Hat Sherpur Union	16175	66
7	Kamalpur Union	23478	96
8	Kazla Union	26191	107
9	Karnibari Union	24479	100
10	Kutubpur Union	25720	106
11	Narchi Union	19012	78
12	Sariakandi Union	15779	65
	Total	252176	1035
	Total Urban	18543	76
	Total Rural	252176	1035
	Total (Urban + Rural)	270719	1111

Source: Socio-economic Survey, Sariakandi Upazila, 2016

Table 1.2: Household Distribution for Sampling of Socio-Economic Survey in Urban Areas of Sariakandi Upazila

Sariakandi Urban Area Ward and Mouza/Mahallah	Total Population	Sample Size at 3% Precision (Accuracy) Level with 97% Confidence level
Sariakandi Paurashava	18543	76
Ward No-01 Total	2567	11
*Handukandi Uttar	2567	11
Ward No-02 Total	2404	10
*Batia Uttar	1137	5
*Dhap Uttar Purba	1267	5
Ward No-03 Total	2010	8
*Baluhata	420	2
*Dhap Paschim	1590	7
Ward No-04 Total	2304	9
*Baraipara Paschim	842	3
*Handukandi Dakshin	1144	5
*Narchi	318	1
Ward No-05 Total	2141	9
*Bagber Paschim	754	3
*Andorbari Uttar	291	1
*Shariakandi	1096	4
Ward No-06 Total	2065	8
*Andorbari Dakshin	1745	7
*Shariakandi Dakshin	320	1

Sariakandi Urban Area Ward and Mouza/Mahallah	Total Population	Sample Size at 3% Precision (Accuracy) Level with 97% Confidence level
Ward No-07 Total	2343	10
*Bagber Purba	1722	7
*Batia Dakshin	621	3
Ward No-08 Total	1187	5
*Baraipara Uttar	1187	5
Ward No-09 Total	1522	6
*Baraipara Dakshin	1522	6
Total	18543	76

Source: Socio-economic Survey, Sariakandi Upazila, 2016

Sample Design for Group Discussion (GD)

The main purpose of the GD is to collect primary information in the market areas about the formal and informal economy. The sampling technic used in this case is cluster sampling. The Stakeholders within the market area has been primarily divided into three broad group.

1. Formal Shopkeepers/sellers
2. Shoppers/Byers
3. Informal sellers or service providers

From these three broader groups 2 GD has been conducted in each market under consideration. The distribution of the GD conducted in the field area as follows:

Hat-Bazar	Clusters			Total GD conducted
	Formal Shopkeepers/ sellers	Shoppers/ Byers	Informal sellers or service providers	
Sariakandi Bazar	2 GD	2 GD	2 GD	6 GD
Jorgacha Bazar	2 GD	2 GD	2 GD	6 GD
Sonkorpur Bazar	2 GD	2 GD	2 GD	6 GD
Mathurapara Bazar	2 GD	2 GD	2 GD	6 GD
Koritola Bazar	2 GD	2 GD	2 GD	6 GD
Rouadoho Bazar	2 GD	2 GD	2 GD	6 GD
Doriapara Bazar	2 GD	2 GD	2 GD	6 GD
Kazla Bazar	2 GD	2 GD	2 GD	6 GD
Fulbari Hat	2 GD	2 GD	2 GD	6 GD
Ananda Bazar	2 GD	2 GD	2 GD	6 GD
Total	20 GD	20 GD	20 GD	60 GD

Source: Socio-economic Survey, Sariakandi Upazila, 2016

Selection of the individual participants for the GD was based on purposive sampling as the enumerator need to gather 5 to 7 specific type of people in this regard.

Sample Design for Institutional/Organizational Survey

Due to time and resource limitation only a part of the formal Institution/ organization has been surveyed in this regard. The selection of the economic unit follows purposive sampling and the following Table 1.3 shows the sample that has been included in the Formal and Informal survey.

Table 1.3: Items to be Included in Formal and Informal Economic Study

Hat-Bazar	Bank	Bima	NGO	Industries
Sariakandi Bazar	Rajshahi Krishi Unnyan Bank	Popular Life Insurance Ltd.	BRAC	Abdul Halim Rice Mill
Jorgacha Bazar	Sonali Bank	Delta Life Insurance Ltd.	ASA	Wares Rice Mill
Sonkorpor Bazar	Karmosangsthan Bank		Gram bikash sangtha	Sariakandi Rice Mill
Mathurapara Bazar	Janata Bank		GUK	Koritola Rice Mill
Koritola Bazar	Agrani bank			Nur Rice Mill
Rouadoho Bazar				Rice Mill
Doriapara Bazar				Sariakandi Saw Mill
Kazla Bazar				Titporol Saw Mill
Fulbari Hat				Enamul Saw Mill
Ananda Bazar				Koraitola Saw Mill

Source: Field Survey, 2016

1.3 Understanding Formal-Informal Survey

In this report Formal and Informal sector comprises as following:

1.3.1 Formal Sector Survey

Formal Sector illustrates Professional (Bank/Bima, NGO, CBO, etc.), Types of Business Centers (Katcha Bazar, Hat, Growth Centers, Retail Market, Wholesale Market, and Other etc.), Shopping Center, Industry, Traders and Consumer Groups, types of Industrial Products, Marketing area, etc. Their Output and Employment impacts are taken care of GDP, GNP and National Accounting System.

Information on formal sector has been collected mostly from the secondary sources. Direct inquiries of large employees, trade organizations, owner associations and labour unions were conducted. Besides, relevant Government agencies (Bureau of Statistics, Ministry of Industry) publish regular reports that contain information on employment; investment, production etc. have been analyzed.

1.3.2 Informal Sector Survey

Informal Sector Illustrates the Means of livelihoods, unregistered economy, informal trade category, fixed place of retailers, road side/footpath markets, mobile hawkers, daily wage earners groups, rickshaw pullers, home servant-made servant, homemade cloths and food sellers etc. This sector is beyond government control and exempted from tolls and taxes. This sector output and employment impacts are not taken into GDP and National Accounting System.

At first, necessary steps were taken to identify the nature of activities in informal sectors of the study area. Most of these activities were in the service sectors and small manufacturing units. A reconnaissance survey was proposed to identify the nature of activities.

Sample survey was conducted at the household level and at the business unit level/trading centers with the help of questionnaires. While the household surveys was designed to collect information on employees, type and nature of employment, income level etc. The business unit level survey was conducted to collect information on investment, production, if locally consumed, or “exported” type of trading, name of employees etc.

The objective of this study is to analyze the present economic base of the study area to assess how the significance of its economic base is changing compared to the national economy. This would determine the future growth potentials of the area.

1.4 Upazila Profile: Sariakandi

Sariakandi is an Upazila of Bogra district under Rajshahi Division. It was established as Thana in 1886 and turned into a Municipality in 1999. Most of the business, economic and administrative activities are based on the Sariakandi Municipal area. People living in the Char area migrated from the eastern part to western part of the Upazila affecting by river erosion and flood and looked for the permanent settlement in and around of the municipal area. The large portion of the settlement of this Upazila was taken place as a result of in-migration from nearly Jamalpur, Sirajganj and Gaibandha district. The fertile land, available char area, communication facility over river way and excellent geography exerted a pull on people to live and conduct business here. Thus, settlement developed by the surrounding inhabitants and with the people of remote area as well.

1.4.1 Location, Area and Physical Setting

Sariakandi Upazila is a flood prone area located at Bogra district under Rajshahi Division. The Upazila is adjacent to four others Upazila namely Madarganj Upazila (Jamalpur district) at east,

Gabtali Upazila (Bogra district) at west, Sonatola Upazila (Bogra district) at north and Dhunat Upazila (Bogra District) at south.

The total area of Sariakandi Upazila is 408.5 square kilometer with a total population covering 270719 of which 1, 35,266 are males and 1, 35,453 are females (GoB, 2016). The whole Upazila is covered by 122 Mouzas and the number of village is 216. The major rivers of the area are Jamuna and Bangali. Jamuna River runs over the middle part of the upazila adjoining to Kazla, Sariakandi, Karnibari, Chandan Baisha and Bohail Union from north to south. The Upazila has 4048.82 acre of khas land.

Table 1.4: Location, Area and Physical Setting

Sariakandi Area Distribution	Area (sq. km.)
Total area	408.5
Land area	236.4
Riverine area	168.46
Reserve Forest	3.64

Source: BBS District Statistics 2011, Bogra District, GoB, 2016

1.4.2 Administration

Sariakandi Upazila is divided into Sariakandi Municipality and 12 (twelve) Union Parishads namely Chaluabari, Hat Sherpur, Kazla, Sariakandi, Narchi, Fulbari, Karnibari Kutubpur, Bhelabari, Chandan Baisha, Kamalpur and Bohail Union (See the Map 1.1).

The total area of Sariakandi Upazila is 408.5 square kilometer with a total population covering 270719. The whole Upazila is covered by 122 msuzas and the number of village is 216. The Upazila has one fire station, one telephone exchange office, 14 (fourteen) post office, 6 (six) bank branches, 5 (five) union land office, one municipal land office, one Upazila Server Station and so on.

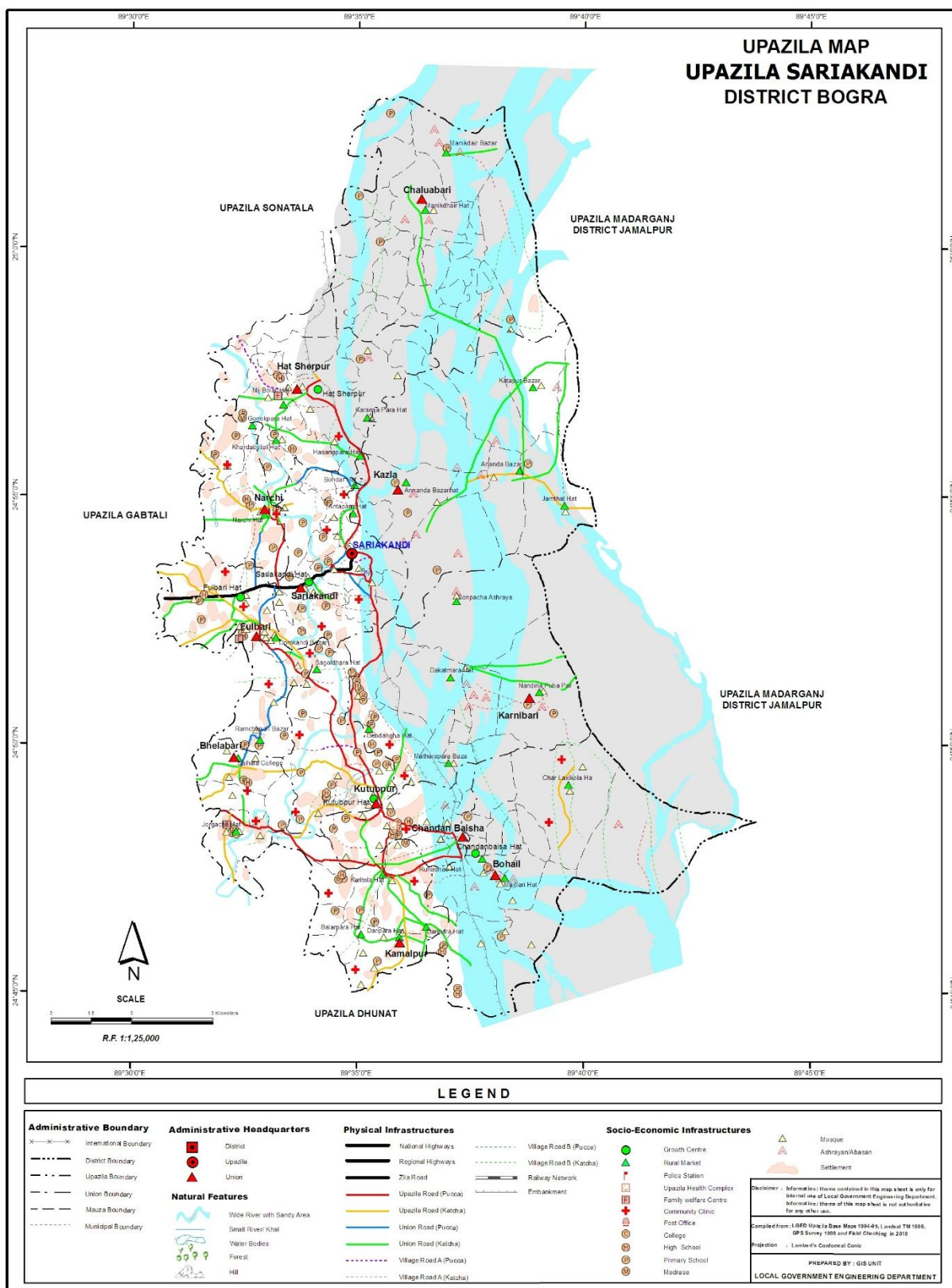
1.4.3 Residential and Commercial Development

The area is mostly in rural characteristics. Most of the structure is katcha (85.13%), while pucca structure is only 1.98% and semi-pucca structure is only 12.41%. According to the BBS report based on population census 2011, total household of the Upazila is 75614. Average household size is 3.58 and population density per square kilometer is 663 persons.

1.4.4 Heritage and Historic site

Archaeological heritage and relics Residence of Zamindar Kashi Roy at village Harina under Fulbari Union, remnants of Neelkuthi at the upazila sadar. Debdanga fish pass and Sariakandi Pani Port also a place of heritage of this Upazila.

Map 1.1: Sariakandi Upazila Map



Source: LGED

1.4.5 Sariakandi Regional and Sub-Regional Setting

The economy of the Sariakandi Upazila is based on agricultural activities. The major agricultural items produced in this Upazila are paddy, green chili and brinjal. According to the BBS report based on population census 2011, the total production of rice in 2010-11 of the Upazila was 54598 metric ton. Besides, the production of wheat was 863 metric ton, production of jute was 10413 metric ton and production of sugarcane was 1663 metric ton in the same year. About 89.11% people engaged in agricultural activities. Every year flood, drought and river erosion catastrophe this Upazila. Though it has many constraints but it has possibilities to develop this area as an agricultural center.

The communication facility of Sariakandi Upazila is awfully poor. The Upazila is connected with the other parts of the country only through roadway. There is no railway connection of this Upazila. There only have a regional highway from Gabtali (Bogra).

1.4.6 Economic Activities and Productivity

Major Economic sector in Sariakandi Upazila is Agriculture. The Upazila has the potentiality grow further as an agricultural growth center. The major agricultural items produced in this Upazila are paddy, green chili and brinjal. According to the BBS report based on population census 2011, the total production of rice in 2010-11 of the Upazila was 218,920 metric ton, wheat production was 418 metric ton, Jute production was 6,233 metric ton and Sugarcane was 353 metric ton. Table 1.4 depicts some information regarding the Economic activities within the Upazila:

Table 1.5: Different Economic resources in Sariakandi Upazila

Economic Resources	Frequency
1. Farms	
Advanced Poultry Farm	13 Unit
Cow rearing and beef Fattening	41 Unit
2. Cooperative	
Farmers' Cooperative	111 unit
Youth Cooperatives	13 unit
Fisherman's' Cooperative	23 unit
Others	86 unit
3. Fisheries Infrastructure	
Number of Ponds	----- unit

From the Table 1.4 it is evident that, along with the agro-product the Upazila also have resources for animal husbandry and Fisheries sector for further development. The Upazila

already have decent amount of cooperative initiatives which with proper situation can accelerate the economic activities of the locality.

1.4.7 Water Supply, Sanitation and other Utility Services

The urban area (Sariakandi Paurashava) of Sariakandi Upazila has little water supply facility. From the BBS, 2011 statistics there only 0.24% people got access to the tap water supply and 94% rely on tube-well, 0.31% depends on pond and 5.45% get water from other source of water. Moreover, high quantity of iron composition into the tube well water also is a problem faced by the inhabitants.

Sariakandi Pourashava has no street lights. Major part of the Upazila devoid of power connection. Installation of solar power system is a popular alternative to have gridded power supply.

According to BBS, 2011 all the Wards and Unions of the Upazila are under rural electrification net-work only 7.60% of dwelling households have to access to electricity.

Table 1.6: Union-wise Basic Statistics of Sariakandi Upazila

Union Name	Total Area (acres)	Population			Literacy Rate
		Male	Female	Both Sex	
Sariakandi	6328	7188	6953	14141	36.28
Bhelabari	3644	8059	7665	15724	26.25
Fulbari	5876	16042	15418	31460	39.66
Karnibari	12920	12356	11136	23492	38.42
Kamalpur	5336	12118	11970	24088	26.07
Chaluabari	14454	7588	6979	14567	17.25
Hat Sherpur	6813	8063	8017	16080	31.33
Kazla	16509	8644	8116	16760	13.23
Narchi	3881	9005	8816	17821	36.4
Chandan Baisha	3180	5216	5165	10381	36.81
Bohail	17155	7251	6522	13773	29.35
Kutubpur	4836	12533	11943	24476	33.05
Total	100932	114063	108700	222763	32.34

Source: District Statistics: Bogra, Population and Housing Census, 2011

Sariakandi Upazila has relatively low literacy rate compared with the national literacy rate. Average literacy rate is 32.3%; male 37.1%, female 27.3%. The residents of the Upazila are now having education facility from 5 college, 22 secondary school, 160 primary school, 30 madrasa. There are some renowned educational institutions such as Chandannaish Degree College (1964), Jamthol Technical Management College (2001), Naokhila Government Primary School (1901), Devdanga Government Primary School (1903), Chhagaldhara

Government Primary School (1904), Sariakandi Model Government Primary School (1905), Hat Fulbari Government Primary School (1905), Kazla Primary School (1905).

The community facilities of this area are very poor. The urban population of this area is 17320, but for this population and also for the entire Upazila there are little community facilities. There is one Filling station, one Fire brigade station, one Police station.

The sanitation facilities of this area are not satisfactory. About 19.11% (rural 16.03% and urban 58.69%) of dwelling households of the Upazila use sanitary latrines and 53.70% (rural 56.43% and urban 18.62%) of dwelling households use non-sanitary latrines; 27.20% of households do not have latrine facilities.

With only one Public Hospital with 50 beds, the local inhabitants acquire inadequate health facilities. There is 12 family planning centre, 12 community clinic, 4 satellite clinic and one private clinic in this Upazila. For recreation purpose, there has public no park or playground in the area but there are 20 cultural clubs, 2 cultural society, 4 women organization, 1 theatre group and 2 cinema hall.

The general information regarding the Sariakandi Upazila has been collected from the District Statistics: Bogra, Population and Housing Census, 2011.

CHAPTER TWO: APPROACH AND METHODOLOGY

2.1 Methodology of Field Survey

The consultants realized that, creation of good working condition and rapport-building with the respondents are important pre-conditions for developing faith and beliefs between the interviewee and the interviewer. Good environment is of great help for collection of quality and accurate data and information. Local people, in this case can play significant role in the creation of such atmosphere with the targeted respondents. Therefore, the consultants engaged local investigators having at least bachelor/equivalent degree for conducting the household survey. It is mentionable that, investigators have been engaged in each Union and in the Pourashava area, totaling 10 nos. to conduct the survey simultaneously all over the Upazila. The consultants organized a day-long training program for them; including a field testing of the questionnaire for these investigators with a view to make them understand the pros and cons of the questionnaire and techniques and approach to conduct the survey.

An Interview Guide was used to collect the information relevant information. At first a draft interview guide was prepared and has been tested in the field during the reconnaissance survey with some dummy interviews. With feedback from the field, the interview guide was finalized. As interview guide intended to give much flexibility to the responded, it has both the combination of the open ended and close ended answering pattern. Also if anything interesting came up from the respondent view, it was immediately noted in the questionnaire. Each of the interviews took 1 hour duration. Thus the interviews were conducted in an informal way. Often interviews were taken considering their working and leisure time.

Group Discussion (GD) is a special type of data collection tool. Each GD engages 3 steps. At first, the facilitator has been appointed and trained to be the moderator. Then, with the help of the potential participants of the GD, the time and the place have been fixed. The Facilitator has helped the researcher in this regard. At last, on the appointed day, GD has been conducted. The expected participants for the each GD have been 5 to 7 participants. The total discussion was conducted following a checklist of information prepared earlier for the each GD.

While doing the Group Discussion and the Guided interview if the researcher considers a respondent as a potential source of information, then instantly the respondent was considered as a potential candidate for. Thus the *Key Informant Interview* was followed in unstructured way with informal *key informant* manner to have more flexibility to collect the data.

Observation is a way of data gathering by looking into the research subjects in *natural or structured environments*. There are different types of observation. This study uses the

“*complete observer type*” in which the *researcher observes from the outside* (Tashakori et al. 2003). Researcher considers him as an outsider of the targeted group collect the data as an outsider perspective. Personal observation was used to get background information and also the reflection of the researcher towards the study area and the respondent which was kept maintaining a daily log.

2.2 Review of National Policies and Plans

2.2.1 Perspective Plan, 2010

This “Perspective Plan of Bangladesh (2010-2021): Making Vision 2021 a Reality” is a strategic articulation of the development vision, mission, and goals of the Government in achieving a prosperous Bangladesh grounded in political and economic freedoms a reality in 2021. It provides the road map for accelerated growth and lays down broad approaches for eradication of poverty, inequality and human deprivation (General Economic Division , 2012).

The major imperatives of this Plan within the context of this document are:

- Treating urban and rural development as two legs of sustainable development;
- Higher growth in rural economy to improve quality of life of the rural people;
- Improved urban management through providing infrastructure and services;
- Promoting sustainable land-use planning and innovative land management practices for urban development through integrated and environmentally sound physical planning.

2.2.2 Sixth Five Year Plan (2011-2015)

Perspective Plan 2010-2021 have set solid development targets for Bangladesh by the end of 2021. The implementation of Perspective Plan 2010-2021 will expected to be achieved through two medium term development plans i.e. Sixth Five Year Plan (SFYP) and 7th FYP. This Five Year Plan is the sixth in the series of development plans in Bangladesh starting in 1973. SFYP is a midterm strategic document which illustrated the Perspective Plan 2010-2021 goals within midterm achievable manner. The sixth Five-Year Plan makes the following key observations in the context of urbanization:

- Better management of land is of paramount importance for sustaining rapid growth;
- Sound land management also has a direct effect on people’s welfare and poverty reduction;
- Landless farmers are amongst the poorest of the poor and land is essential for their housing;

- The rapidly expanding slum population and rising land prices in urban areas are indications of increasing difficulties that Bangladesh faces in providing people with proper shelter.

2.2.3 Seventh Five Year Plan (2016-2020)

The 7th FYP reflects a continuation of the major goals articulated in the 6th FYP. The core targets set in accordance with the vision and goals of the Perspective Plan under the 7th FYP which is relevant to this report includes: (General Economic Division , 2015)

❖ Income and poverty

- Attaining average real GDP growth rate of 7.4% per year over the Plan period;
- Reduction in the head-count poverty ratio by 6.2 percentage points;
- Reduction in extreme poverty by about 4.0 percentage points;
- Creating good jobs for the large pool of under-employed and new labour force entrants by increasing the share of employment in the manufacturing sector from 15 percent to 20 percent.

❖ Urban Development

- Infrastructural investment and civic facilities in peri-urban growth centres especially around Special Economic Zones;
- Inclusive housing and other civic services for urban inhabitants including for people living in informal settlements and slums;
- Inclusive urban planning based on sustainable land use planning and zoning;
- Increased productivity, access to finance, and policy support for urban micro-small and medium enterprises.

❖ Human Resource Development (Education, Health and Population)

- Achieving 100 percent net enrolment rate for primary and secondary education;
- Percentage of cohort reaching grade 5 to be increased to 100 from current 80 percent;
- Under 5 mortality rate to be reduced to 37 per 1000 live birth;
- Maternal Mortality Ratio to be reduced to 105 per 100,000 live births;
- Immunization, measles (percent of children under 12 months) to be increased to 100 percent;
- Reduce proportion of underweight children among under-five children to 20 percent;
- Births attended by skilled health staff to be increased to 65 percent;
- Reduction of Total Fertility Rate to 2.0;

- Increasing Contraceptive Prevalence Rate to 75 percent F. Water and Sanitation;
- Safe drinking water for all;
- Proportion of urban population with access to sanitary latrines to be increased to 100 percent;
- Proportion of rural population with access to sanitary latrines to be raised to 90 percent.

2.2.4 Millennium Development Goals (MDGs)

The poverty reduction strategies were also targeted towards achieving the Millennium Development Goals (MDGs) of the government. The supporting strategies of the poverty reduction framework comprise:

- i. Ensuring participation, social inclusion, and empowerment;
- ii. Promoting good governance;
- iii. Ensuring efficient delivery of public services;
- iv. Caring for environment and tackling climate change; and
- v. Enhancing productivity and efficiency through science and technology.

The critical concern of the strategy is to achieve higher growth as well as equity and poverty reduction simultaneously. In this context, the focus is on agriculture and rural life, expansion of social safety nets for the ultra-poor and targeted approach towards employment generation.

2.2.5 Sustainable Development Goals (SDG)

The Sustainable Development Goals (SDGs), officially known as transforming our world: the 2030 Agenda for Sustainable Development is a set of seventeen aspirational "Global Goals" with 169 targets between them. Spearheaded by the United Nations, through a deliberative process involving its 193 Member States, as well as global civil society, the goals are contained in paragraph 54 United Nations Resolution A/RES/70/1 of 25 September 2015. On 5 December 2014, the UN General Assembly accepted the Secretary-General's Synthesis Report which stated that the agenda for the post-2015 SDG process. Bangladesh has ratified for the SDGs and recently General Economic Division of Planning Commission, Ministry of Planning, GoB, have published a paper on "*Mapping of Ministries/Divisions by SDGs' Targets*" which provides the goal specific Bangladesh targets. Among the 17 goals of SDG the following 5 Goals specific targets are relevant for this report:

Goal 01: End poverty in all its forms everywhere.

Specific Targets:

- ❖ By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day.

- ❖ By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.
- ❖ 1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable.
- ❖ 1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.
- ❖ 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

Goal 04: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Specific Targets:

- ❖ Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.
- ❖ By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, Small Island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.
- ❖ By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and Small Island developing States.

Goal 08: Promote sustainable, inclusive and sustainable economic growth, full and decent work for all.

Specific targets:

- ❖ Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors.
- ❖ Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization

and growth of micro-small-and medium-sized enterprises, including through access to financial services.

- ❖ By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
- ❖ 8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training.
- ❖ Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

Goal 09: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Specific targets:

- ❖ Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
- ❖ Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.
- ❖ Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.
- ❖ By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

- ❖ By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.
- ❖ By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- ❖ By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

- ❖ Strengthen efforts to protect and safeguard the world's cultural and natural heritage
- ❖ Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.
- ❖ By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels.

2.2.6 National Disaster Management Plan

The Disaster Management Vision of the Government of Bangladesh is to reduce the risk of people, especially the poor and the disadvantaged, from the effects of natural, environmental and human induced hazards, to a manageable and acceptable humanitarian level, and to have in place an efficient emergency response system capable of handling large scale disasters.

1. Disaster management would involve the management of both risks and consequences of disasters that would include prevention emergency response and post-disaster recovery.
2. Community involvement for preparedness programmes for protecting lives and properties would be a major focus. Involvement of local government bodies would be an essential part of the strategy. Self-reliance should be the key for preparedness, response and recovery.
3. Non-structural mitigation measures such as community disaster preparedness training advocacy and public awareness must be given a high priority; this would require an integration of structural mitigation with non-structural measures.

2.2.7 National Land Use Policy, 2001

The policy suggests the following measures in land use planning:

- Formulation and execution of Land Use Plan in order to ensure planned use of land.
- Introduction of 'land use zoning' based on particular characteristics of land.
- Prevention of unplanned expansion of residential areas, and control of indiscriminate growth of industrial and commercial activities.
- Implementation of land conservation programs aimed at prevention of desertification and weathering of land and conservation of fertility of land.
- Zoning has to be ensured in order to prohibit the encroachment of cultivable agriculture lands in village areas.
- Conservation and development of land and watershed areas.

2.2.8 National Urban Policy (Draft), 2014

The policy suggests that the following measures should be taken in urban planning process:

- Development of a hierarchy in urban structure with inclusive partnerships of people through decentralization of regionally balanced and planned urbanization.
- Preservation and conservation of water bodies, rivers, natural canals, water flow channel, open space, playground, park etc. and reclaiming the illegally occupied water bodies and water flow channel.
- Determination and implementation of urban management strategies and administration system to increase the complimentary role of urban and rural areas for sustainable development.

2.2.9 National Population Policy

- The main objective of National Population Policy is to improve the living standard of the people through a balance between population and development.
- The national population policy aims to reduce influx of population from rural to urban areas through decentralization of population activities and while employment can be created in all the sectors of the Upazila, some economic sectors have higher potential for employment generation. The industrial, commercial and service sectors generally have higher potential in the creation of employment with higher wages and benefits. The policies and strategies for these sectors are provided in this section. The agriculture sector is expected to remain strong in the future for growth and employment and policies and strategies for this sector have already been discussed.

2.2.10 Industrial Policy, 2010

- Land selected for the purpose of Economic Zones and industrial parks will be those deemed marginal for agriculture, such as unproductive and barren land. For this purpose, fertile agricultural land cannot be used. Land Zoning Policy should be followed in this regard.

2.2.11 National Tourism Policy, 2010

- To preserve, protect, develop and maintain tourism resources;
- To build a positive image of the area concerned;
- To identify sectors for private capital investment;
- To arrange entertainment and recreation;
- Prohibition of development without governmental permission within an area declared as tourism spot by the government.

2.2.12 Other Sectoral Policies and Acts related to Land Use Planning

The sectoral composition of the economy in Bangladesh has changed significantly over the last several decades. The share of agriculture in the economy has been reduced significantly while industry and services have been increasingly contributing to the GDP growth. Services have contributed particularly strongly to GDP growth in the current decade. In terms of employment and livelihood, the agriculture sector, however, will remain important as it has always been. The national food security can only be guaranteed if the high value agricultural lands of the country can be saved from conversion into other uses.

The poverty has also been significantly reduced along with the sustained economic growth over more than the last twenty years. The country is expecting to achieve seven percent economic growth in the current financial year and even higher in the future.

2.3 Linkage of National Plans and Policies with Development Plan of 14 Upazilas Project

The project has been designed in such a way to complement the national plans and policies to actively support development plan of the country. The essential aspect of the project is to attain physical infrastructural development of the project areas, including sectoral balanced development with emphasis on emancipation of vulnerable people of the concerned areas. As such, it may be aptly said that the Project will be able to establish a direct and unhindered link with the national plans and policies with Development Plan of the 14 Upazilas under the project.

CHAPTER THREE: FORMAL ECONOMIC SURVEY

3.1 Introduction

Agriculture is the backbone of rural economy on Bangladesh. It is also the major source of employment in rural areas. Markets help in marketing agriculture and other products and provide access in inputs required for agricultural products. Ensuring food security for the vast population of Bangladesh is directly associated with the agricultural development in the country. The governments of Bangladesh have therefore been giving priorities to agricultural development with a view to ensuring food and nutritional security, poverty alleviation, and increased generation of employment. Whereas a profitable, sustainable, and environment-friendly agricultural system is required to achieve these objectives, agriculture in the country faces by a number of challenges every year. These challenges include population growth, climatic hazards, loss of arable land, lack of quality seeds, food habit of people (about 90 percent is rice based), inadequate credit support to the farmers, unfair pricing, insufficient investment in agricultural research and agricultural mismanagement in terms of irrigation, use of fertilizer and pesticides. The majority are small and marginal farmers who are endowed with poor financial resources and cannot afford high cost of frontier technology.

Present situation most of the hats/bazaars/markets located on Western part of Sariakandi Upazila under Bogra District. It goes on to outline market management and leasing systems and legal framework that governs market operation.

In this report the formal economic sector (Table 3.1) includes hats, bazars, markets, growth centers, industries, banks/bima and NGOs. These economic units are concentrated mostly within the Upazila centers and Union Parishad centers.

The informal economic sector includes agricultural day laborers, small traders, urban street vendors, paid domestic workers and home produced cloths, handicrafts, small tea stall, ferry-wala, and vegetables seller and van-rickshaw puller. Informal jobs mostly fall outside the domain of the Government's labor market regulation. Table 3.1 has shown the overall issues that are covered in this report.

Table 3.1: Formal-Informal Sector Activities Types

Economic Employment Status	Category Name
Formal Economic Sector The economic activities that is included in the national input-output. Their Output and Employment impacts are taken care of	<ul style="list-style-type: none"> - Professional (Bank/Bima, NGO, CBO, etc.), - Business Centers (Katcha Bazar, Hat, Growth Centers, Retail Market, Wholesale Market, and Other etc.), - Shopping Center,

Economic Employment Status	Category Name
GDP, GNP and National Accounting System.	<ul style="list-style-type: none"> - Industry, - Traders and Consumer Groups, - types of Industrial Products Marketing area, etc.
Informal Economic Sector This sector is beyond Govt. Control and exempted from tolls and taxes. This sector Output and Employment impacts are not taken into GDP and National Accounting System.	<ul style="list-style-type: none"> - Means of rural Livelihoods, - Unregistered Economy, - Informal Trade Category, - Fixed Place of Retailers, - Road side/Footpath Markets, - Mobile hawkers, - Daily Wage Earners Groups, - Rickshaw/Van Pullers, - Home Servant/made servant, - Homemade Cloths and Food sellers etc.

3.2 Section-A: Hat/Bazar/Market

Distribution of markets over a region plays an impotent role in local economy. As the spatial distribution of bazar/hat (Market area) give the idea how much a farmer/producer need to travel. Gradual growth pattern in the local bazar/hat over the years usually provides the indication of increasing economic capacity of the locality. On the other hand, most of the financial organization and other formal sector units usually concentrate within the jurisdiction of local hat bazaar. Thus information set regarding the local hat/bazaar in a necessary element for developing development plan.

Table 3.2: Location and Description of Hat/Bazar in Sariakandi Upazila

Sl. No	Name of Markets	Union	Rural / Urban	Area in acre	Annual Lease amount Taka	No. of permanent shops as in 2015	No. of temporary shops as in 2015	No. of permanent shops as in 2010	No. of temporary shops as in 2010	No. of permanent shops as in 2005	No. of temporary shops as in 2005
1	Sariakandi Bazar	Sariakandi	Urban	1	--	62	10	55	8	48	7
2	Jorgacha Bazar	Bhelabari	Rural	0.5	80000	80	45	70	35	62	38
3	Sonkorpor Bazar	Fulbari	Rural	0.9	92000	100	20	85	15	65	20
4	Mathurapara Bazar	Karnibari	Rural	0.5	53000	42	8	35	5	28	5
5	Koritola Bazar	Kamalpur	Rural	1	65000	55	35	48	29	46	20
6	Rouadoho Bazar	Kamalpur	Rural	1	65785	60	15	50	10	45	10
7	Doriapara Bazar	Kamalpur	Rural	1	75000	40	25	35	20	30	18
8	Kazla Bazar	Kazla	Rural	1	32000	22	8	19	7	12	5

Sl. No	Name of Markets	Union	Rural / Urban	Area in acre	Annual Lease amount Taka	No. of permanent shops as in 2015	No. of temporary shops as in 2015	No. of permanent shops as in 2010	No. of temporary shops as in 2010	No. of permanent shops as in 2005	No. of temporary shops as in 2005
9	Kazla Bazar	Kazla	Rural	1	34000	25	7	20	6	16	6
10	Ananda Bazar	Kazla	Rural	1	--	20	15	----	----	----	----

Source: Field Survey, 2016

The Table 3.2 shows the spatial distribution of hat/bazar in Sariakandi Upazila along with over the decade growth pattern.

From the Table 3.2 it is evident that among 10 hat/bazars available in Sariakandi Upazila only Sariakandi Bazar located in the Sariakandi Union is predominantly has the criterion of urban market. The other 9 hat/bazar is predominantly has the rural characteristics.

The Hat/Bazar listed in the Table 3.2 illustrated, most of the hat/bazaars occupied about 1 acre of land area.

The annual leasing amount is the direct indicator of size of economic activity. According to the Table 3.2 Sonkorpor Bazar picks the economic concentration having BDT 92,000, followed by Jorgacha Bazar (BDT 80,000) and Doriapara Bazar (BDT 75,000). Note that, usually urban market attracts much complex set of economic activity, thus hard to measure the economic concentration by the annual leasing amount. Only urban market Sariakandi Bazar does not have a value in the table

Table 3.3: Growth of Permanent and Temporary shops in different bazaar of Sariakandi Upazila

Sl. No	Name of Markets	Union	Number of Permanent Shops					Number of temporary Shops				
			No. in 2015	Growth percentage over previous period (%)	No. in 2010	Growth percentage over previous period (%)	No. in 2005	No. in 2015	Growth percentage over previous period (%)	No. in 2010	Growth percentage over previous period (%)	No. in 2005
1	Sariakandi Bazar	Sariakandi	400	14	350	9	320	180	29	140	17	120
2	Jorgacha Bazar	Bhelabari	530	8	490	6	463	220	7	205	14	180
3	Sonkorpor Bazar	Fulbari	390	5	370	6	350	80	14	70	27	55
4	Mathurapara Bazar	Karnibari	230	7	215	8	200	40	14	35	40	25
5	Koritola Bazar	Kamalpur	410	6	385	5	365	85	21	70	27	55

Sl. No	Name of Markets	Union	Number of Permanent Shops					Number of temporary Shops				
			No. in 2015	Growth percentage over previous period (%)	No. in 2010	Growth percentage over previous period (%)	No. in 2005	No. in 2015	Growth percentage over previous period (%)	No. in 2010	Growth percentage over previous period (%)	No. in 2005
6	Rouadoho Bazar	Kamalpur	470	7	440	5	420	160	19	135	13	120
7	Doriapara Bazar	Kamalpur	310	3	300	5	285	40	25	32	7	30
8	Kazla Bazar	Kazla	280	6	265	6	250	35	17	30	20	25
9	Fulbari Hat	Fulbari	355	25	330	6	310	40	14	35	17	30
10	Ananda Bazar	Kazla	665	7	620	7	580	110	22	90	20	75

Source: Field Survey, 2016

From the Table 3.3 it is evident that within the last decade from 2005 to 2015 both the permanent and temporary shops in the only urban market Sariakandi Bazar experienced highest growth rate. The other rural markets also experienced more or less positive growth in both permanent and temporary shops.

3.2.1 Ownership of Land/Hat/Bazar

As per hat bazaar policy guideline published on February 07, 2008 by the LGRD&C, Local government division all hat/bazar/market are to be built on khas land and in almost all markets land should be available for expansion. In that case, all the markets are on theory owned by the Government of Bangladesh. However in reality such development takes place, concentrating on a khas land provided by the government and the adjacent private land eventually is converted to commercial use and become an integral part of the market area. Thus most of the Hat/Bazar though established in the Khas land, also included some of the private land creating a mixed Ownership pattern. The Table 3.4 shows that, all the Hat/bazaar under consideration has mixed Ownership pattern.

Table 3.4: Ownership of Land/Hat/Bazar

Name of Hats/Bazars	Land in Acres	Owner of Land		
		Government	Private	Mixed
Sariakandi Bazar	1	0	0	Yes
Jorgacha Bazar	0.5	0	0	Yes
Sonkorpor Bazar	0.9	0	0	Yes
Mathurapara Bazar	0.5	0	0	Yes
Koritola Bazar	1	0	0	Yes

Name of Hats/Bazars	Land in Acres	Owner of Land		
		Government	Private	Mixed
Rouadoho Bazar	1	0	0	Yes
Doriapara Bazar	1	0	0	Yes
Kazla Bazar	1	0	0	Yes
Fulbari Hat	1	0	0	Yes
Ananda Bazar	1	0	0	Yes

Source: Field Survey, 2016

3.2.2 Regulation Process of Hat/Bazar/Market

Two types of committees have been identified that govern the market operation in Sariakandi Upazila. The name and formation of these committees are as follows:

Tender Evaluation Committee

The Upazila has a Tender Evaluation Committee They are responsible to call tender and evaluate schedule and finally give yearly lease every year of Hat/bazar/market. The Tender Evaluation Committee comprises of 06 members, as follows:

- Upazila Nirbahi Officer - Chairman of the Committee
- Upazila Agriculture Officer - Member of the Committee
- Upazila Engineer - Member of the Committee
- Upazila Rural Development Officer - Member of the Committee
- Concerned UP Chairman - Member of the Committee
- AC Land - Member-Secretary of the Committee.

Upazila Market Management Committee (UMMC)

The Committee composition is as follows:

- Upazila Nirbahi Officer - Chairman of the Committee
- Upazila Engineer - Member of the Committee
- Concerned UP Chairman - Member of the Committee
- District Commissioner will nominate one person from concerned Upazila
- District Commissioner will nominate one person from concerned Upazila Govt. Official
- UNO will nominate two members secretary from Market Management Committee of the Upazila.
- AC Land - Member-Secretary of the Committee.

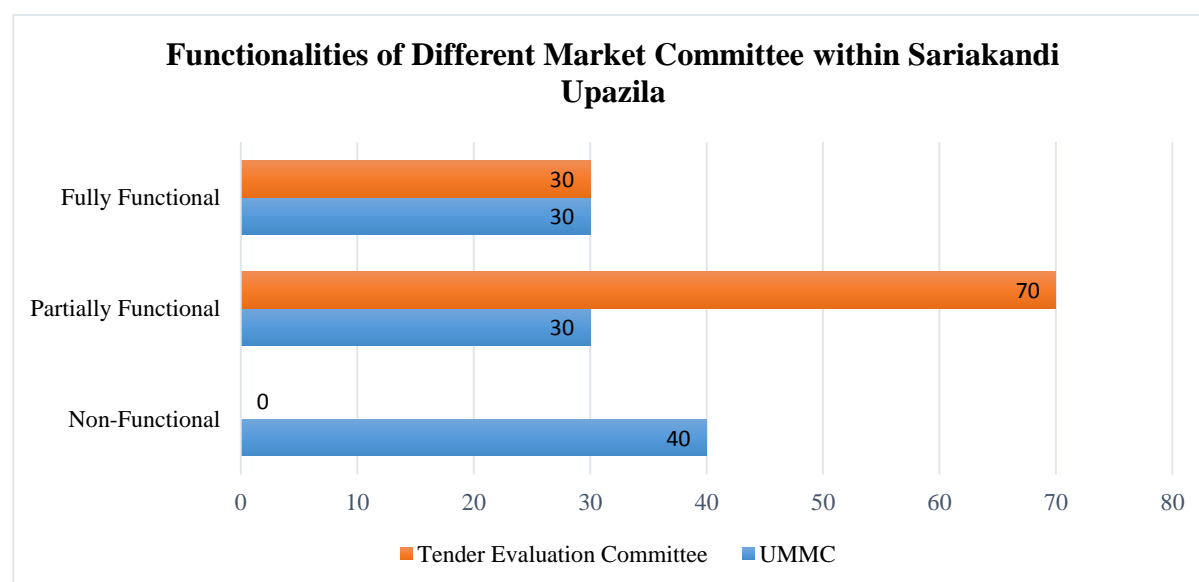
Though the committees have been formed in all the market areas but those are found to be limitedly functional in most of the cases.

Table 3.5: Functionalities of Different Market Committee within Sariakandi Upazila

Name of Hats/Bazars	Status of Tender Evaluation Committee			Status of UMMC		
	Committee Formed	Functional	Partially functional	Committee Formed	Functional	Partially functional
Sariakandi Bazar	Yes	NA	Yes	NA	Yes	Yes
Jorgacha Bazar	Yes	NA	Yes	NA	Yes	Yes
Sonkorpur Bazar	Yes	NA	Yes	NA	Yes	NA
Mathurapara Bazar	Yes	Yes	NA	NA	Yes	NA
Koritola Bazar	Yes	Yes	NA	NA	Yes	NA
Rouadoho Bazar	Yes	NA	Yes	NA	Yes	Yes
Doriapara Bazar	Yes	Yes	NA	NA	Yes	NA
Kazla Bazar	Yes	NA	Yes	NA	Yes	Yes
Fulbari Bazar	Yes	Yes	NA	NA	Yes	NA
Ananda Bazar	Yes	NA	Yes	NA	Yes	Yes

Source: Field Survey, 2016

According to Table 3.5 it is evident that though all the committee is formed, in majority of the cases that committee remains partially functional. As showed in the Figure 3.1 in case of Tender evaluation committee out of 10 Bazar 60 percent of the committee is partially functional, whereas only 40 percent are fully functional. In case of UMMC 20 percent of the committees are non-functional, where as 40 percent are fully functional and remaining 30 percent are partially functional.



Source: Field Survey, 2016

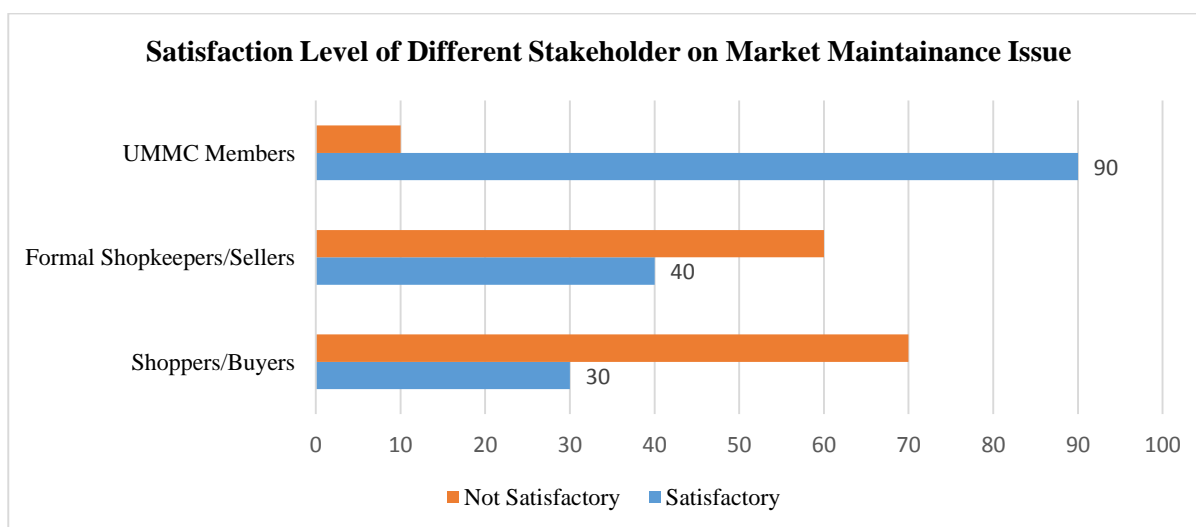
Figure 3.1: Functionalities of Different Market Committee within Sariakandi Upazila

3.2.3 Leasing and Revenue Collection of Hat/Bazaar/Market

Government policy for hat/bazaar/market for rural and urban dictates that they would be leased out to an individual. This person, known as *Ijarader*, has the responsibilities to levy toll on market users at rate fixed by the government and also ensure cleanliness of market. Leasing is done through auction or tender and Government can then be assured of a certain level of income from market. Revenue from lease money are shared among central government, revenue fund of Upazila and Union development funds with a proportion being return to the market for its maintenance and development.

3.2.4 Market/Bazar Maintenance Work

According to the Table 3.5 all the market areas of Sariakandi has an already established UMMC and the maintenance work has been properly by the UMMC. Figure 3.2 draws an Interesting contrast regarding the opinion on market maintenance issues. According to the Figure 3.2, 100 percent of the members from market management committee opinioned that the maintenance work are in satisfactory level. On the other hand 80 percent of the shoppers/byers showed dissatisfaction and 60 percent of the shopkeepers/sellers showed dissatisfaction in this regard.



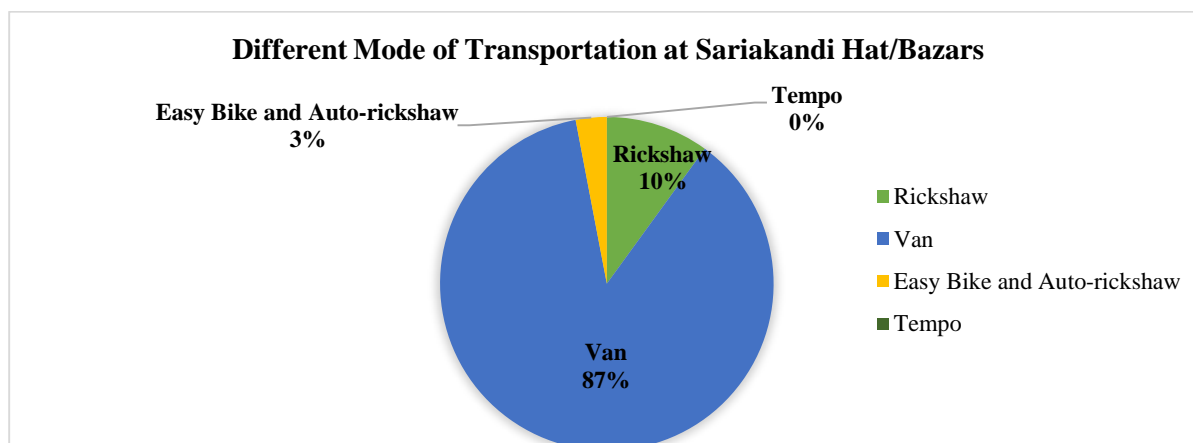
Source: Field Survey, 2016

Figure 3.2: Satisfaction Level of Different Stakeholder on Market Maintenance

3.2.5 Transportation System (Hat/Bazar/Market)

Figure 3.3 shows the mode of travel to the different Hat/Bazars within the Sariakandi Upazila. From the Figure 3.3 it is apparent that Rickshaw van is the most frequently used (in 87 percent of total transportation mode) transportation system. In the local markets and in the rural areas Rickshaw van is usually popular because of its flexibility to operate in the narrow and muddy path, comparatively cheap and the carrying capacity is convenient for the local micro-producers

and the vendors. Followed by the rickshaw van, easy bike and auto-rickshaw is the second popular mode of transportation.

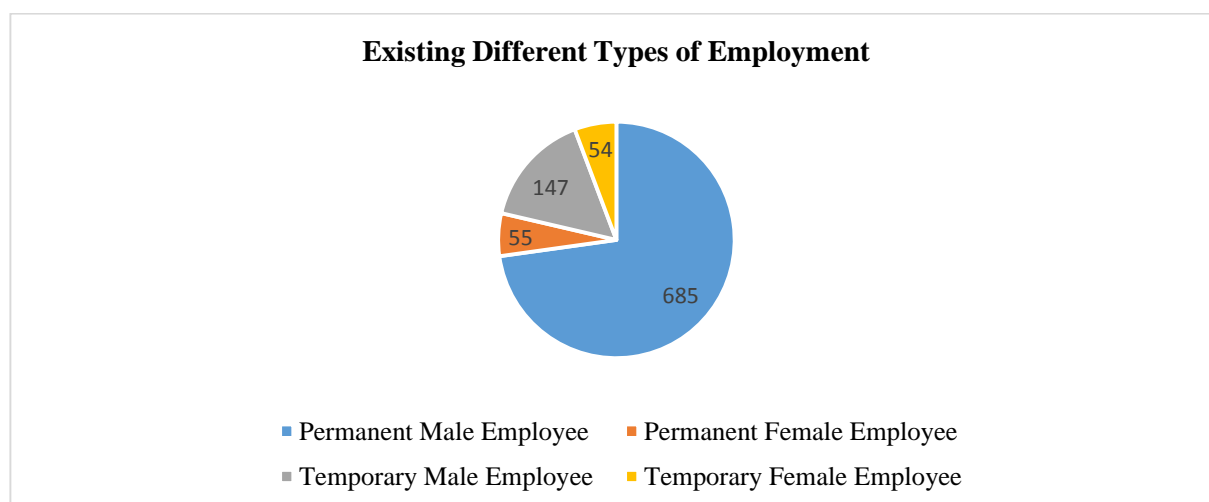


Source: BBS, 2011

Figure 3.3: Different Mode of Transportation at Sariakandi Hat/Bazars

3.2.6 Employment Creation of Last Year from Permanent and Temporary Shops of the Hat/Bazaar/Market

The Figure 3.4 shows the existing employment status of different hats/bazaars/market at Sariakandi Upazila. Two broader types of employment type have been found in Sariakandi Upazila i.e. employment in the permanent shops and employment in the temporary shops. The employment in the permanent shops depicts the employment opportunity created by the permanent registered shop of the hats/bazaars/market. This type of employment has less seasonal variation in number. On the other hand, employment in the temporary shops is the employment generated by temporary shops which is in many cases seasonal and for a short time venture. Thus the number of this type of employment varies with the seasonal variations.



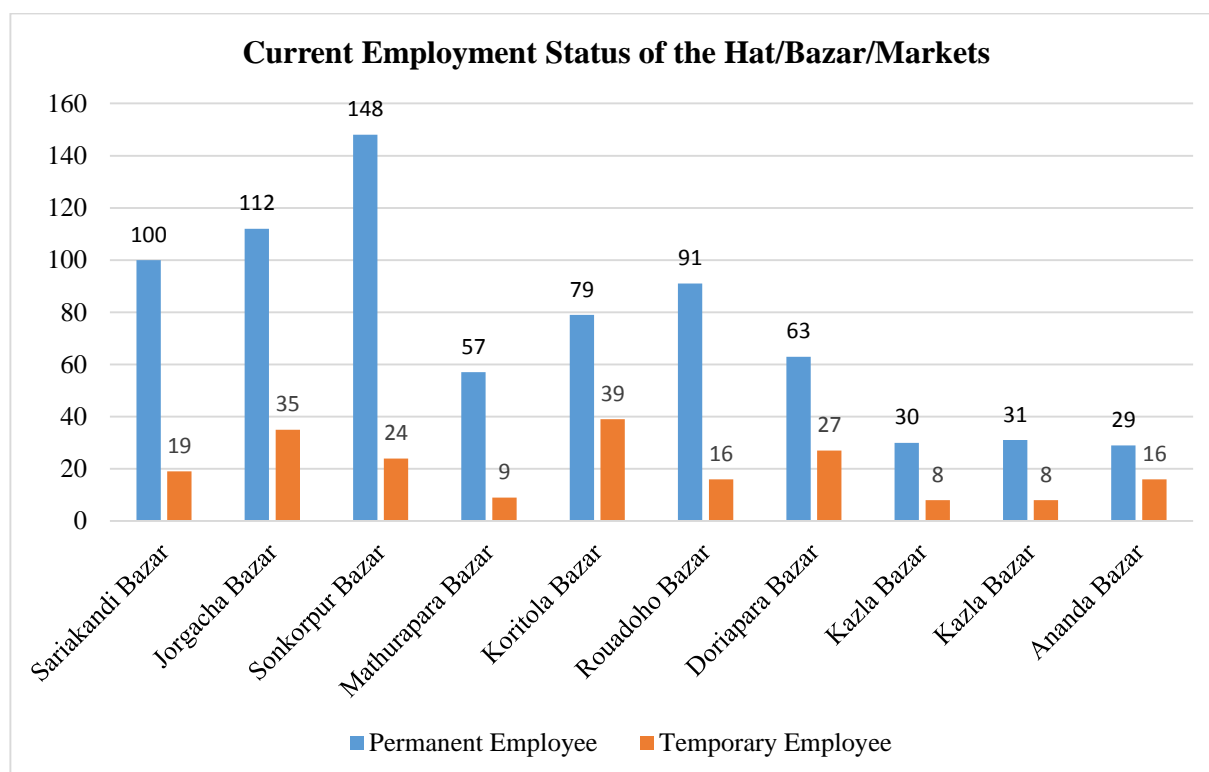
Source: BBS, 2011

Figure 3.4: Different Type of Existing Employment

From the Figure 3.4 it is evident that overall 73 percent of the market based employment is male permanent employee. Total 88 percent of the employment is for the male. On the other hand 12 percent (combining both permanent and temporary) is for female employee. This structure provides the generic understanding how much spaces or provision need to provide for the public service considering the gender.

In all the market areas employment in the permanent shops is grater having a percentage share lowest 64 percent in Ananda Bazar to highest 86 percent at Sonkorpor Bazaar. With 148 permanent employment and 24 temporary employment Sonkorpor Bazar holds the highest amount of employment as shown in the Figure 3.5; followed by Jorgacha Bazar (112 permanent employment and 35 temporary employment) and Sariakandi Bazar (100 permanent employment and 19 temporary employment). Another important aspect evident from the Figure 3.5 is, comparatively smaller markets in respect of employment has more temporary employment ratio. It is evident in the Mathurapara Bazar, Kazla Bazar and Ananda Bazar.

Consideration of type of structures in the markets, i.e., permanent structure and temporary structure is an important issue for market area development and design of public service systems.



Source: Field Survey, 2016

Figure 3.5: Current Employment Status of the Hats/Bazaars/Markets of Sariakandi Upazila

3.2.7 Utility services of Hat/bazaar/Market

The market areas under Sariakandi Upazila have the access to different utility services. The Table 3.6 is showing different utility services available in the market Areas.

Table 3.6: Utility Services of Hat/bazaar/Market

Sl. no	Utility Services available in the Market Area	Yes	No	Comment
1	Have any garbage pit	4	6	70 percent of the bazar does not have any garbage pit; thus the Shops and the marketers usually use road side or adjacent fallow land as garbage pit.
2	Have Sanitation facility	10	0	All the market has sanitation facility. There is no separate toilet for female in any bazar/Hat. Maximum toilets are Semi-Pucca and some are Katcha.
3	Have Water supply	10	0	There is no piped water supply system installed in the markets. Some Public and several private Tubewell have been serving as the source of water.
4	Electricity connected	6	4	6 out of 10 market have the access to electricity. It is one of the reason that these markets have more facilities of good and services than the rest.
5	Have any waste dump place	6	4	6 out of 10 have access to the waste dump site. In all the cases these dump site is open; in many cases in the bank of a nearby waterbody.

Source: Field Survey, 2016

According to the Table 3.6 only 4 (40 percent) out of 10 market has garbage pit. All the market areas have the sanitation facility. There is no separate toilet for female in any bazar/Hat. Maximum toilets are Semi-Pucca and some are Katcha. The primary source of the water supply is Tube well and very few bazar/hat have the access to small ponds. About 40 percent of the markets (4 markets) have no facilities of electric power. There are 6 markets (60 percent) out of 10 have access to the waste dump site.

3.2.8 Waste Dumping Site

Location of waste dumping site is a crucial issue for a development planning. Availability and access to the waste dumping site is a must for the hat/bazar/market; as during the functional time, market area produce a lots of different kind of waste i.e. plastic waste, bio-degradable waste, paper waste.

Distance between the waste generation point and the waste dumping site is a determinant how much waste will be carried to the dumping site. The more the distance the harder it gets to dump the waste. Table 3.7 shows that 50 percent of the market areas have waste disposal place within

50 meter from the periphery of bazar area; whereas 20 present are in between 50 to 100 meter. 30 percent of the markets have it more than 100 meter distance.

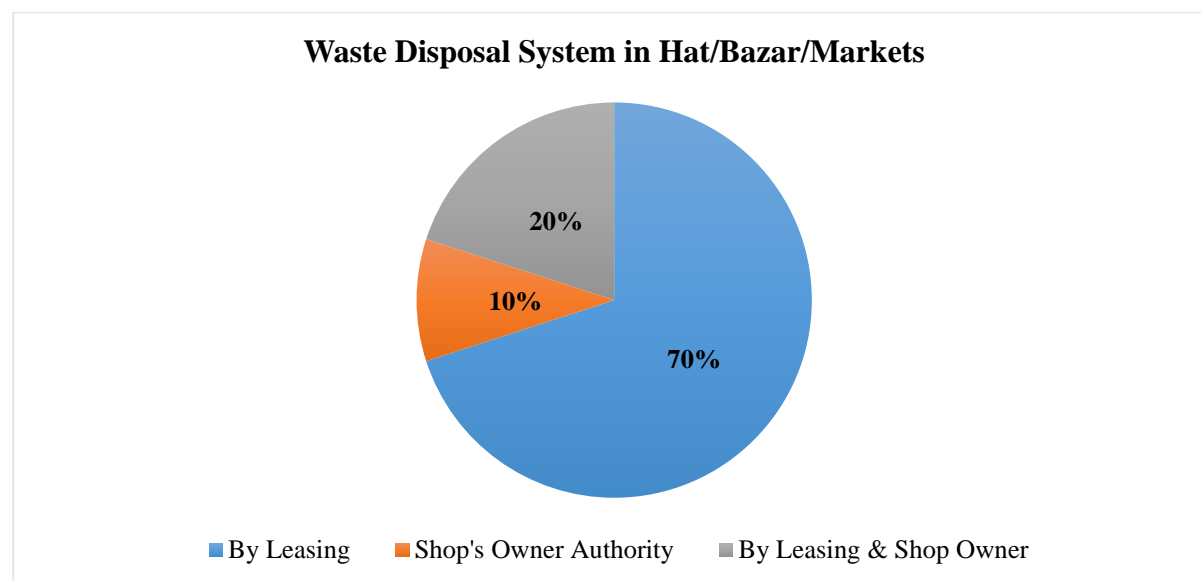
Table 3.7: Distance to Waste Disposal Place

Distance to Waste Disposal Place	Number	Percent
0 - 50 meter	5	50
51 - 100 meter	3	30
More than 100 meters	2	20
Total	10	100

Source: BBS, 2011 (Annex 3.2)

3.2.9 Waste Disposal System in Hat/Bazar/Market

Different waste disposal systems in hat/bazar/markets have been observed during the field survey. Figure 3.6 shows that the waste disposal is done by leasing, or shop's owner initiatives or by combining the both. Out of 10 hat/bazar/markets in Sariakandi Upazila, 7 maintain waste disposal by leasing, one by shop's own initiative and 2 by leasing and shop owners own initiative.

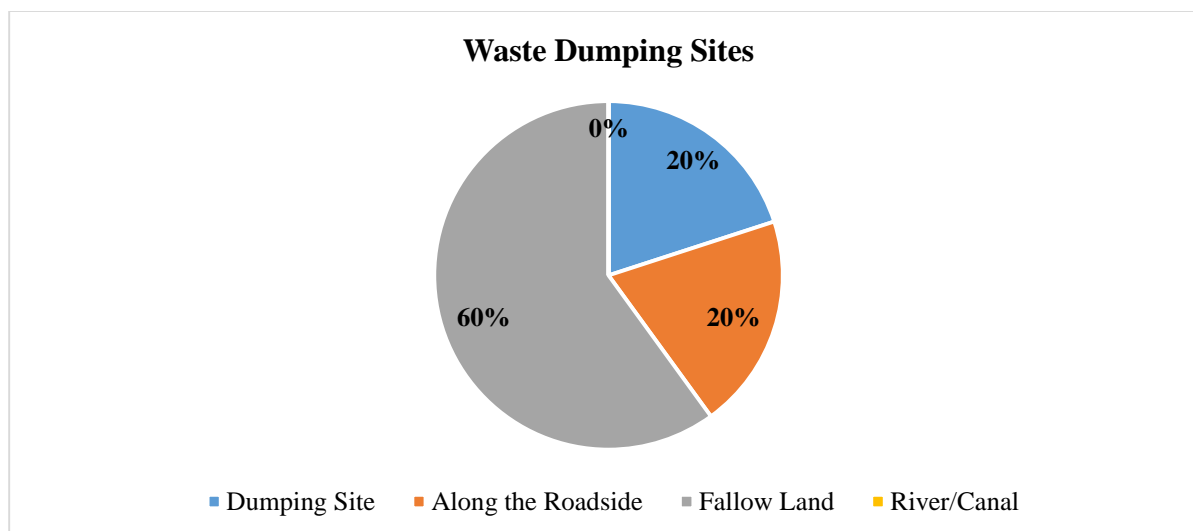


Source: Field Survey, 2016

Figure 3.6: Waste Disposal System in Hats/Bazaars/Markets of Sariakandi Upazila

3.2.10 Wastes Dumping Sites

Figure 3.7 shows that 10 nos. hat/bazar/markets were surveyed, out of it, 2 (20 percent) were found to dump their wastes in designated dumping sites. Other 2 (20 percent) were found to dump alongside of the road and the rest 6 (60 %) in the adjacent fallow land.



Source: Field Survey, 2016

Figure 3.7: Waste Dumping Sites in Sariakandi Upazila

3.2.11 Sanitation System of Hat/Bazar/Market

Table 3.8 depicts the sanitation facilities in different hat/bazar/market of Sariakandi Upazila. According to the Table 3.8, most of the market area has 3 or more toilets (6 out of 10 Bazar). Among the 25 toilets available in 10 bazar, 20 (80 percent) toilets are found to be sanitary toilets and 5 (20 percent) are pit latrines with unhygienic features. Being in the Sariakandi Paurashava only Sariakandi Bazar enjoys 150 m long drainage system which is absent in the other 9 bazars.

Table 3.8: Sanitation Facility of Hat/Bazar/Market

Sl. No.	Name of Market	Name of Union	Sanitary Toilet	Pit Latrine	Drainage Network (m)
1	Sariakandi Bazar	Sariakandi	3	0	150
2	Jorgacha Bazar	Bhelabari	2	0	No
3	Sonkorpor Bazar	Fulbari	2	0	No
4	Mathurapara Bazar	Karnibari	2	0	No
5	Koritola Bazar	Kamalpur	1	0	No
6	Rouadoho Bazar	Kamalpur	2	0	No
7	Doriapara Bazar	Kamalpur	2	0	No
8	Kazla Bazar	Kazla	0	1	No
9	Fulbari Bazar	Fulbari	1	0	No
10	Ananda Bazar	Kazla	1	0	
	Total		16	1	150 meter

Source: Field Survey, 2016

An important feature is that there are no separate latrines for the women. In many cases the women come to the bazar use latrines from the household of adjacent neighborhood.

3.2.12 Water Supply System of Hat/Bazar/Market

There is no pipelined water supply system in Sariakandi Upazila for the bazar areas. A few of the bazar areas have the access to the open surface water source like pond. However, the main source of water is the tube-well. A total of 12 tube-wells have been found in the markets for the use of all. Some tube-wells are found sunk indoor for private uses, especially for the hotels and restaurants but those are not accessible to common people. Among the 15 tube wells 12 (80 percent) tube well is owned by Paurashava or Union Parishad. The other 3 (20 percent) are privately owned.

Table 3.9: Source of Drinking Water

Union		Pipe Line Service	Own Tube-well	Public Tube-well	Open Water-body	Total
Sariakandi Bazar	No.	N/A	1	2	0	3
Jorgacha Bazar	No.	N/A	0	1	0	1
Mathurapara Bazar	No.	N/A	0	1	0	1
Sonkorpur Bazar	No.	N/A	0	1	0	1
Koritola Bazar	No.	N/A	0	1	0	1
Rouadoho Bazar	No.	N/A	1	2	0	3
Doriapara Bazar	No.	N/A	0	1	0	1
Kazla Bazar	No.	N/A	0	1	0	1
Fulbari Bazar	No.	N/A	0	1	0	1
Ananda Bazar	No.	N/A	1	1	0	2
Total			3	12	0	15

Source: Field Survey, 2016

3.2.13 Electricity Connections

As portrayed in the Table 3.10 all the Market areas except Kazla Bazar have electricity connection. But the power outage is a very common phenomena. On an average the bazar area faces 4 hours of load shading. The situation becomes worse during the irrigation seasons as power supply to irrigation is given priority in these seasons.

Table 3.10: Electricity Supply Status

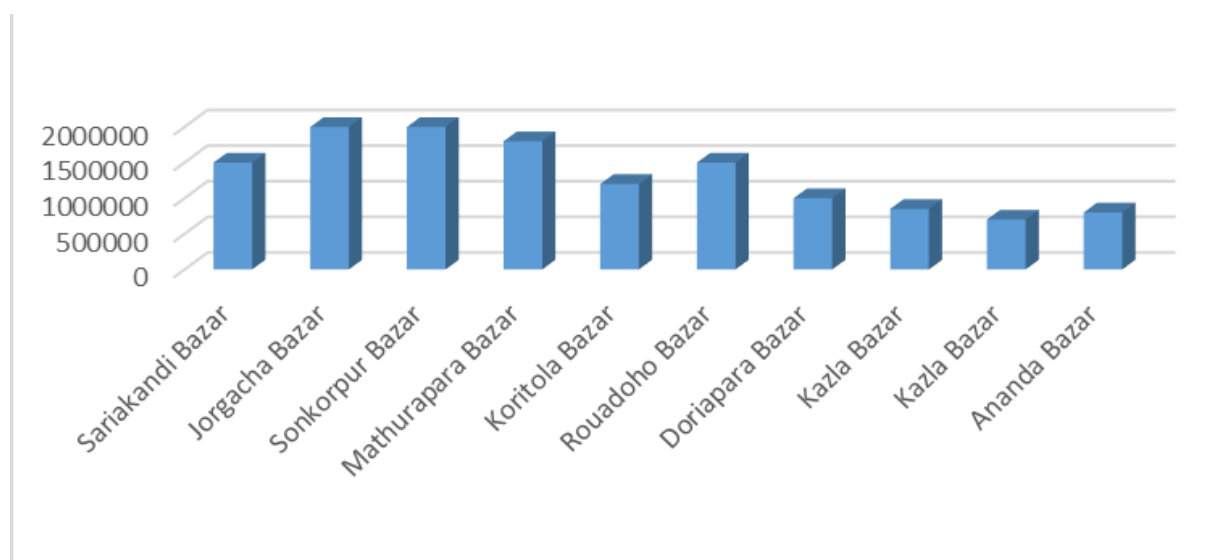
Name of Hat/Bazar/Market	Availability of Electricity		Load-Shedding	
	Yes	No	Yes	No
Sariakandi Bazar	√		√	
Jorgacha Bazar	√		√	
Sonkorpur Bazar	√		√	
Mathurapara Bazar	√		√	
Koritola Bazar	√		√	
Rouadoho Bazar	√		√	
Doriapara Bazar	√		√	

Name of Hat/Bazar/Market	Availability of Electricity		Load-Shedding	
	Yes	No	Yes	No
Kazla Bazar		√		√
Fulbari Bazar		√		√
Ananda Bazar	√		√	

Source: Field Survey, 2016

3.2.14 Amount of Money is Dealing with (Hat/Bazar/Market)

Figure 3.8 shows the amount of money is dealing with in the hat/bazar/markets of the Sariakandi Upazila. Among them, Sonkorpor Bazar and Jorgacha Bazar are the highest amounts of transaction are made and Kazla and Ananda bazar are comparatively low transaction are made during the survey period. Actually, all the bazar/hat has the similar capacity for the transaction. However, due to the difference of accessing facilities transaction amount may vary with the other hat/bazar. For example, if all the bazar/hat can get the access to the electricity then all the hat/bazar has the more or less same amount of transaction.



Source: Field Survey, 2016

Figure 3.8: Amount of Money Dealing with (Hat/Bazar/Markets)

3.2.15 Summary of Economy Survey

In formal economic survey was carried out with standard questionnaires and stakeholders' consultation, Group Discussion (GD) and observation. Data on 10 hat/bazar/market in the study area (Sariakandi Upazila) were collected through field investigators- interviewed/consulted with range of business owners/traders, and buyers; on physical and social infrastructures facilities there are the problems as encountered and reported by the stakeholders. It has been found from the data shown in tables and figures of this section that hat/bazar/markets are managed and conducted by market committee, leaseholders, Upazila Parishad and personal

property owners. Almost all the hat/bazar/market/growth centers have locally ensured waste management system. No hat/bazar/markets have piped water supply, 60 percent have electricity connections and 100 percent have sanitation facilities. Wastes of the hat/bazar/market/growth centers are dumped mostly 60% in the adjacent fallow land, 20% in designated dumping sites, rest 20% along road side.

3.3 Section-B: Banks and Bimas

3.3.1 Total Bank and Bima

In Sariakandi Upazila has only 5 banks are currently operational. Name of banks are Rajshahi Krishi Unnyan Bank, Sariakandi; Janata Bank, Sariakandi; Sonali Bank, Sariakandi; Karmasangsthan Bank, Sariakandi; Agrani bank, Sariakandi. On the other hand there are 5 bima/insurances located in the Sariakandi Upazila as listed in the Table 3.11.

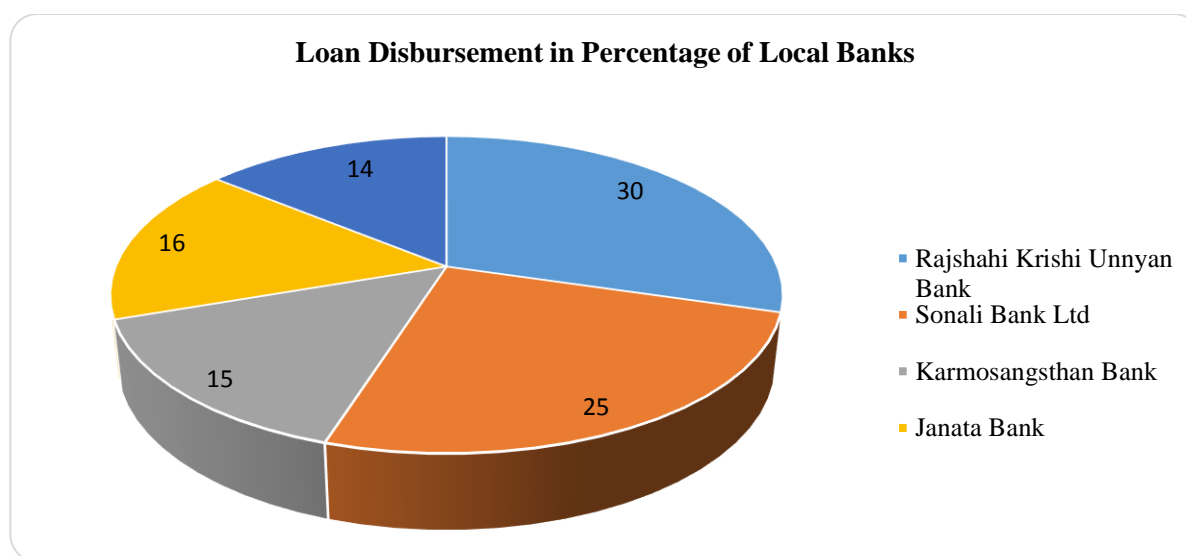
Table 3.11: Names of Banks, List of Bima/Insurances and Locations and Types of Services

Name of the Organization and Address	Types of Services
List of Banks	
Rajshahi Krishi Unnyan Bank, Sonatala, Bogra	General banking, SME, banking, Mobile banking, Loan on running capital, Industrial loan, Agri. loan, project loan
Sonali Bank, Sonatala, Bogra	General banking, SME, banking, Mobile banking, Loan on running capital, Industrial loan, Agri. loan, project loan etc.
Karmasangsthan Bank, Sonatala, Bogra	Agri. loan, project loan, Project loan etc.
Janata Bank, Sonatala, Bogra	General banking, foreign trade, Mobile banking, Loan on running capital, Agri. Loan etc.
Agrani bank, Sonatala, Bogra	General banking, foreign trade, Loan on running capital, Industrial loan, Agri. loan, project loan etc.
List of Bima/Insurances	
Popular Life Insurance Ltd.	Life insurance, health insurance, accident insurance, labour insurance, education insurance, risk insurance etc.
Islami Life Insurance Co. Ltd	Life insurance, Health Insurance, Education Insurance, Risk Insurance, Hajj Insurance, Den-mohor Insurance
Progoti Life Insurance Co. Ltd	Life insurance, Health Insurance, Education Insurance, Hajj Insurance, Pension insurance
National Life Insurance Co. Ltd	Life insurance, Health Insurance, Education Insurance, Risk Insurance, Hajj Insurance, Pension insurance Den-mohor Insurance
Al-Arafa Life Insurance Co. Ltd	Life insurance, Health Insurance, Accident Insurance, Education Insurance, Hajj Insurance, Den-mohor Insurance

Source: Field Survey, 2016

A total of BDT 142.1 lakh loan has been disbursed by the said banks (See Table 3.9) in different types of schemes i.e. general banking, SME, banking, mobile banking, loan on running capital, industrial loan, agri. loan and project loan.

Figure 3.9 shows that among BDT 142.1 lakh total loan, Sonali Bank share is 29% which make it leading loaning Bank in Sariakandi Upazila. Except Agrani Bank (5% of the total loan) more or less all the other bank shares a fare percentage of loan disbarment.



Source: Field Survey, 2016

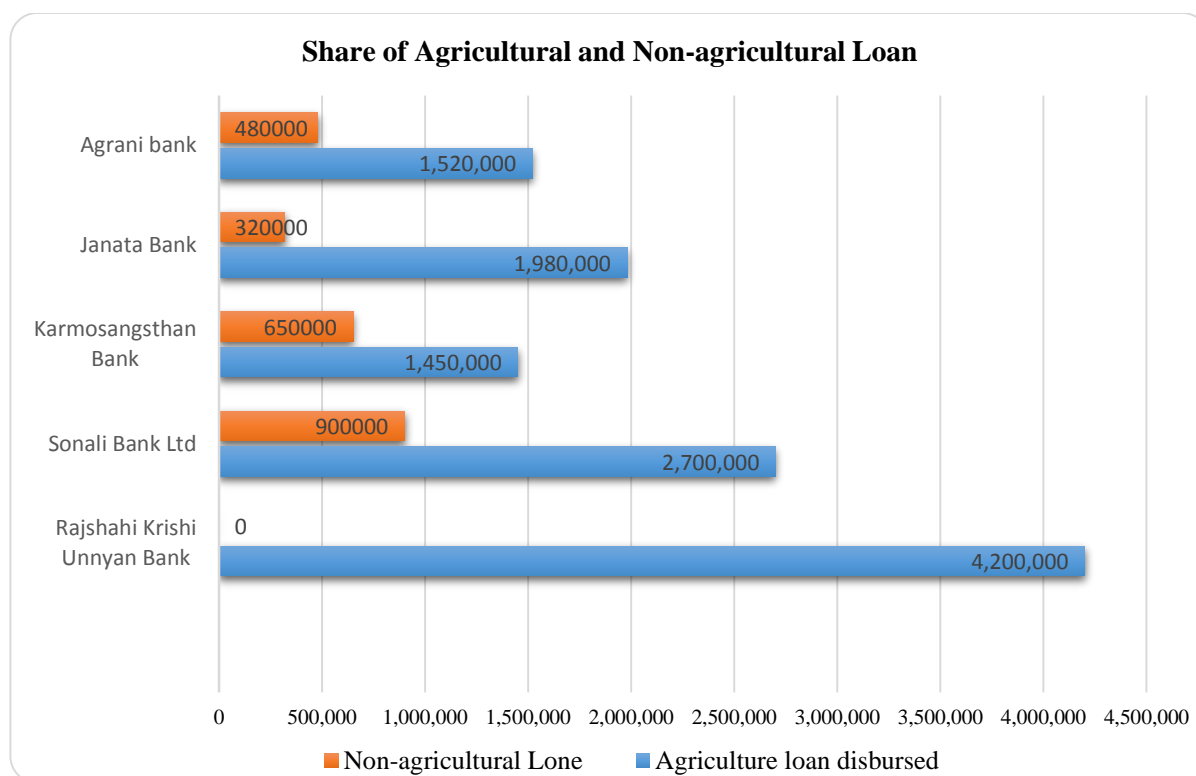
Figure 3.9: Loan Disbursement in Percentage of Local Banks

Table 3.12: Name and General Operations of Banks of Sariakandi Upazila

Sl.	Name of Bank	Total no. of account holders	Total Loan Disbursed	Loan Share (In Percentage)	Agriculture loan disbursed	Non-agricultural Lone	Total Due Amount of loan Installment
1	Rajshahi Krishi Unnayan Bank	16148	4200000	30	4,200,000	0	0
2	Sonali Bank Ltd	17000	3600000	25	2,700,000	900000	360000
3	Karmasangsthan Bank	372	2100000	15	1,450,000	650000	280000
4	Janata Bank	6050	2400000	16	1,980,000	320000	140000
5	Agrani bank	5400	130000	14	1,520,000	480000	290000
Total		44,970	14,200,000	100	11,850,000	2,350,000	1,070,000

Source: Field Survey, 2016

As described in the Figure 3.10 Sonali Bank leads the disbursement of agricultural loan disbursement following by the Rajshahi Krishi Unnayan Bank. From the figure it is evident that the non-agricultural loan is comparatively low (only 16.76 percent) comparing to the total agricultural loan disbursement.



Source: Field Survey, 2016

Figure 3.10: Share of Agricultural and Non-agricultural Loan

As shown in the Table 3.12 a significant portion (35.71 percent of total non-agricultural loan) of the non-agricultural loan has been found outstanding when this survey is conducted.

3.3.2 Bima/Insurance Companies in the Sariakandi Upazila

Table 3.13 shows some basic information regarding insurance and bimas in the Sariakandi Upazila. As portrayed in the Table 3.13 the local Insurance Companies provides different types of schemes i.e. life insurance, health insurance, accident insurance, labour insurance, education insurance, risk insurance etc.

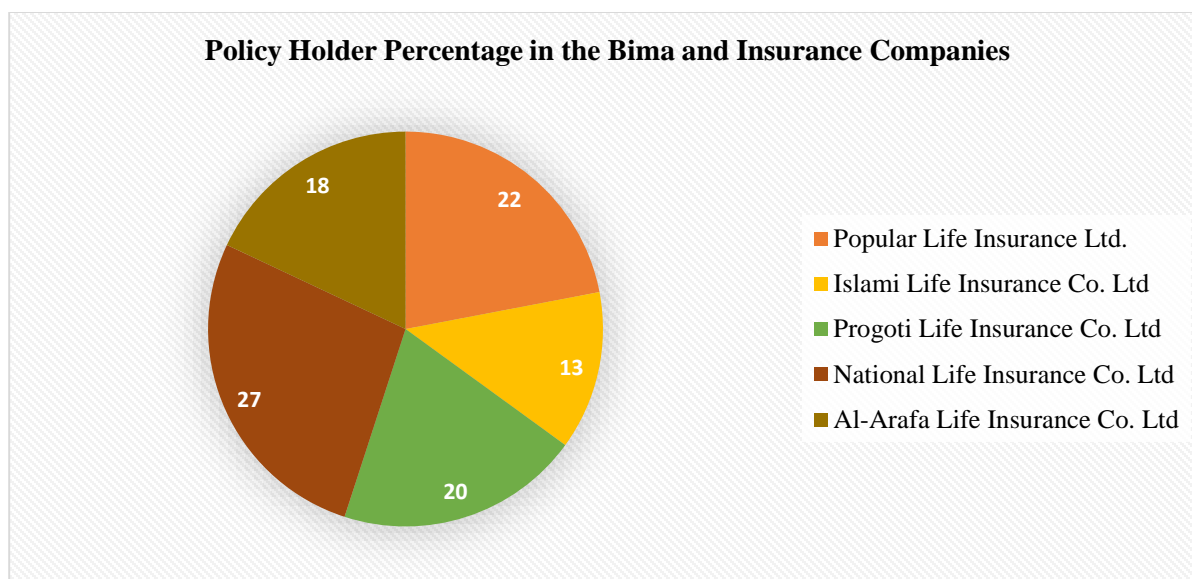
Table 3.13: Name of the Insurance Companies, Number of Policy Holders, Amount of Premium Received and Total Amount of Premium Due

Sl. No.	Name of Insurance Company	Total no. of Policy Holders	Amount of Premium Received	Total Amount of Premium due
1.	Popular Life Insurance Ltd.	21000	62300	223000
2.	Islami Life Insurance Co. Ltd	13000	37600	115600
3.	Progoti Life Insurance Co. Ltd	19000	436000	187500
4.	National Life Insurance Co. Ltd	26000	916000	268000
5.	Al-Arafa Life Insurance Co. Ltd	17000	419000	97000
		96000	1870900	891100

Source: Field Survey, 2016

A total amount of BDT 1870900 has been received as premium received of the insurance by the insurance companies where as BDT 891100 remained outstanding during the survey period.

Among the available insurance companies in Sariakandi Upazila National Life Insurance has maximum policy holders acquiring 27% of the total amount. On the other hand Islami Life Insurance has lowest with 13% of total amount.



Source: Field Survey, 2016

Figure 3.11: Policy Holder Percentage in the Bima and Insurance Companies

3.3.3 Summary of Bank and Bima

In the study area (Sariakandi Upazila), total nos. of Banks working are five and total nos. of Insurance Company working are five. Figure 3.10 and Figure 3.11 are showing the nature of banking services. Service coverage's in agriculture is 83.24% while in non-agricultural loan 16.76%. It has been found during the survey time, total numbers of bank account holders are 42,462 for non-agricultural loan and the due/arrear loan is amounting to BDT 8 Lakh. Total agricultural loan disbursed by the banks in the study area is amounting to BDT 119.7 Lakh.

3.4 Section-C: NGO

3.4.1 Name of NGO and Loan Providing

Several NGOs/CBOs operate in Sariakandi Upazila among them 4 CBOs/NGOs in the study area has been surveyed in this regard. Table 3.14 provides the names, types of services of the NGOs surveyed. Different types of services provided by NGO/CBO includes micro-credit services, good seed distribution, training on land fertility, public awareness building. GUK having 10,289 stakeholders has most engagement and Gram Bikash Sangstha with 10000

stakeholders follows it whereas ASA having only 2400 stakeholders and BRAC has the lowest engagement in this category with 1460 stakeholders.

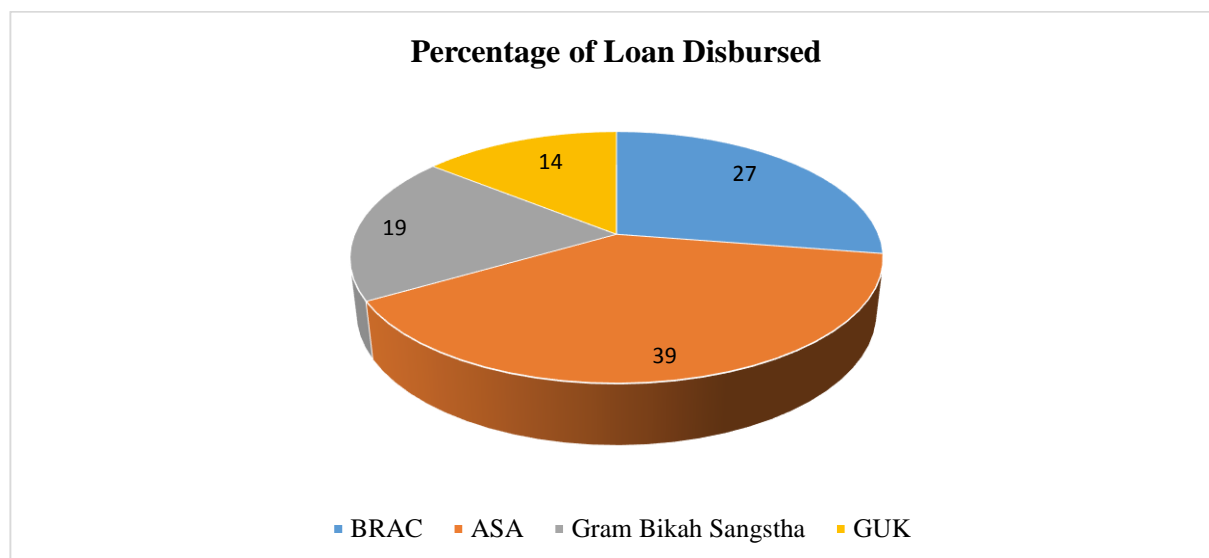
Table 3.14: Name of NGOs and Loan Providing

Sl. no	Name of NGOs	Types of Service	Total Stakeholders	Total Loan Disbursed (BDT)	Total Loan Recovery %
1.	BRAC	Seed supply Loan service Social awareness	1460	672000	50%
2.	ASA	Loan service Social awareness	2400	960000	42%
3.	Gram Bikash Sangstha	Social awareness Strengthening local governance, Disability	10000	466000	60%
4.	GUK	Loan service, training on fertility Health, education, agriculture	10289	350000	35%
Total					

Source: Field Survey, 2016

According to the Table 3.10 a total of BDT 2448000 has been disbursed by these four NGOs as loans for different purposes. Among the four NGOs, ASA disbursed 39% of the total loan among followed by 27% by BRAC and 19% by Gram Bikash Sangstha.

According to the Table 3.14 Gram Bikash Sangstha is the most efficient with loan recovery over 60%. BRAC also recovered major share of the loan about 50%. The rest of the NGOs loan recovery is not more than 42%.



Source: Field Survey, 2016

Figure 3.12: Percentage of Loan Disbursed

3.4.2 Names of NGO and Working Area

Table 3.15 depicts the working areas of different NGOs surveyed. According to the Table 3.15 BRAC has the most coverage whereas GUK has the least.

Table 3.15: Name of NGOs and Working Areas

Sl. no	Name of NGOs	Working areas
1.	BRAC	Sariakandi, Bhelabari, Karnibari, Chandan Baisha, Kamalpur,
2.	ASA	Sariakandi, Karnibari, Kamalpur
3.	Gram Bikash Sangstha	Sariakandi, Bhelabari, Chandan Baisha
4.	GUK	Sariakandi, Karnibari

Source: Field Survey, 2016

3.4.3 NGO's Target Group/Beneficiaries

Table 3.16 is showing beneficiary group of CBO/NGO. It is found that there are four types of target groups of CBO/NGO and they are lower income group (35%), beneficiary for particular characteristics (28%), business group (20%) and lower class professional group (17%).

Table 3.16: Beneficiary Target Group CBO/NGO

Beneficiary Target Group of CBO/NGO	Frequency	Percent
Lower Income Group	1	35%
Beneficiary for Particular Characteristics	1	28%
Business Group	1	20%
Lower class professional group	1	17%
Total	4	100%

Source: Field Survey, 2016

3.4.4 Name of NGOs, Nos. of Members and Beneficiary Target Group

In the Table 3.17, types of beneficiary target group of NGOs have been depicted. BRAC, signifies the lower income group target group each having one group. ASA has professional-wise target group with 1 group. While Gram Bikash Sangstha and GUK have also with the one group but they represented business group and lower class professional groups, respectively.

Table 3.17: Name of NGOs, Nos. Members and Target Group Beneficiary

Serial No	Name of the NGO	Beneficiary Target Group				Total
		Lower Income Group	Profession wise Group People	Business Group	Lower Class	
1	BRAC	1	0	0	0	1
2	ASA	0	1	0	0	1
3	Gram Bikash Sangstha	0	0	0	1	1
4	GUK	0	0	1	0	1
Total		1	1	1	1	1

Source: Field Survey, 2016

3.4.5 Summary of NGO

In formal sector, one of the dominant actors is the CBO and NGO's activities. Their involvement in income generation activities is providing ample employment opportunities for improving the livelihoods of the community. The area is potentials for CBOs and NGOs to utilize the local resource base for micro credit program and foster community development.

3.5 Section-D: Industries

3.5.1 Introduction

Industrialization is considered to be the most important drivers of growth in an economy. Along this vein, the country has been demonstrating considerable performance in low-value-adding manufacturing. However, recent trends of different indicators that are considered in measuring the development of industrial sector appear to be unsatisfactory. From FY2010-11 to FY2012-13, the rates of growth in industrial sector have been showing a decelerated trend. As a result, the share of industry in GDP is increasing.

By concept formal sector industry is organized. It follows the legal frame-work of the Government e.g.is chartered sector. The data for the industrial sector has been collected from the study area through standard questionnaire and secondary sources.

3.5.2 Ownership Pattern of Industry

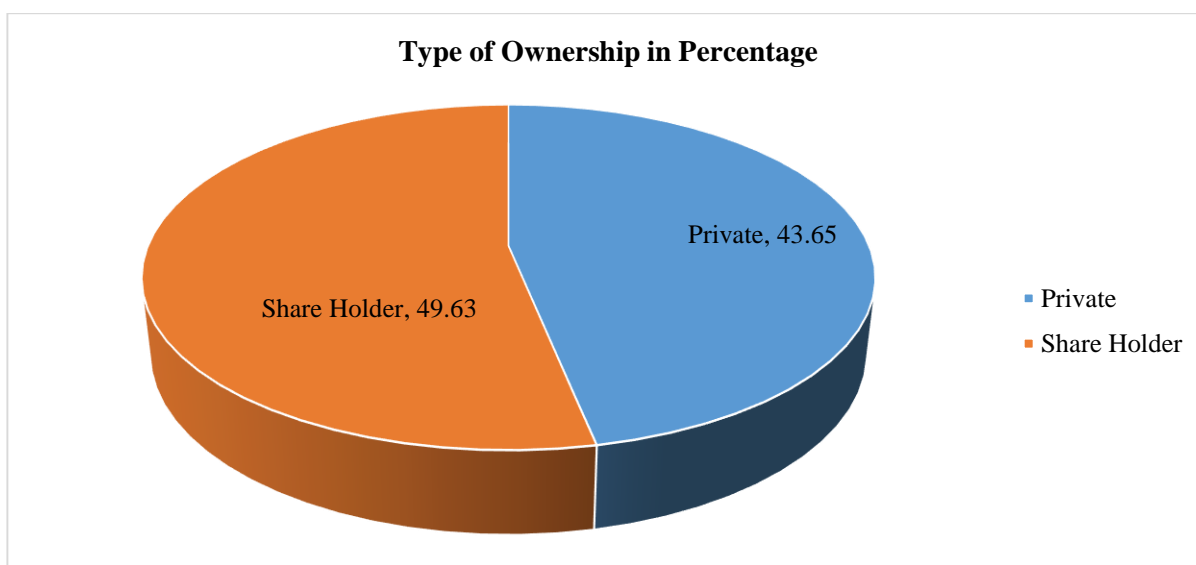
Table 3.18 and Figure 3.13 show the study area has 1086 industries and of those 47% (513 nos.) of the industries are privately owned and 53% (557 nos.) are shared initiative.

Table 3.18: Ownership Patterns of Industries

Industries	Type of Ownership		Total
	Private	Share Holder	
Brick Field	3	2	5
Small Scale & Cottage Industry	46	21	65
Warehouse (Food, Fertilizer, Jute Godown)	6	9	15
Rice Mill	8	74	82
Furniture Making	40	160	200
Semi-auto Rice Mill	8	1	9
Saw mills	2	10	12
Poultry Farm	40	64	104
Dairy Farm	40	74	114
Handloom	100	20	120
Match Factory	1	0	1
Dying	30	24	54
Oil Mill	0	6	6

Industries	Type of Ownership		Total
	Private	Share Holder	
Bakery	0	6	4
Tailoring Shop	120	90	210
Pottery	18	4	22
Flour Mill	50	12	62
Plastic Industry	1	0	1
Total	513	557	1086
Percentage	47%	53%	

Source: Field Survey, 2016



Source: Field Survey, 2016

Figure 3.13: Type of Ownership in Percentage

Among all those industries the following industries listed in the table 3.19 has been surveyed with questionnaire. Of the surveyed industries 55% (6 nos.) of the industries has been selected from the rural areas and the other 45% (5 nos.) has been taken from the urban area. Different types of industries have been selected for the survey purpose. The major groups are rice mills, and saw mills.

Table 3.19: Name of Industries/Factories/Mills, Location, Area in Acre and Products

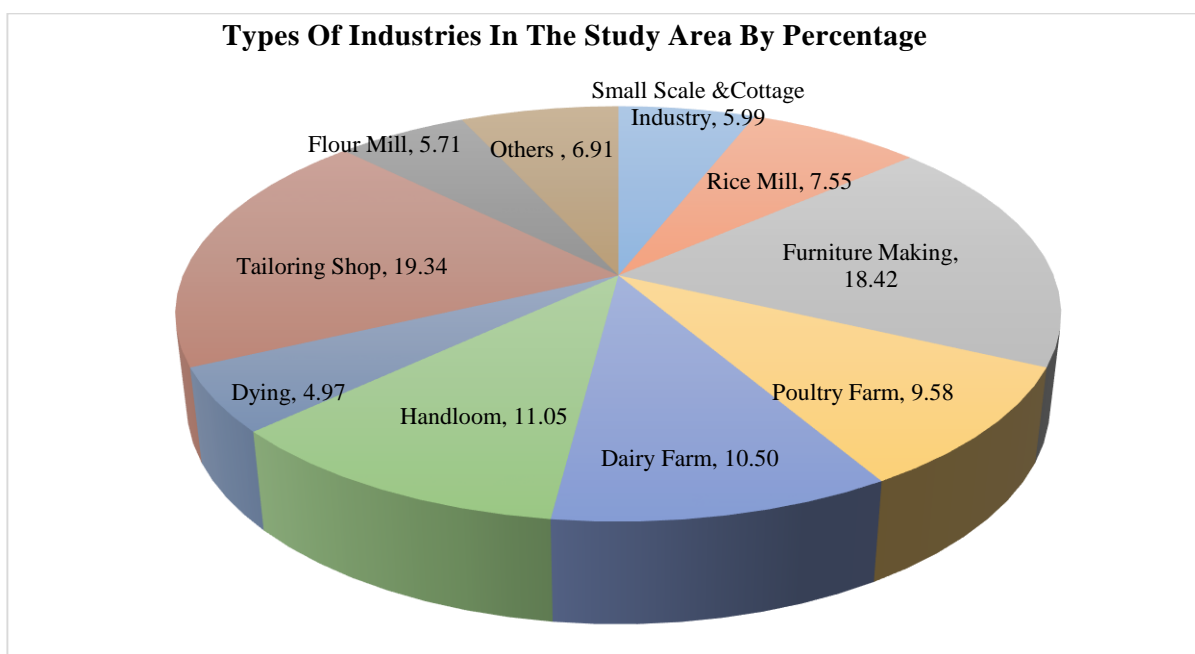
Sl. no	Name and Type of Industries/Mills/Factories	Area of land in acre	Name of Union	Type of product
1.	Abdul Halim Rice Mill	1	Sariakandi	Rice
2.	Wares Rice Mill	1	Sariakandi	Rice
3.	Sariakandi Rice Mill	1	Sariakandi	Rice
4.	Koritola Rice Mill	.5	Kamalpur	Rice
5.	Nur Rice Mill	1	Chandan Baisha	Rice

Sl. no	Name and Type of Industries/Mills/Factories	Area of land in acre	Name of Union	Type of product
6.	Rice Mill	.5	Kazla	Rice
7.	Sariakandi Saw Mill	.5	Sariakandi	Wood
8.	Titporol Saw Mill	.5	Sariakandi	Wood
9.	Enamul Saw Mill	.5	Fulbari	Wood
10.	Koraitola Saw Mill	.5	Kamalpur	Wood
11.	Saw Mill	.5	Kazla	Wood

Source: Field Survey, 2016

3.5.3 Types of Industry

Figure 3.14 shows 10 types of industries in the study area with their relative percentage weight. Highest no. of industries belongs to tailoring shops with 19.34% and furniture making with 18.42%. Other than these two industries the other industries has a share near around 10% more or less.



Source: Field Survey, 2016

Figure 3.14: Type of Industries in the Study Area by Percentage

3.5.4 Products Industries in Local Market

Table 3.20 showing types of industrial products are brick, rice, wood and match and their share of their products consumed in local market and markets outside the study area. These listed products are both locally and all over the country are marketed. According to the table brick, rice and wood products are also exported to the adjacent districts and all over the countries.

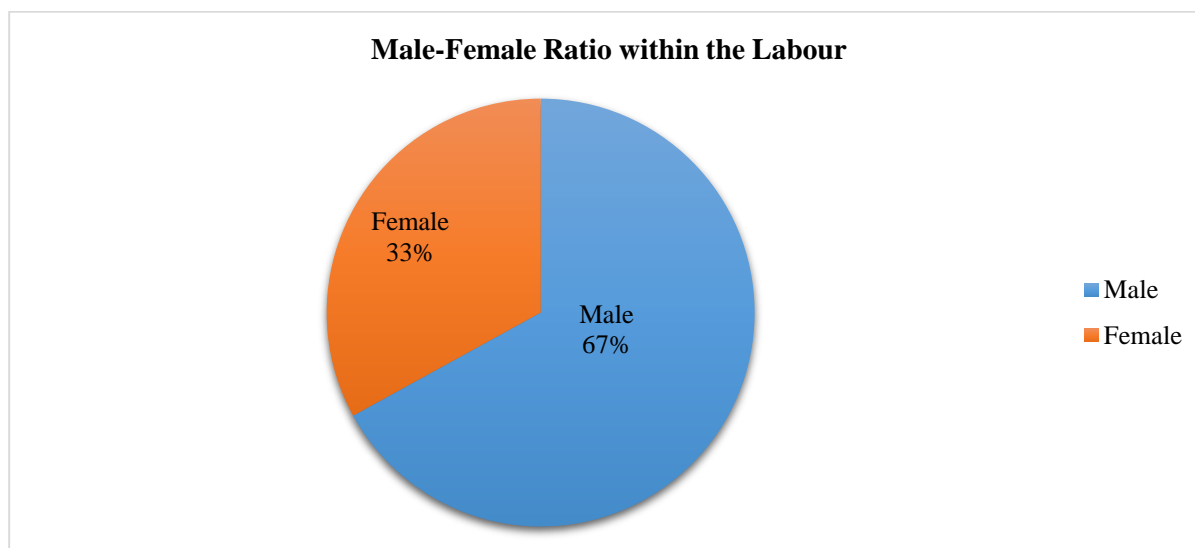
Table 3.20: Products of Industries in Local Market

Type of the Production	Number of production Unit	Marketing of Products Within the District	Marketing of Product Nationwide (In Percentage)	Marketing Product Internationally
Brick	3	78	22	0
Rice	3	43	57	0
Wood	3	55	45	0
Match	1	60	40	0

Source: Field Survey 2016

3.5.5 Type of the Structure, No. of Labors and Housing Facilities

Table 3.20 shows the labour consumption pattern by different types of industries. Within the 11 industries a total of 163 labors are engaged. According to the Figure 3.15 overall male female ratio at Sariakandi Upazila is Male 67% against female 33%.



Source: Field Survey, 2016

Figure 3.15: Male-Female Ratio within the Labor

Table 3.21: Name of Industries/Factories/Mills, Type of the Structure, No. of Labors and Housing Facilities

Sl. no	Name and Type of Industries/Mills/Factories	Type of product	No. of Labour		
			Male	Female	Total
1.	Abdul Halim rice mill	Rice	20	10	30
2.	Wares rice mill	Rice	18	12	30
3.	Sariakandi rice mill	Rice	14	8	22
4.	Koritola rice mill	Rice	15	10	25
5.	Nur rice mill	Rice	6	5	11
6.	Rice mill	Rice	10	8	18
7.	Sariakandi saw mill	Wood	5		5
8.	Titporol saw mill	Wood	6		6

Sl. no	Name and Type of Industries/Mills/Factories	Type of product	No. of Labour		
			Male	Female	Total
9.	Enamul saw mill	Wood	5		5
10.	Koraitola saw mill	Wood	5		5
11.	Saw mill	Wood	6		6

Source- Field Survey, 2016

3.5.6 Product Markets and Transport

Table 3.22 shows type of transport used for marketing industrial products. Van, push cart, nasimon, bus, truck and pickup are generally used. Within the local markets van, push cart, rickshaw and small pickup is being used. Most popular is the van and push cart. On the other hand for nationwide domestic supply bus, truck, pickup is being used for transporting the products. Type of transport to be used depends on the amount of order and location of the market.

Table 3.22: Product Markets and Transport

Sl. No	Name & Type of Industry	Type of transport for marketing	
		Local Market	Domestic Market
1.	Abdul Halim rice mill	Van, Push cart, Pickup, Nasimon	Bus, Truck, Pickup
2.	Wares rice mill	Van, Push cart, Pickup, Nasimon	Bus, Truck, Pickup
3.	Sariakandi rice mill	Van, Push cart, Pickup, Nasimon	Bus, Truck, Pickup
4.	Koritola rice mill	Van, Push cart, Pickup, Nasimon	Truck, Bus
5.	Nur rice mill	Van, Push cart, Pickup, Nasimon	Bus, Truck, Pickup
6.	Rice mill	Van, Push cart, Pickup, Nasimon	Bus, Truck, Pickup
7.	Sariakandi saw mill	Van, Push cart, Pickup, Nasimon	Bus, Truck, Pickup
8.	Titporol saw mill	Push cart, Pickup, Nasimon	Bus, Truck, Pickup
9.	Enamul saw mill	Push cart, Pickup, Nasimon	Bus, Truck, Pickup
10.	Koraitola saw mill	Push cart, Pickup, Nasimon	Truck,
11	Saw mill	Push cart, Pickup, Nasimon	Truck, Pickup

Source: Field Survey, 2016

3.5.7 Have the Industry Done EIA

As portrayed in the Table 3.23 among the 11 industries 64% (7 nos) industries have the EIA have EIA clearance from the Department of Environment (DoE) and 36% (4 nos) do not take the clearance.

Table 3.23: Did the Industry do EIA

Having EIA	Frequency	Percentage (%)
Yes	7	64%
No	4	36%
Total	11	100.0

Source: Field Survey 2016

3.5.8 Utility Services for the Industries

The industries of Sariakandi Upazila have accesses to different utility services. Table 3.24 is showing different utility services available for the industries.

Table 3.24: Utility Services of Industries

Sl. no	Utility Services available in the industries	Yes	No	Comment
1	Have any garbage pit	3	7	There is industries have any garbage pit; thus they usually use road side or adjacent fallow land as garbage pit.
2	Have Sanitation facility	11	0	All the industries have sanitation facility. There is no separate toilet for females. 70 percent (7 nos) toilets are Semi-Pucca and 30% (3 nos) are Katcha.
3	Have Water supply	11	0	There is no piped water supply system installed in the markets. Some Public and several private Tubewells have been serving as the source of water.
4	Electricity connected	11	0	All the industries have the facility to access the electricity.
5	Have any waste dump place	6	4	6 out of 10 have access to the waste dump site. In all the cases these dump site is open;

Source: Field Survey, 2016

3.5.9 Funding Source of Setting up Industries

Table 3.25 shows funding sources for setting up industries. Out of 11 industries funding sources for setting up are, 4 (36%) from personal savings, 2 (18%) from inheritance of property source, 4 (36%) from family savings and bank loan source and 1 (09%) is loan from relatives.

Table 3.25: Source of Capital of Industry in Sariakandi Upazila

Source of Capital	Frequency	Percentage (%)
Personal Savings	4	36
Inheritance of Property	2	18
Personal/Family Savings & Bank Loan	4	36
Loan from Relatives	1	09
Total	11	100.0

Source: Field Survey-2016

3.5.10 Problems of Industries

Table 3.26 has depicted various challenges by the industries in Sariakandi Upazila. The problems that are being faced by the industries of Sariakandi Upazila are infrastructure problems, bad transportation system, bureaucratic complexity, problem of skilled man power, lack of capital and insufficiency of loan.

Table 3.26: Problems of Industries

Problem of Industry	Frequency	Percent (%)
Infrastructural Problem	13	22
Bad Transportation System	11	19
Bureaucratic complexity	6	10
Insufficiency of Skilled Worker	8	14
Lack of Capital & Insufficiency of Loan	21	35
Total	59	100

Source: Field Survey, 2016

Table 3.26 shows that out of 59 mentioned problems from the 11 industries 21 times lack of capital & insufficiency of loan (35%) has been mentioned. Besides, other problems reported are infrastructural problems, 13 times (22%), bad transportation system 11 times (19%), bureaucratic complexity 6 times (10%), insufficiency of skilled workers 8 times (14%).

Though the study does not have the resource to fully prepare the Formal-Informal Sector percentage within the Sariakandi Upazila. Table 3.27 shows the estimates of the size of the Formal-Informal Sector percentage in GDP which can be equally applicable for Sariakandi Upazila.

Table 3.27: Estimates of the Size of the Formal-Informal Sector % of GDP

Sl. No	ISIC Sector	Total Share to GDP (%)	Share to GDP (%) Formal Sector	Share to GDP (%) Informal Sector
1	Agriculture	16.75	0.94	15.71
2	Fishing	4.71	0.66	0.4.05
3	Mining and quarrying	1.2	0.75	0.45
4	Manufacturing	17.5	11.88	5.77
5	Electricity, Gas & Water	1.6	1.5	0.10
6	Construction	9.23	6.98	2.95
7	Wholesale & Retail	14.24	1.32	12.92
8	Hotels and Restraint	0.70	0.47	0.23
9	Transportation, Storage and Communications	9.30	6.98	2.95
10	Financial Intermediation	1.71	1.60	0.10
11	Real Estate, Renting & Business	7.62	0.47	7.15
12	Public Admn. & defense	2.81	2.64	0.17
13	Education	2.51	1.98	0.53
14	Health & Social Works	2.31	1.89	0.24
15	Community, Social & Personal Services	7.12	0.66	6.48
Total		100	36.6	63.4

Source: Informal Sector in Bangladesh: Implications For Growth and Poverty (Selim Rahamn, Economics Dept. DU, 2010)

3.5.11 Summary of Industry

11 industrial units have been taken for surveying in study area. Different types of data are collected: types of industries and pattern of ownerships, physical and social infrastructure e.g. communication network, electricity, water supply connections, sanitation system, EIA & waste management status, capital funding source, goods\commodities and marketing areas (local, domestic and exporting) and finally problems being faced by the entrepreneurs for establishment of industries in Sariakandi Upazila. According to PRA report there is ample opportunities for developing small and medium types industries (agro-processing industries in particular) if interior and peripheral road communication and other enabling environment is improved.

CHAPTER FOUR: INFORMAL SECTOR ECONOMIC SURVEY

4.1 Status of Informal Trading Centers

It is reported that about 27.5% of trading centers have permanent establishment, 47.5% temporary establishments, 40% trades/business/shopping by non-motorized vehicles and 5% by head or floating/mobile. Total 40 stakeholders were consulted/interviewed of them 4 are permanents traders/business man, 34 are temporary traders/sellers, 9 are on non-motorized vehicles and 2 are on head/floating. So highest nos. of population of informal sector sitting place/working place is temporary (47.5%), second highest is permanent (27.5%) and lastly through head or floating 5%.

Table 4.1: Status of Informal Trading Centers

Status of Informal Sector's Trading Center	Frequency	Percent
Permanent	11	27.5
Temporary	19	47.5
Through Non-motorized vehicle	8	20
Through Head or Floating	2	5
Total	40	100

Source: Field Survey, 2016

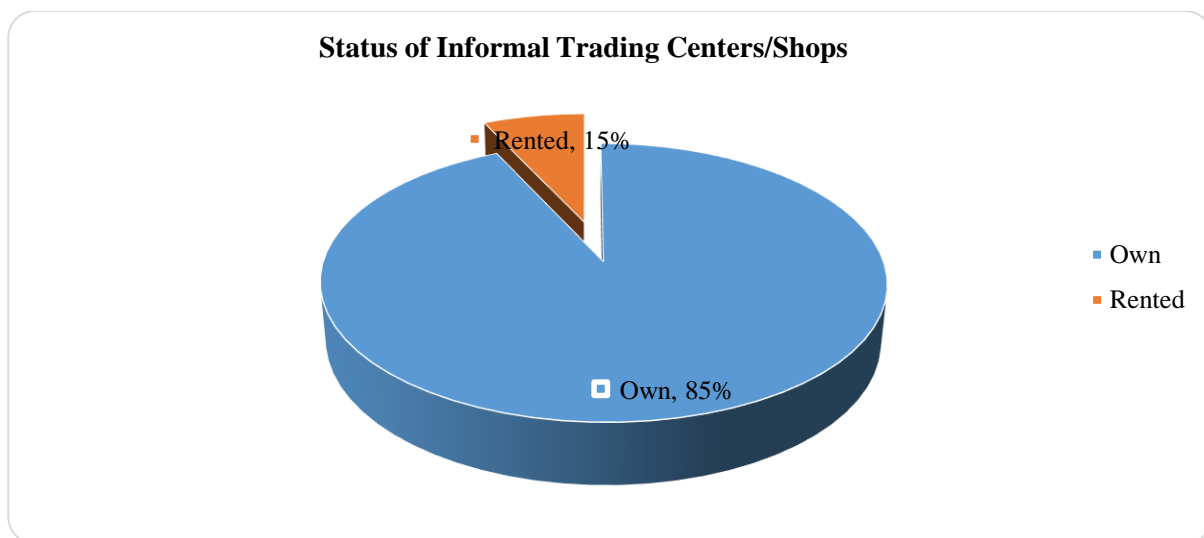
4.2 Owner House and Hired Status

It has been shown in Table 4.2 that informal sector businesses are carried on in 72.5% cases in owners holding and in 7.5% cases in hired/rented spaces. Figure 4.1 shows that status of informal sector working place/shops in Sariakandi Upazila 15% is owner holding and 85% is rented holding.

Table 4.2: Trading Houses Ownership Status

Owner of House	Frequency	Percent (%)
Own	29	72.5
Hired	11	27.5
Total	40	100

Source: Field Survey, 2016



Source: Field Survey, 2016

Figure 4.1: Status of Informal Trading Centers/Shops

4.3 Period of Informal Business

Total 40 stakeholders were interviewed of Informal sector and of them 23 people responded (57.5%) that they do/carryout their trade only in monsoon and 17 people responded (42.5%) carrying out business whole year. That is 42.5% traders are off from business in monsoon season.

Table 4.3: Period of Informal Business/Activities

Time Period For Informal Activities	Frequency	Percent (%)
Monsoon	23	57.5
Whole year	17	42.5
Total	40	100

Source: Field Survey, 2016

4.4 Number of Traders Having Loan\Number of Loan

Of the informal traders/business people 13 out of 40 (32.5%) responded that they do their business taking loan from different sources whereas 27 people out of 40 (67.5%) do not take any loan. That is to say about 68% informal sector traders\business man have no access to loan market.

Table 4.4: Number of Traders Having Loan/Number of Loan

Having Loan	Frequency	Percent
Yes	13	32.5
No	27	67.5
Total	40	100

Source: Field Survey, 2016

4.5 Informal Sector Traders Monthly Income

Table 4.5 is showing informal sector traders/sellers duration of works and monthly income of concerned stakeholders. For instance 17 traders were consulted those who have 12 months business. 3 of them replied their monthly income is amounting Tk. 20000 or more, 3 persons replied monthly income is Tk. 15000, 7 persons replied monthly income is Tk. 10000, another 3 person and 1 person replied their monthly income is Tk. 8000 and Tk. 6000 respectively. The lowest monthly income is Tk. 3000 whose business is 2 month in a year.

Table 4.5: Informal Sector Traders Monthly Income Statement

Duration of working period	Total monthly income (in BDT)												Total
	3000	3500	4000	4500	5000	5500	6000	7000	8000	10000	15000	20000	
2 Month	1	1	0	1	0	0	0	0	1	0	0	0	4
4 Month	0	0	0	0	1	0	1	0	2	0	0	0	4
6 Month	0	1	0	0	2	1	4	1	0	0	0	0	9
10 month	0	0	0	0	0	0	0	1	0	2	2	1	6
12 Month	0	0	0	0	0	0	1	0	3	7	3	3	17
Total	1	2	0	1	3	1	6	2	6	9	5	4	40

Source: Field Survey, 2016

4.6 Informal Sector Traders Monthly Expenditures

Table 4.6 shows the monthly expenses on various purpose of informal sector traders/sellers. It is observed from the responses of 40 interviewees that their minimum entertainment expense is minimum BDT 300 and maximum BDT 4000. Expense for cloth is BDT 200 to 3000, medical expense is amounting to BDT 200 to 3500 and educational expense is amounting to BDT 500 to 3000.

Table 4.6: Informal Sector Monthly Expenditure Statement

Expenses	Frequency	Minimum	Maximum
Expense on entertainment	29	300	4000
Cloth expense	40	200	3000
Medical expense	38	200	3500
Educational expense	31	500	3000

Source: Field Survey, 2016

4.7 Source of Informal Sector Capital and Amount

It is shown Table 4.7 and 4.8 that source of capital is mainly from relatives/friends and loan. 8 nos. interviewees/respondents disclosed that they received 53.33% business capital from

friends\relatives and 7 nos. disclosed receiving business loan from Multipurpose Cooperative Society. From Table 4.8, it is found that out 13 household 12 disclosed that they are receiving business capital ranging from BDT 5000 to 20000 from friends and Relatives and only one household says that received loan.

Table 4.7: Source of informal Traders

Source of capital	Frequency	Percent
Relatives/ Friend	8	53.33
Business Loan	7	46.67
Total	15	100

Source: Field Survey, 2016

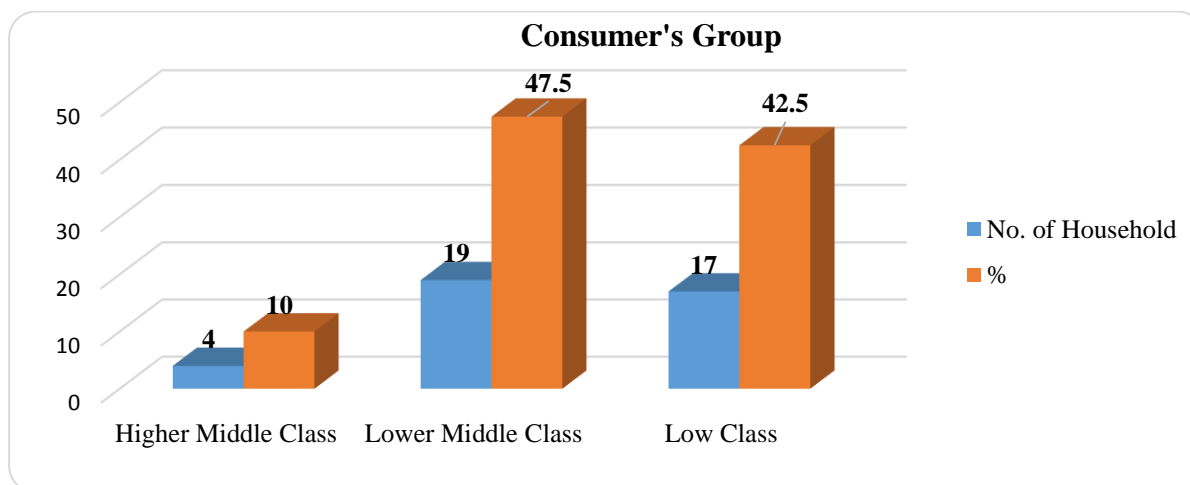
Table 4.8: Amount of Capital from Different Sources

Amount of capital (BDT)	Source of capital (No. of Households)		Total
	Relatives/ Friend	Loan	
5000	1	1	2
8000	1	0	1
10000	3	3	6
12000	0	1	1
15000	1	1	2
20000	2	1	3
Total	8	7	15

Source: Field Survey, 2016

4.8 Consumer Groups of Informal Sector Traded Goods

Figure 4.2 is showing traded commodities/goods consumers of informal sector is mainly higher middle class group, lower middle class group and low class group. Out of 40 households, 19 households (lower middle class) consume 47.5%, 4 household consumes (higher middle class) 10% and 17 households (low class) consume 42.5%.

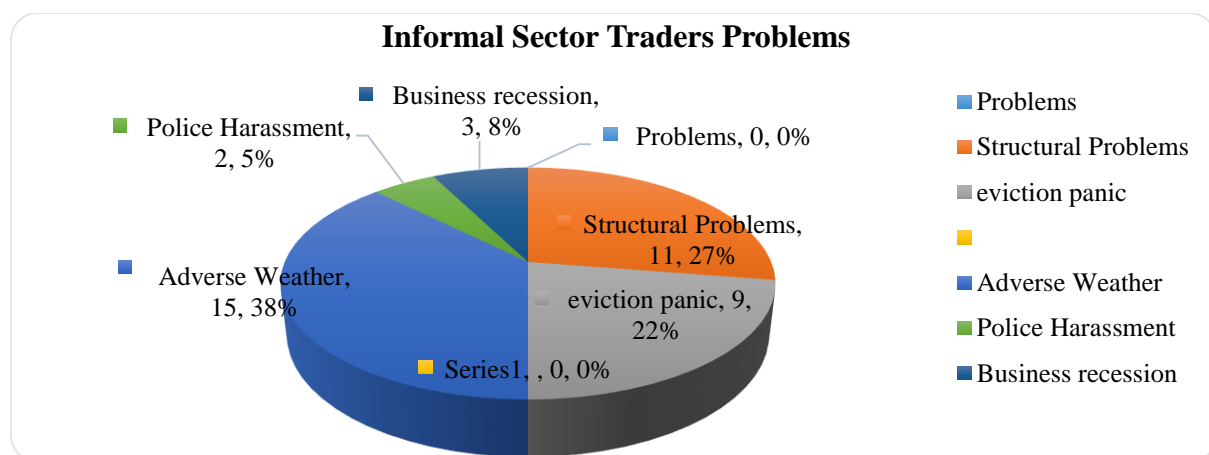


Source: Field Survey, 2016

Figure 4.2: Consumer Groups

4.9 Type of Problems Facing Informal Sector Business Location

Problems encountered by informal sector traders (Figure 4.3) in respect of their working/trade centers are: adverse weather, eviction panic, extortion, police harassment, structural problem, business recession and adverse weather. Respondents disclosed 22% are facing structural problems, 38% eviction panic, 3% police harassment 13%, adverse weather and 24% business recession.



Source: Field Survey, 2016

Figure 4.3: Informal Sector Traders Problems

4.10 Summary Informal Sector Economic Activities

In the study area, 40 (Table 4.1) traders in informal sector traders were interviewed. Types of informal traders were interviewed are: Betel-nut business, Crockery sellers, Fish sellers, Fruit sellers, Garments sellers, Hawkers, Raw materials sellers, Shoe sellers, small business and Vegetable sellers etc. Among these Fruit trader, Fish traders, Garment product sellers, Vegetables sellers, Small business\Traders have lion shares in the market. But the informal sector traders have to frequently shift their occupation due to adverse weather panic, police harassment, extortions, eviction panic etc. Out of this 40 samples 23 (57.5%) says that they do the business only in monsoon, 17 (42.5%) says that they do the business all the year round (Table 4.3). In fact, informal sector traders are off from trading\business after monsoon season. Informal sector traded goods 42.5% are consumed by low class group, 47.5% by lower middle class group and 10% are consumed by higher middle class group. Informal sector trader's monthly income and expenditures are shown in Table 4.5 and Table 4.6. Main problems in the informal sector are traders' adverse weather, structural problems, police harassment and eviction panic.

CHAPTER FIVE: INFORMAL SECTOR AGRICULTURAL ECONOMIC SURVEY

5.1 Introduction

The land of Sariakandi Upazila is intensively used for agriculture, housing and settlements, forest, fisheries and other infra-structural development. Sariakandi Upazila is a flood prone area located at Bogra District under Rajshahi Division. Shifting of agricultural land to non-agricultural purposes is a common phenomenon in this upazila. To protect agricultural land, to minimize land degradation and introducing modern technology are the basic needs to cope-up with the increasing demand of food for the growing population of this upazila. The study is to determine the present scenario of agriculture practices and assessment of the potential sustainable future development of the sector.

In view of the above reality, a comprehensive study was conducted in all the unions of Sariakandi Upazila to assess present situation of land uses, related problems and potentialities of agricultural development and to find out possible ways to solve the problems. Therefore, a sustainable land management was considered to develop better crop production considering all available parameter and characteristics of the area.

5.2 Objective the Study

The main objective of the study is to assess the present cropping pattern and cropping intensities (single, double and triple crop area), land utilization and flood level. The main study questions are to determine the growth or decline of agricultural land during last ten years (from 2005-2016), and their causes for growth or decline covering a possible quality of existing and future agricultural land for the project area. The study is to determine the present scenario in agriculture practices and assessment of potential sustainable future development of the sector.

5.3 Approach and Methodology

A multi-disciplinary, participatory and interactive method has been followed in carrying out the study. Both primary and secondary data were reviewed. The primary data were collected through KII (Key Informant Interview) and field visit. KII information was collected by using survey questionnaire (Annex-1). The secondary data were collected and reviewed on land use from DAE union and upazila office documents. KII information was collected from 27 Sub-Assistant Agriculture officers under 1 municipality and 12 unions through interview. Structured and semi-structured questionnaire was used for data collection (Annex-2). Data collection and consolidation occurred simultaneously. Data consolidation activities, such as editing, coding,

classifying and data entry into the computer software for analysis were carried out simultaneously. Frequency tables (one, two or multiple ways) were prepared for interpretations and analyses using SPSS for data analysis.

5.4 Description of Present Situation

Most of the people of this Upazila are directly and indirectly dependent on agriculture. The land of this upazila is intensively used for agricultural purposes. The land of Sariakandi Upazila is intensively used for agriculture, settlements, fisheries and housing, poultry and other infrastructural development. Sariakandi Upazila falls into 2 Agro-ecological zones of the Upazila are: a) Karatoya-Bangali Floodplain AEZ-4 and b) Active Brahmaputra-Jamuna Flood plain AEZ-7 (BARC1997). Wide range of crops grow here in rabi and kharif season like paddy, jute, wheat, maize, sugarcane, potato, spices, oilseeds, vegetables etc. Fruits grow well here are mango, jackfruit, coconut, banana, litchi, papaya, palm etc. Land resources of this upazila have been brought into mango orchard and poultry farms as commercial basis. It is reported that natural disasters like prolonged drought, decreasing ground water, heavy rain, early rain, erosion, cold, fog and hail-storm damage crops of this upazila. Shifting agricultural land to non-agricultural purposes and land degradation is common phenomena in this upazila. Protecting agricultural land, minimizing land degradation and introducing modern technology are the basic needs to cope-up with the increasing demand of food for the growing population of this upazila.

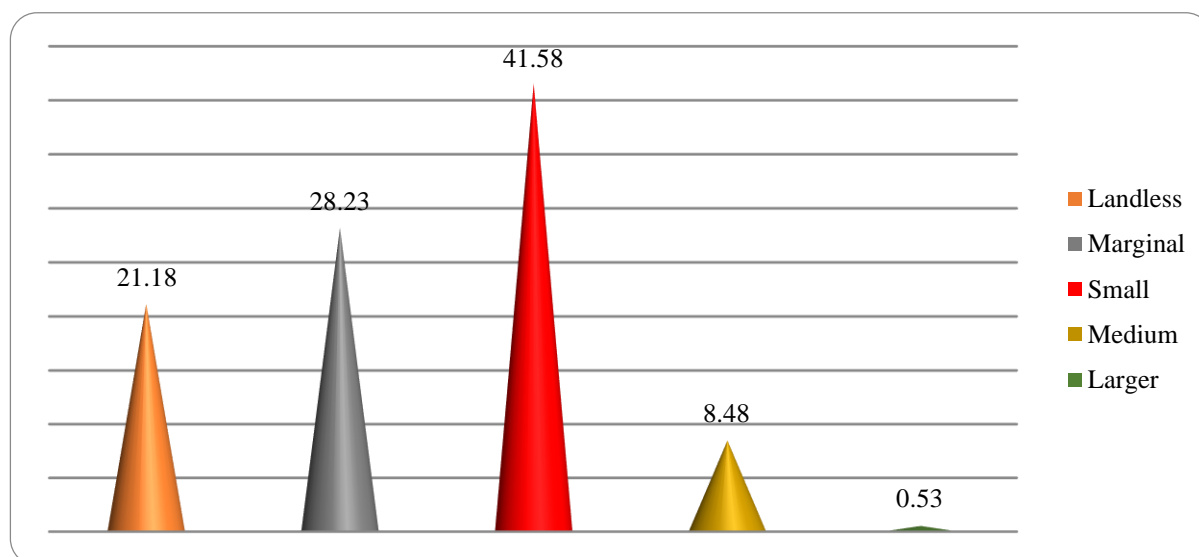
5.5 Sariakandi Upazila and Union Wise Farm Families

Farmers in Sariakandi Upazila lead their livelihood from agricultural activities. It is the major source of their employment and income. Sariakandi Upazila has 12 unions and 1 municipality. It has 20 agricultural blocks under DAE. It has 122 mauza and 207 villages. Farm family is categorized according to farmer holding own land. There are five categories of farm family in Bangladesh. These are: landless (0.05-0.50 acre land), marginal (0.51-1.50 acre land), small (1.51-2.50 acre land), medium (2.51-7.50 acre land) and larger (above 7.50 acre land). The present Union and category wise farm family under Sariakandi Upazila is shown in Table 5.1. On an average about land less 14036, marginal 18707, small 27556, medium large 5617 farm families and remaining 350 are larger farmers under Sariakandi Upazila. The major percentage of farm families are small farmers (42%) followed by marginal (28.00%), landless (21%), medium farmers (8%) and remaining are 1% larger farmers (Figure 5.1). Most of the farmers are small and marginal. With the increased number of population the pressure on land is decreasing day by day. As a result, the number of small, marginal and landless farm families is gradually increasing that create pressure on livelihood in the Upazila.

Table 5.1: Union and Category Wise Farm Family under Sariakandi Upazila

Name of Union	Landless (%) (0.05-0.50 acre)	Marginal (%) (0.51-1.50 acre)	Small (%) (1.51-2.50 acre)	Medium (%) (2.51-7.50 acre)	Larger (%) (above 7.50 acre)	Total
Bhelabari Union	567(15.51)	846(23.14)	2035 (55.68)	203(5.56)	4(0.14)	3655
Bohail Union	704(16.22)	1253(28.86)	1637(37.72)	693(15.96)	54(1.24)	4341
Chaluabari Union	420(13.64)	750(24.36)	1619(52.58)	280(9.09)	10(0.33)	3079
Chandan Baisha	1044(45.18)	513(22.20)	623(26.96)	117(5.06)	14(0.60)	2311
Fulbari Union	1908(20.01)	3131(32.83)	4208(44.12)	283 (2.97)	7(0.07)	9537
Hat Sherpur	850 (18.68)	1450(31.87)	1700(37.87)	550(12.09)	0(00)	4550
Kamalpur Union	435 (7.84)	1560(28.13)	3042(54.85)	495(8.93)	14(0.25)	5546
Karnibari Union	768(10.28)	1526(20.43)	3758(50.32)	1397(18.71)	19(0.26)	7468
Kazla Union	950(15.70)	1500(24.79)	2964(48.99)	436(7.21)	200(3.31)	6050
Kutubpur Union	1920(32.54)	1403(23.78)	1928(32.68)	644(10.91)	5(0.09)	5900
Narchi Union	410(9.01)	1065(23.41)	2652(58.29)	400(8.78)	23(0.51)	4550
Sariakandi Union	3203(44.85)	2735(38.29)	1100(15.40)	104(1.46)	0(00)	7142
Sariakandi Municipality	857(40.10)	975(45.63)	290(13.57)	15 (0.15)	0(00)	2137
Total	14036 (21.18)	18707 (28.23)	27556 (41.58)	5617 (8.48)	350 (0.53)	66266

Source: SAAOs and UAO Sariakandi Upazila, DAE 2016



Source: SAAOs and UAO Sariakandi Upazila

Figure 5.1: Percentage of Category wise Farm Family under Sariakandi Upazila

5.6 Present Upazila Land Use

The land of Sariakandi Upazila of Bogra district is intensively used for agriculture, settlements with homestead gardening, fish culture, dairy farm for milk production and other infra-structural developments. Diversified of cropping systems has been an important feature of the upazila. Farmers are harnessing their livelihood by producing multiple crops round the year. At the same time, the pressure of population on land and other natural resources along with rapid

urbanization is a major factor for changing land-use patterns rapidly which has adverse effect upon Upazila's agricultural land. However, there has been a positive change in adoption of modern technologies like high-yielding varieties of rice and other crops, irrigation and mechanized cultivation in this area. It is recognized that a change has taken place in production of different crops including fruit and vegetable in this region.

Sariakandi Upazila gets high potentials for its land and agricultural production. This upazila holds an important arena in Bogra district with her natural resources and ecosystem. The present different land utilized scenario under Sariakandi Upazila is shown in Table 5.2 major types of lands are 3850 ha high land, 11550 ha medium high land, 5420 ha medium low land and 2260ha low land and very low land 1420 ha respectively. This Upazila has no permanent fallow land.

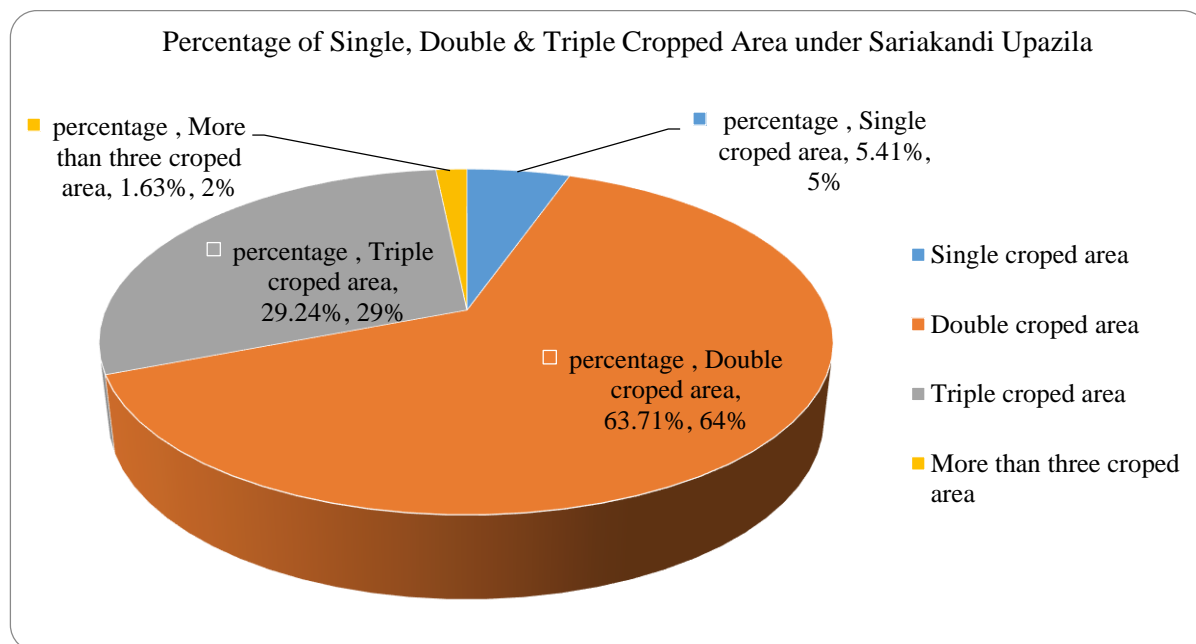
The soil P^H is 5.4---7.9 and soil texture is sandy/silt loam and silt clay loam K-bearing minerals medium (SRDI February 1997). This Upazila covers 24500 ha of net cropped area of which about cultivated area is 56640 ha. The highest land area is 15610 ha is used as double crop and followed by triple crop of 7165 ha and remaining 1325 ha is used as single crops and also 400ha used for more than three crops. Other land use for Forest 235 ha and Fish cultivation 13316 ha and housing 3252 ha purposes. About 90% land is covered by irrigation. Percentage of single, double and triple cropped area used in Sariakandi Upazila is shown in Figure 5.2. The highest percentage is double cropped area (63.71%) followed by triple cropped area (29.24%), single crop area (5.41%) and remaining land (1.63%) used as more than three crops under Sariakandi Upazila. The cropping intensity of Sariakandi Upazila is 231%.

Table 5.2: Present Land Used under Sariakandi Upazila

Sl. No	Upazila Land use	Total Area (ha)
1	Total Agricultural land	24500
2	High Land	3850
3	Medium high land	11550
4	Medium low land	5420
5	Low land	2260
6	Very Low land	14200
7	Net cropped area	24500
8	Single cropped area	1325
9	Double cropped area	15610
10	Triple cropped area	7165
11	More triple cropped area	400
13	Total cropped area	56640
14	Cropping Intensity (%)	231
15	Irrigated land area (%)	90
16	Forest area	235

Sl. No	Upazila Land use	Total Area (ha)
17	Housing	3252
18	Water land (River, Ponds and others)	13316

Source: UAO Sariakandi Upazila, DAE 2016



Source: UAO Sariakandi Upazila, DAE 2016

Figure 5.2: Percentage of Single, Double and Triple Cropped Area under Sariakandi Upazila

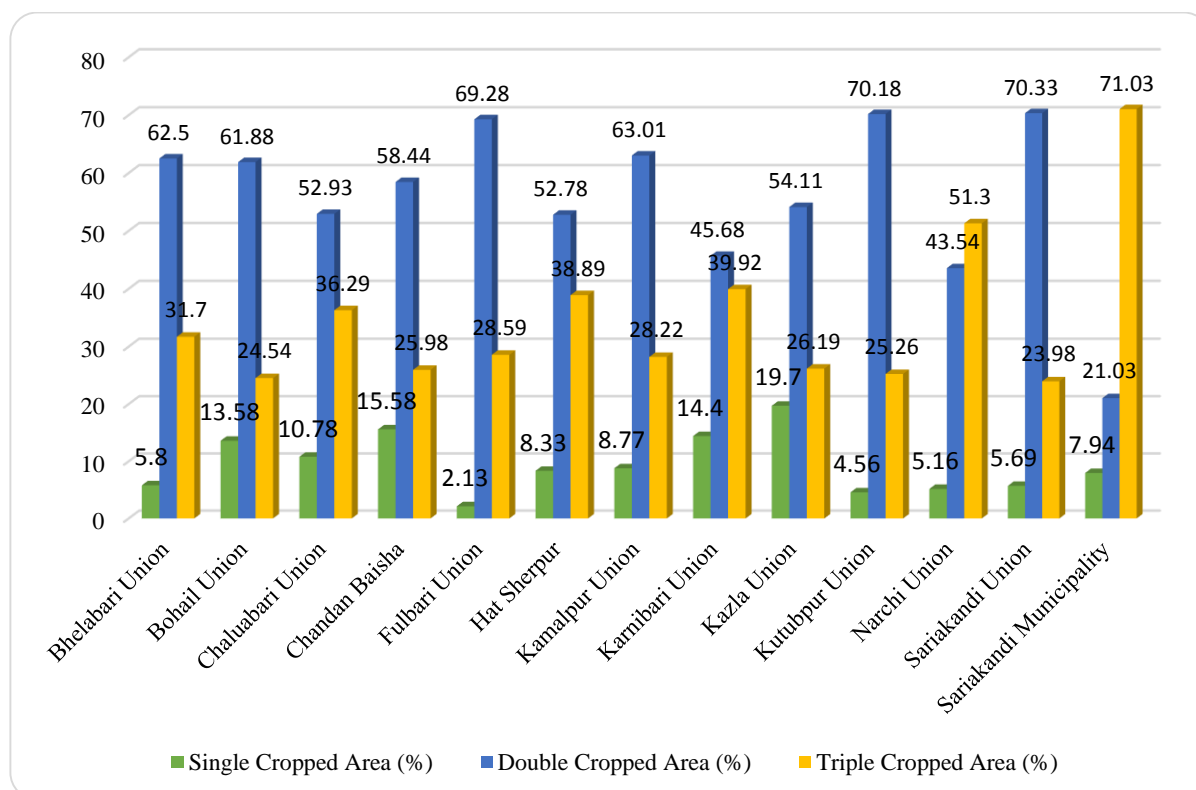
5.6.1 Single, Double and Triple Cultivated Cropped Area

Cultivation of single, double and triple crops depends on land seasonal flood inundation period. Single crops suitable for cultivated that land the seasonal flood inundation period is longer period. Triple crops cultivated that land above the seasonal flood level. All 12 Unions and 1 Municipality percentage of land used for single, double and triple crops under Sariakandi Upazila is shown in Figure 5.3. Figure 5.3 shows that highest percentage of single cropped area were used in Kazla Union (20%) followed by Chandan Baisha Union (16%) and Bohail Union (14%), Similarly, the highest percentage of double cropped area were used in Kutubpur Union (70%) and Sariakandi Sadar Union (70%) and Fulbari Union (69%). Further, highest land used for triple crops in Sariakandi Municipality (71%) followed by Narchi Union (51%) and Karnibari Union (40%) under Sariakandi Upazila. Union Wise Land Used of Single, Double and Triple Cropped Area and cropping intensities under Sariakandi Upazila is shown in Table 5.3.

Table 5.3: Municipality and Union wise Single, Double and Triple Cropped Area in Sariakandi Upazila

Name of Union	Present Land Used in ha (%)					
	Cultivated Area	Single Cropped Area	Double Cropped Area	Triple Cropped Area	Net Cropped Area (ha)	Cropping Intensity (%)
Bhelabari Union	2530	65(5.80)	700(62.50)	355(31.70)	1120	226
Bohail Union	8898	573(13.58)	2610(61.88)	1035(24.54)	4218	211
Chaluabari Union	5180	285(10.78)	1400(52.93)	960(36.29)	2645	196
Chandan Baisha	1640	120(15.58)	450(58.44)	200(25.98)	770	218
Fulbari Union	4651	42(2.13)	1364(69.28)	563(28.59)	1969	236
Hat Sherpur	4150	150(8.33)	950(52.78)	700(38.89)	1800	231
Kamalpur Union	4005	160(8.77)	1150(63.01)	515(28.22)	1825	219
Karnibari Union	6858	438(14.40)	1389(45.68)	1214(39.92)	3041	226
Kazla Union	9540	910(19.70)	2500(54.11)	1210(26.19)	4620	206
Kutubpur Union	3185	65(4.56)	1000(70.18)	360(25.26)	1425	224
Narchi Union	3441	81(5.16)	684(43.54)	806(51.30)	1571	219
Sariakandi Union	3833	100(5.69)	1235(70.33)	421(23.98)	1756	218
Sariakandi Municipality	563	17(7.94)	45(21.03)	152(71.03)	214	263

Source: SAAOs DAE under Sariakandi Upazila



Source: SAAOs DAE under Sariakandi Upazila

Figure 5.3: Municipality and Union wise Single, Double and Triple Cropped Area (%) in Sariakandi Upazila

5.6.2 Cropping Pattern

Cropping patterns has given idea about any area farmers which crops cultivated in their land. A cropping pattern is the yearly sequence and spatial arrangement of crops and fallow on a given area. Mixed farming involves the raising of crops, animals and trees. Multiple cropping is the growing of more than one crop on the same land in the period of a year, and sole cropping, or solid planting, is when one crop variety is grown at normal density, alone and in pure stands. The repeated growing of the same sole crop on the same land is monoculture, and crop rotation is the repetitive cultivation of an ordered succession of crops or crops and fallow on the same land.

Selection of crops and cropping patterns largely depends on the topographic position of land in relation to seasonal flood depth and its duration. Land types are the dominant factor guiding choice of crops and cropping patterns in Upazila as well as in the area. The term 'Cropping pattern' as it applies to the area of reclamation can be defined as the acreage distribution of different crops in any one year in a given farm area such as a water agency, or farm. Thus, a change in a cropping pattern from one year to the next can occur by changing the relative acreage of existing crops, and/or by introducing new crops, and/or by cropping existing crops'. Information that defines a cropping system consists of the number of crops on a given field per year including the accompanying cropping periods from sowing to maturity for each crop cycle and whether each crop is grown under rain fed or irrigated conditions.

Lands which are seasonal flooded inundation longer period can only possible to grown single crops in a year. Lands, which are above normal inundation level, can provide a wide range of opportunities for growing both of perennial and year round annual crops in the area. The scenario of present cropping pattern under Sariakandi Upazila is predominantly Boro (HYV/Hybrid) and T. Aman (HYV/LV) Rice, Jute, potato, Wheat, Maize, Vegetables, Oilseeds, Pulses, Spices (onion, chili), Groundnut and Fruits Garden based. Detailed Upazila cropping patterns by season are presented in Table 5.4. Study finding shows that 14 different cropping pattern are practiced by Sariakandi Upazila farmers. The present major cropping pattern area is Boro (HYV/Hybrid) → Fallow→T.Aman (HYV) which is practiced 31.84% of the Net Cultivable Area (NCA). Spices→ Fallow→ T.Aman is the cropping pattern covering about 21.02% of the NCA. Chili→Jute→Fallow is covering about 18.37 % of the NCA. Further, Wheat/Maize→ Fallow→T.Aman which is practiced about 4.90% of the Net Cultivable Area (NCA). Similarly Onion (HYV) →Jute→T.Aman which is practiced about 4.90 of the NCA. Potato/S.Potato→Boro (HYV/Hybrid) →T.Aman which is practiced 4.49% of the Net Cultivable Area (NCA). Winter vegetables cropping pattern covering about 2.24% of the NET Cultivable Area. Sariakandi Upazila land is very fertile and main crop is Boro (HYV/hybrid), T. Aman &

potato, Wheat, Maize, Jute, Onion, Chili and farmers also cultivated multiple crops such as vegetables, Mustard, Groundnut, Pulses and different fruits (Mango, Litchi, Papaya and Guava) production.

Table 5.4: Present Cropping Pattern under Sariakandi Upazila

Major Cropping Pattern			Area (ha)	Contribution %
Rabi	Kharif-1	Khari-2		
Boro (HYV/Hybrid)	Fallow	T. Aman (HYV)	7800	31.84
Boro (HYV/Hybrid)	Fallow	Fallow	345	1.41
Winter vegetables	Summer vegetables	T.Aman(HYV)	190	0.78
Winter vegetables	Fallow	T.Aman(HYV)	550	2.24
Mustard/groundnut	Boro (HYV/Hybrid)	T. Aman (LIV)	455	1.86
Pulses	Jute	T.Aman	375	1.53
Wheat/Maize	Fallow	T. Aman (HYV)	1200	4.90
Potato/S.potato	Boro (HYV/Hybrid)	T.Aman	1100	4.49
Onion	Jute	T.Aman	1200	4.90
Boro (HYV/Hybrid)	Jute	T.Aman(HYV)	800	3.27
Spices	Fallow	T.Aman	5150	21.02
Chili	Jute	Fallow	4500	18.37
Groundnut	Jute	Fallow	600	2.45
Fruits Garden (Orchard)	Fruits Garden (Orchard)	Fruits Garden (Orchard)	235	0.96
Total			24500	100.00

Source: SAOs and UAO Sariakandi Upazila, DAE 2016

5.6.3 Cropping Intensity

It has given utilization status of agricultural land and cultivation of crops. Cropping intensity depends on land type, seasonal flood inundation period, types of crops selection for cultivation and soil. It is Index refers to the changes in the cropping intensity of crop compared to a given base year. Cropping intensity is the number of times a crop is planted per year in a given agricultural area. It is the ratio of effective crop area harvested to the physical area. Cropping intensity is an important index of utilization of land. Crop intensity index assesses farmers actual land use in area and time relationship for each crop or group of crops compared to the total available land area and time, including land that is temporarily available for cultivation. It is calculated by summing the product of area and duration of each crop divided by the product of farmers total available cultivated land area and time periods plus the sum of the temporarily available land area. For a specific crop, the cropping intensity is the number of times that crop is grown in one year on the same field. It is distinguish single, double and triple cropping systems respectively.

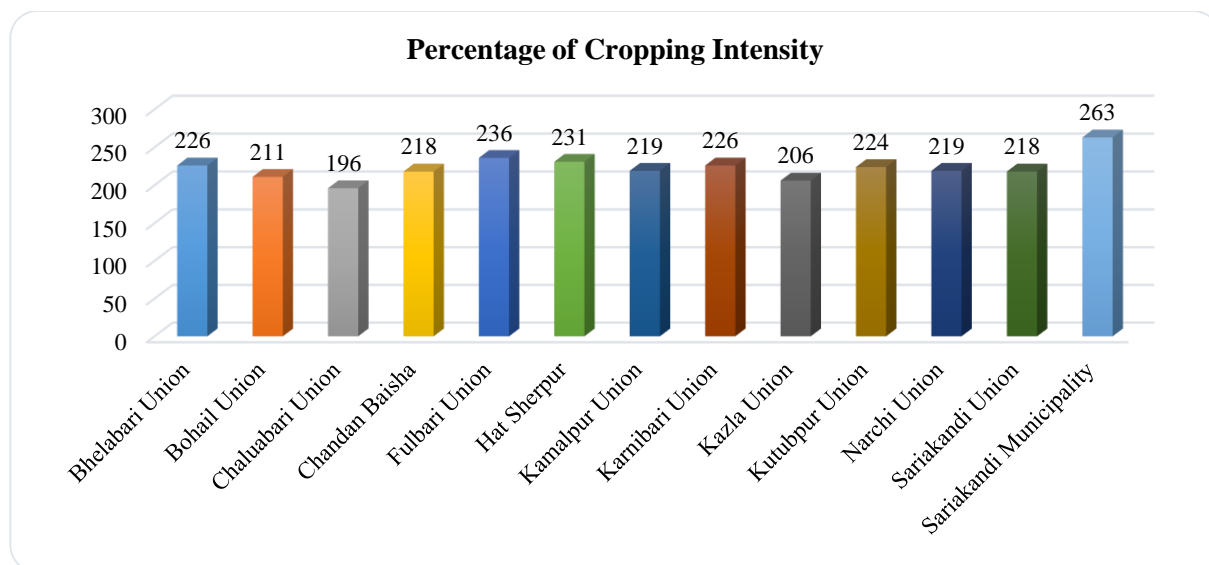


Figure 5.4: Union wise Cropping Intensities under Sariakandi Upazila

Farmers of Sariakandi Upazila are practiced multiple cropping patterns. The present Municipality (1) and Union wise (12 Unions) cropping intensity is shown in Figure 5.4. The average cropping intensity under Sariakandi Upazila is 228% which is higher than cropping intensity of 10 Unions and also less than 2 Unions and Municipality (Figure 5.4). The highest cropping intensities were achieved in Sariakandi Municipality (263%), Followed by Fulbari Union (236%) and Hat Sherpur Union (231%). The average cropping intensity under Sariakandi Upazila is 228% which is less than Bogra district (260%) and higher than national average cropping intensity (190%) (Krishi Diary 2016). It is clearly Figure 5.4 shows that all the 12 unions and 1 municipality under Sariakandi Upazila cropping intensities is higher than national average cropping intensity (190%).

5.6.4 Present Cropped Area

Cropped cultivated area depends on land types & soil fertility, crop variety and irrigation facilities and inputs availability etc. Major different crops cultivated under Sariakandi Upazila are Boro (HYV/Hybrid), T. Aman (HYV/LV) and T. Aus (HYV), Jute, Wheat, Maize, potato, mustard, groundnut, Chili, Onion, winter and summer vegetables, and pulses, and various fruits crops (Banana, Litchi, Mango, Papaya). Sariakandi Upazila present scenario of rice and non-rice cropped area, yield rate and production levels are shown in Table 5.5. The present total different cultivated cropped area is 46137 ha of which rice cropped area are 22470 ha and the rest 23667 ha is covered by non-rice crops. The rice and non-rice cropped area are about 49% and 51% respectively of the total cropped area. The highest land area was used for Boro (HYV/Hybrid), T. Aman (HYV) rice, Jute and Spices crops cultivation.

5.6.5 Present Crop Production

It is a food producing self-sufficient Upazila. Total 73733 mt foods produced per year under Sariakandi Upazila. Food requirement for this Upazila population is 44509mt and food surplus is 29224mt per year (UAO 2016). Crops higher yield depends on variety, soil types, balance use of fertilizer, pest's control, irrigation, weed and other management. Hybrid crops give higher yield in compared to HYV and local variety crops. Total crop production is 236999.8 metric tons of which rice production is 72943.4 metric tons and non-rice production is 164056.4 metric tons (Table 5.5). The rice and non-rice cropped production are about 31% and 69% respectively of the total cropped production. The highest contribution among the various crops was given by Boro (HYV) & T.Aman (HYV) rice and Jute and Spices (Table 5.5).

Table 5.5: Present Cultivated Area, Yield and Production under Sariakandi Upazila

Crop Grown	Crop area (ha)	Yield/ha (mt)	Production (mt)	Contribution (%)
T. Aus (HYV)	1850	2.82	5217	7.15
T. Aman (LV)	560	1.5	840	1.15
T. Aman (HYV)	10000	3.01	30100	41.26
Boro (HYV)	9910	3.64	36072.4	49.45
Boro (Hybrid)	150	4.76	714	0.98
Sub Total Rice	22470		72943.4	100.00
S. Vegetables	190	14	2660	1.62
W. vegetables	555	20	11100	6.77
Wheat	1740	1.95	3393	2.07
Maize	1695	7.5	12712.5	7.75
Jute	7970	9.52	75874.4	46.25
S.Potato	505	14	7070	4.31
Potato	745	11.5	8567.5	5.22
Onion	1430	8	11440	6.97
Spices	5150	4.22	21733	13.25
Oil seeds (Mustard, Til, Groundnut)	1790	1.1	1969	1.20
Pulses	1662	1	1662	1.01
Fruits (Orchard)	235	25	5875	3.58
Sub-Total	23667		164056.4	100.00
Total	46137		236999.8	

Source: SAAOs and UAO, Sariakandi Upazila, DAE 2016

5.7 Major Types of Crops Cultivated

- a. **Main Crops:** Rice and Wheat is a primary crop and a staple food of this area. Here the growth of rice production is much faster. Paddy (Boro rice (HYV/Hybrid), T. Aus (HYV) and T. Aman (HYV/LIV), Jute, Wheat, Maize, Vegetables, Mustard,

Groundnut, Spices (Onion, Chili) and Pulses etc. Jute, Onion and Chili are the main cash crops of this Upazila. It is an eco-friendly fiber. Jute cultivation requires less labor and less input. Despite the relative decline in importance of jute in agriculture, potential still exists for the fiber to increase its contribution to the economy through productivity increases and diversification. Farmers need to cultivate BJRI innovative variety of Jute such as HC-95, HS-14 for better yield. Yield increase, availability of better quality seeds, and improved provision of extension and credit support to grower's for this crop. Jute leaf is a common and favorable vegetable item to the farmer.

- b. Maize Cultivation:** Now-a day's Maize is very important cash crops in Bangladesh. Low risk in maize production is another privilege taken by farmers. Marginal and poor farm families are showing interest in maize cultivating. This is possible due to the adaption of modern maize varieties since production has been expanding fast. Its price, demand, and supply are increasing in domestic market. Pop-corn as an alternative food has been getting priority. It has diversified usages in small business and poultry feed production. Farmers can earn more by maize cultivation. For getting better yield farmers need to cultivate BARI Hybrid Bhuta-1, 8, 9, 10, 11 varieties. Lack of capital as well as high price of inputs is a barrier to its higher production.
- c. Potato:** It is widely commercially cultivated in winter with huge potential in Sariakandi area. The soil and climate conditions of Sariakandi area are favorable for potato production. Both potato and Sweet potato are grown under Sariakandi Upazila. It is one of the cash crops for Sariakandi farmers. Sunny land with cool and moisture in soil is appropriate for potato cultivation. Potato, a tuber crop, is cooked and eaten as a vegetable. In the context of nutrient, potato is comparable with rice and wheat. But unavailability of quality inputs (seeds, fertilizer and pesticide), lack of knowledge on proper cultivation techniques and finally low investment capacity of the farmers are some of the major challenges in potato farming.
- d. Oilseed Crops:** Farmers of Sariakandi Upazila generally cultivate mustard before Boro cultivation. Mustard, Groundnut and Til are popularly cultivated in Sariakandi Upazila. Mustard as an oilseed crops takes first place in respect of cultivated area in Bangladesh. Mustard oilcake is a nutritious food for cattle. This oilcake also used as organic fertilizer and the dry mustard plants can use as fuel.
- e. Vegetables:** The soil and climate conditions of 12 Unions and Municipality area are favorable for multiple vegetables production. Tomato, Sweet potato, Brinjal,, Radish, Cauliflower, Cabbage, Bean, Chili, Lalshakh, Loncho, Kolmi, Peas, Kochu, Bitter gourd, Pumpkins, Gourd, Rai Shakh, Ladies finger, Palong, Spinach, Cucumber etc.

Encouraging homestead level vegetables cultivation could be alternative source of household income generation. It is widely cultivated in winter with huge potential in Sariakandi Upazila. But unavailability of quality inputs (seeds, fertilizer and pesticide), lack of knowledge on proper cultivation techniques and finally low investment capacity of the farmers are some of the major challenges in vegetables production.

- f. Spices:** Chili, Turmeric, Ginger, Onion and Garlic etc. are the major spices crops. The soil and climate conditions of this Sariakandi area are favorable for Chili and Onion production.
- g. Fruits:** Mango, Jackfruit, Litchi, Banana, Coconut, Betel Nut, Country Goose Berry, Guava, Plum, Kul and Papaya etc. are grown in this Upazila. Many farmers were established commercial fruit garden of Mango, Litchi, Papaya and Guava etc.

5.8 Growth or Decline of Agricultural Land during Last Ten Years

The Sariakandi Upazila land in one hand is rich in both aquatic and terrestrial resources and on the other hand is vulnerable to natural and man-made hazards like river erosion, drainage congestion, deforestation and unplanned uses for housing and industries which are the main causes of land degradation, loss of biodiversity, human lives and properties. But the fact is that these valuable resources are now under threat due to over exploitation and unplanned uses for urbanization, human settlements, and infrastructural development and meeting with demands of the people. A census on land resources reported that everyday 220ha of arable land was converting for other uses like constructions of houses, roads, commerce and industries and for other non-agricultural activities, which is very alarming for the sustainability of land resources of our country (Banglapedia 2003). It is very important to know the present picture of agricultural land utilization for future development of sustainable plan in any area.

Quantification of various parameters in relation to land use and farming is really a very difficult task, specially, in Bangladesh where record keeping is poor either by an organization or by individual. Beside this difficulty in mind a sincere attempt has been made to collect land use last ten year data (2005 to 2015) from Upazila Agriculture Office and discussion with 1 Municipality and 12 Unions all Sub- Assistant Agriculture Officers of Sariakandi Upazila and review the other documents. The growth or decline of agricultural land use during last ten years under Sariakandi Upazila is shown in Figure 6 & Table 5.6. Table 5.6 finding shows 86% local variety rice was decreased during last ten years. The main reason for decreased local variety rice area due to yield is less in compared to HYV rice and farmers dictated to switchover cultivated HYV and Hybrid rice. The HYV/Hybrid paddy cultivation area 18% was increased. The reason for increased HYV rice cultivated area due to higher yield many farmers were

cultivated HYV and Hybrid rice. Remarkable significant highest changed or increased during 10 years was occurred in Pulses (343%) followed by Spices crops (287%) and winter vegetables (270%), Maize (183%) and oilseeds (178%) increased but highest decreased in local variety rice (-86%) followed by summer vegetables (-69). The main reasons for increases are produce crop market demand and price is high. Table 5.6 and Figure 5.5 shows, among the other purposes remarkable significant changed were occurred in poultry farm (150%) and followed by Brick field (43%), Housing (10%), Gardening (7%) and fish cultivation (2%) respectively. Study finding clearly indicated crop land day by day has gradually decreased which will be reflected on overall agriculture crop production.

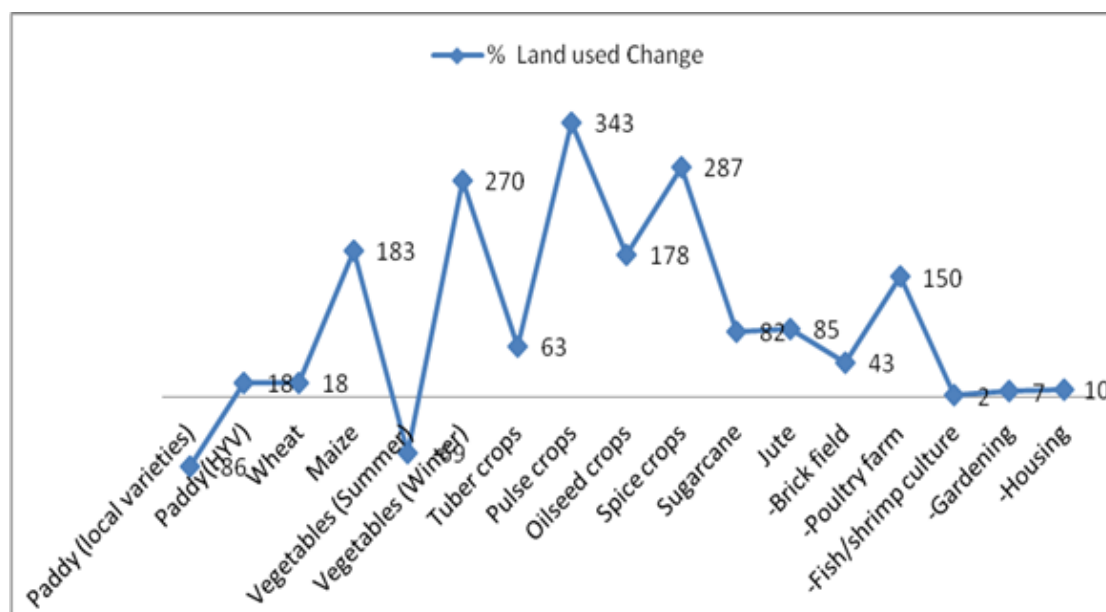


Figure 5.5: Percent Changed of land used from 2005-2015 under Sariakandi Upazila

Table 5.6: Growth or Decline Agriculture Land Use during the Last 10 Year

Sl. No.	Agricultural land use	Land Use (2005) in ha	Land Use (2015) in ha	% Land used Change
1	Paddy (local varieties)	5065	710	-85.98
2	Paddy (HYV)	18515	21910	18.34
3	Wheat	800	944	18
4	Maize	600	1695	182.5
5	Vegetables (Summer)	620	190	-69.35
6	Vegetables (Winter)	150	555	270
7	Tuber crops	1185	1935	63.29
8	Pulse crops	375	1662	343.2
9	Oilseed crops	645	1790	177.52
10	Spice crops	1330	5150	287.22
11	Sugarcane	17	31	82.35

Sl. No.	Agricultural land use	Land Use (2005) in ha	Land Use (2015) in ha	% Land used Change
12	Jute	4300	7970	85.35
13	Other purposes			
	Brick field	21	30	42.86
	Poultry farm	4	10	150
	Fish/shrimp culture	13000	13316	2.43
	Gardening	220	235	6.82
	Housing	2950	3252	10.24

Source: SAAOs, UAO, ULO, UFO and Upazila Statistic Office of Sariakandi Upazila 2016

5.9 Major Problems of Crop Production in Sariakandi Upazila (12 Unions and 1 Municipality)

Agriculture survey findings and Participatory Rural Appraisal (PRA) September 2016 study report findings show among farmers some problems are common in different unions under Sariakandi Upazila such as flood, water logging, drought, bad communication and unavailability of wholesale market and insufficient infrastructure. Major problems are:

- i. Sudden flood damaged crops;
- ii. Water logging;
- iii. Drought and irregular rainfall;
- iv. River erosion;
- v. Kutcha all irrigation drainage system and wastage of irrigation water;
- vi. Misuse of irrigation water due to excessive setup of STW;
- vii. Most of old canals and river silted;
- viii. Less availability of quality HYV seeds;
- ix. Lack of seed store;
- x. Insect pests, diseases and weeds problem;
- xi. Lack of cold storage and vegetable cool-chamber;
- xii. Lack of vegetables and fruits market infrastructure;
- xiii. Less availability of power tiller/tractor, harvester and foot pump and high price;
- xiv. Kutcha road and damaged;
- xv. Lack of transport facilities;
- xvi. Lack labor during planting and harvesting crops and wage rate is high;
- xvii. Low market price of agricultural commodities;

- xviii. Farmers lack of modern technological knowledge;
- xix. Disturbance of electricity supply during Boro season;
- xx. There is no agro processing center and industries under Unions level;
- xxi. Poor use of organic matter and soil nutrients deficiency;
- xxii. Agricultural land decreasing due to human intervention of unplanned infrastructural development activities.

5.10 Summary of Informal Sector Agricultural Economic Survey

Fertile land type and ecological conditions are suitable for different vegetables, and fruits crops and other high value crops cultivation round the year in Sariakandi Upazila. Chili and onion are important cash crops in this Upazila. There is a need to develop vegetables & fruits wholesale market and improvement of road communication system different Unions to Upazila. Farmers need improve modern crop production technological training which will be helpful for crop diversification and proper utilization land and increase crop production. For improvement of irrigation facilities kutchra drain are to be made lined channel which will reduced irrigation water wastage and increase crop production. Integrated pest management need to implement for Banana, Papaya, orchard and vegetable cultivation and reduce the pesticide use. Electricity power supply should be ensured during Boro crop season. Construction of potato and vegetables and fruits processing, grading and packaging industry/facility need to be developed under each Union. Increase agriculture production through optimum use of land. Many high value crop vegetables are grown in this Upazila. There is wide opportunity to Mango and litchi, Maize, Jute and vegetables as commercial basis to export. Construction of embankment with sluice gates and drainage system which will be protected crops from early and sudden flood.

CHAPTER SIX: POLICY FRAMEWORK AND CONCLUSIONS

6.1 PRA Survey Findings on Economic Issues

6.1.1 PRA Objectives

To involve the local people in the planning process by letting the local people identify their own problems and potentials, development needs (issues-options) and planning priorities for next 20 years. To match PRA findings matching with technical analysis of different sector findings, particularly for spatial analysis and GIS mapping, and to supplement other data sources. To make participants' sense of ownership of the project and its activities towards realizing participatory planning approach.

6.1.2 Identification of Problems and Potentials/Economic Issues

Major Problems and potentials were identified through Venn diagram. For Sariakandi the major problems is the lack of utility services, poor communication system and broken road, lack of educational infrastructure, lack of industrialization and lack of adequate number of organized hat-bazar.

On the other hand, main potentials factors is the availability of hardworking and skilled/semi-skilled man power manpower, sufficient raw materials(Brick-Sand, Wood etc.), growing trend of industrialization and credit facilities, availability of agricultural land and role of NGOs in the local development.

For Sariakandi Paurashava, main problems were poor communication system and broken road, lack of proper drainage system, lack of amenities i.e. water supply, waste dumping site, lack of educational infrastructure, load shedding and lack of supply in electricity and lack of gas connection.

On the other hand, main potentials were availability of agricultural land, availability of demesne land, hardworking man power, government initiatives, Role of NGOs in the development process.

6.1.3 Development Priorities

Participants identified prioritized development issues for 20 years and categorized it into three categories, respectively- short term, mid-term and long term. Development priorities were identified through ToP. For Sariakandi Upazila, participants identified improving livelihood facilities as key areas. They also mentioned about improvement on amenities and credit facilities.

For Sariakandi Paurashava participants identified almost same priorities as Sariakandi Upazila. They added the initiatives of promoting poultry & fisheries culture, promotion of dairy industry, prevention of load shedding, new gas and electricity connection etc.

6.1.4 Discussion

Core issues raised from PRA were kind of similar in both areas. The only difference found due to geographic position and rural-urban format. Key issues covered the areas of livelihood, communication, agricultural and education. Interestingly, these issues are equally applicable for rest of the country. The findings of PRA effectively reflected participants or community voice.

In view of above core issues expressed by surveyed people of Sariakandi Upazila, is essentially to be given utmost importance for formulation of policy-strategy and options development of 20 years (2016-2036) Development Plan of the Study area in line with achieving the target of Middle Income Group Country as well sustainable development goal.

6.2 Survey Findings on Formal-Informal Issues

6.2.1 Formal Sector

- ✓ Numbers of 10 hat/bazar/markets were surveyed in the study area.
- ✓ Waste management system is not satisfactory. 60 percent of the waste is dumped in the adjacent fallow land.
- ✓ Hat/Bazar/Markets are managed and conducted by Market Committee, Leaseholders, Upazila Parishad, and Personal Property Owners.
- ✓ No Hat/Bazar/Markets have piped Water Supply,
- ✓ 80 percent have Electricity Connections.

6.2.2 Banks and Bimas

- ✓ Total surveyed nos. of Banks working are 5 and total nos. of Insurance Company working is 5.
- ✓ Banks' service coverage in percentages are Agriculture (83.24%), and nonagricultural loan (16.76%).
- ✓ Total numbers of Bank account holders are 42,462 nos.
- ✓ In the nonagricultural loan the due/arrear loan is amounting to BDT 8 Lakh.
- ✓ Total Agricultural loan disbursed by the Banks in the Study is amounting to BDT 119.7 Lakh.

6.2.3 NGOs and CBOs

- ✓ 6 Nos. NGOs are surveyed in the study area.
- ✓ Different types of services includes Loan services, Good seeds distribution, Training on land fertility, Public awareness building.
- ✓ Four types of Target groups of CBO/NGO and they are Lower Income Group (33.33%), Beneficiary for Particular Characteristics 33.33%), Business Group (16.66%), Lower Class professional Group (16.66%).

6.2.4 Industries

- ✓ 11 industries were interviewed/consulted in the study area. Highest no. of Industries belongs to Tailoring Shops with 19.34% and Furniture making with 18.42%. Other than this two industries the other industries has a share near around 10% more or less.
- ✓ Out of 11 nos. of industries, 4 nos. (36%) from Personal savings, 2 nos. (18%) from inheritance of property source, 4 nos. (36%) from Family Savings and Bank loan source, 1 nos. (09%) is loan from relatives.
- ✓ Male-Female ratio at Sariakandi Upazila within the industrial labor is Male 62% against female 38%.
- ✓ Transport used for marketing are: Van, Push Cart, Nosimon, Rickshaw Small Pickups, Bus, Truck, and Pickup. Within the local markets Van, Push art, Rickshaw and Small Pickup is being used. Most popular is the Van and push cart. On the other hand for nationwide domestic supply Bus, Truck, Pickup is being used for the transport. Which transport will be used depends on the amount of order and location of the market.
- ✓ 64% (7 nos) industries have the EIA clearance from the Department of Environment (DoE) and 36% (4 nos) do not take the clearance.
- ✓ Problems of industries – infrastructure, bad transportation system, Bureaucratic complexity, Insufficiency of Skilled Worker, Lack of Capital & Insufficiency of Loan.

6.2.5 Informal Sector Survey Findings

- ✓ In the study area, 40 traders in informal sector traders were interviewed.
- ✓ Types of informal traders were interviewed\had talk with: Betel-nut sellers, crockery seller, fish sellers, fruit sellers, garments sellers, hawkers, raw materials sellers, shoe sellers, small business and vegetable sellers etc.
- ✓ Out of this 40 samples 26 (65%) informed that they do the business only in monsoon, 14 (35%) says that they do the business all the year round.
- ✓ Informal sector traded goods 67.5% are consumed by low class group, 30% by lower middle class group and 2.5% are consumed by higher middle class group.

- ✓ Main problems faced by the informal sector traders' adverse in terms of market space utilization are weather, structural problems, police harassment and eviction panic.

6.3 Agricultural Survey Findings on Economic Issues

Sariakandi Upazila falls into 2 Agro-ecological zones of the Upazila are: a) Karatoya-Bangali Floodplain AEZ-4 and b) Active Brahmaputra-Jamuna Flood plain AEZ-7 (BARC1997) with 4048.82 acre khas land.

- The major percentage of farm families are small farmers (42%) followed by marginal (28.00%), landless (21%), medium farmers (8%) and remaining are 1% larger farmers
- The highest percentage is double cropped area (63.71%) followed by triple cropped area (29.24%), single crop area (5.41%) and remaining land (1.63%) used as more than three crops under Sariakandi Upazila.
- Sariakandi Upazila present major cropping pattern are:
 1. Boro (HYV/Hybrid) → Fallow→T.Aman (HYV) which is practiced 31.84% of the Net Cultivable Area (NCA).
 2. Spices→ Fallow→ T.Aman is the cropping pattern covering about 21.02% of the NCA.
 3. Chili→Jute→Fallow is covering about 18.37 % of the NCA.
 4. Wheat/Maize→ Fallow→ T.Aman which is practiced about 4.90% of the Net Cultivable Area (NCA).
- Total crop production is 236999.8 metric tons of which rice production is 72943.4 metric tons and non-rice production is 164056.4 metric tons.

The major problems identified are: sudden flood and water logging, less availability of quality different HYV crop seeds, and River erosion, and siltation of canals and river, and Kutcha drainage system, Indiscriminate use of water by setting up irrigation pump, Lack of seed store for high value crops, Lack of cold storage and vegetable cool-chamber, Lack of vegetables and fruits whole sale market infrastructure, Less availability of agriculture machineries (power tiller/tractor, harvester, sprayer and foot pump) and high price.

CHAPTER SEVEN: RECOMMENDATIONS

7.1 Recommendations

Socio-economic survey report reveals that Sariakandi Upazila is in Bogra district and the study area does not have gas connection and limited electricity connections. So, its potential for establishing agro-based small and medium enterprises (SME) has not been fully utilized.

PRA report reveals that agricultural land in the study area is fertile and land is available for further expansion of modern agricultural activities applying modern integrated farming system.

PRA Participants have identified and prioritized development issues for the next 20 years and categorized it into three categories, (1) Short Term, (2) Medium Term and (3) Long Term. Development priorities were identified through ToP. For these developments, necessary measures for improvement of transportation, broken road, waste management, load shedding, etc. should be taken into consideration which will pave the way for enabling environment for rapid urbanization and industrialization consistent with proposed Fourteen Upazilas Development Plan.

They also mentioned about preventing river erosion, gas and electricity connection etc. Necessary steps/actions should be taken for the above identified problems as the short, medium and long-term basis depending on the urgency of the issues.

Policy recommendations for accelerating the Upazila Urbanization process would be to take up utilities providing services project within medium term basis (by 10 years' time horizon) e.g. Electricity, Gas and water supply connections and along with provision of adequate extension.

Skilled manpower and managerial/administrative staff should be increased for strong monitoring and supervision system of the urban Physical and social infrastructures and this initiative will accelerate and strengthen the urbanization process of Upazila Development Plan Project.

For urban expansion, small towns and cities require to be connected with high ways by flyovers and over bridges, since further encroach of agricultural land for urban use or human settlements are discouraged as national policy.

It is inevitable that enforce stringent regulatory regimes including enforcement of strict land-use regulations and different relevant laws, maintenance of law and order by different government agencies and judicious use of different fiscal measures (VAT, Taxes, different duties and surcharges) would help harmonious growth of urbanization in the study area.

7.2 Conclusions

All formal-informal sector survey data is collected for preparation of Sonatala Upazila Development Plan. The Development Plan will identify strategic programs on the basis of survey findings (Stakeholders' perspective) for all relevant sectors and sub-sectors. It is expected that future detailed plan will be formulated in line with this 20 years strategic plan and implemented by different sectoral agencies during next 20 years' time horizon.

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Annexure-I: Sample Questionnaires



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

গৃহায়ন ও গণপূর্ত মন্ত্রণালয়

নগর উন্নয়ন অধিদপ্তর

প্রিপারেশন অফ ডেভেলপমেন্ট প্ল্যান ফর ফরটিন উপজেলাস প্রকল্প, প্যাকেজ নং-৪

আনুষ্ঠানিক অর্থনৈতিক কর্মকাণ্ড জরিপ প্রশ্নমালা (সি.বি.ও)

পরামর্শক প্রতিষ্ঠান: মডার্ন ইঞ্জিনিয়ার্স প্ল্যানার্স এ্যান্ড কনসালট্যান্টস্ লিঃ

প্রশ্নমালা নংঃ জরিপের তারিখঃ সময়ঃ

তথ্য প্রদানকারীর নাম :

(শুধুমাত্র দাপ্তরিক কাজের জন্য)

তথ্য লিপিবদ্ধকারীর নাম ও স্বাক্ষরঃ

তারিখ :

.....

তথ্য নিরীক্ষকের নাম ও স্বাক্ষরঃ

তারিখ :

.....

☐

সকল তথ্য নেয়া হয়েছে

☐

অসম্পূর্ণ

১. সি. বি. ও (কমিউনিটি বেইজড অর্গানাইজেশন)

১.১ সি.বি.ও.-র নাম :

১.২ সি.বি.ও.-র ঠিকানা :

১.৩ প্রতিষ্ঠানের কর্মকাণ্ড পরিচালনার ব্যাপ্তি (কোড) :

কোড ১.৩ : প্রতিষ্ঠানের কর্মকাণ্ড পরিচালনার ব্যাপ্তি

১. সারাদেশ	২. সিটি কর্পোরেশন এলাকা	৩. ওয়ার্ড ভিত্তিক
৪. গ্রাম ভিত্তিক	৫. স্বল্প আয় শ্রেণির জন্য	৬. বিভাগ ভিত্তিক
৭. জেলা ভিত্তিক	৮. অন্যান্য	

১.৪ সেবার ধরন (কোড) :

কোড ১.৪ : সেবার ধরন

১. বিভিন্ন ট্রেডে প্রশিক্ষণ	২. উন্নত বীজ সরবরাহ	৩. সামাজিক বনায়নে উদ্বুদ্ধকরণ
৪. তামাক প্রক্রিয়াজাতকরণ	৫. পানির আর্সেনিক দূরীকরণ বা সতর্কীকরণ	৬. চারাগাছ বিতরণ
৭. ঋণ প্রদান	৮. ভূমির উর্বরতা হ্রাস ও প্রতিকার বিষয়ে প্রশিক্ষণ	৯. বিভিন্ন জনগুরুত্বপূর্ণ বিষয়ে জনসচেনতা সৃষ্টি
১০. অন্যান্য :		

১.৫ কর্মকাণ্ডের সুবিধাভোগী শ্রেণি কোড :

কোড ১.৫ : সুবিধাভোগী শ্রেণি

১. নিম্ন আয়ের জনসাধারণ	২. পেশা ভিত্তিক জনগোষ্ঠী	৩. ইস্যুভিত্তিক সুবিধাভোগী
৪. বিশেষ বৈশিষ্ট্য এলাকাভিত্তিক সুবিধাভোগী	৫. অন্যান্য	

১.৬ সমিতির মোট সদস্য সংখ্যা : জন

তথ্য প্রদানের জন্য ধন্যবাদ



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

গৃহায়ন ও গণপূর্ত মন্ত্রণালয়

নগর উন্নয়ন অধিদপ্তর

প্রিপারেশন অফ ডেভেলপমেন্ট প্ল্যান ফর ফরটিন উপজেলাস প্রকল্প, প্যাকেজ নং-৪

আনুষ্ঠানিক অর্থনৈতিক কর্মকান্ড জরিপ প্রশ্নমালা (ব্যাংক ও বীমা)

পরামর্শক প্রতিষ্ঠান: মডার্ন ইঞ্জিনিয়ার্স প্ল্যানার্স এ্যান্ড কনসালট্যান্টস্ লিঃ

প্রশ্নমালা নংঃ জরিপের তারিখঃ সময়ঃ

সাক্ষাৎকার গ্রহণকারীর নামঃ সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর :

(শুধুমাত্র দাপ্তরিক কাজের জন্য)

তথ্য প্রদানকারীর নাম :

তথ্য নিরীক্ষকের নাম ও স্বাক্ষরঃ তারিখ :.....

☐ সকল তথ্য নেয়া হয়েছে

☐ অসম্পূর্ণ

১.১ প্রতিষ্ঠানের ধরন : ☐ ব্যাংক ☐ বীমা

১.২ প্রতিষ্ঠানের নাম ও ঠিকানা :
.....
.....

২. ব্যাংক

২.১ সেবা প্রদানের খাত (কোড) :

কোড ১.২ : সেবার খাত

১. সাধারণ ব্যাংকিং	২. বৈদেশিক বাণিজ্য	৩. এস.এম.ই ব্যাংকিং	৪. মোবাইল ব্যাংকিং	৫. ই-ব্যাংকিং
৬. চলতি মূলধন ঋণ	৭. শিল্প ঋণ	৮. কৃষি ঋণ	৯. প্রকল্প ঋণ	১০. অন্যান্য

২.২ মোট গ্রাহক সংখ্যাঃ

৩. বীমা

৩.১ সেবা প্রদানের খাত (কোড) :

কোড ১.২ : সেবার খাত

১. সাধারণ বীমা	২. জীবন বীমা	৩. যানবাহন বীমা	৪. স্বাস্থ্য বীমা	৫. গৃহ বীমা
৬. শস্যঝুঁকি বীমা	৭. অগ্নি বীমা	৮. গবাদি পশু বীমা	৯. দৃষ্টি বীমা	১০. নৌ-বীমা
১১. শ্রম বীমা	১২. শিক্ষা বীমা	১৩. ঝুঁকি বীমা	১৪. অন্যান্য:.....	

৩.২ মোট গ্রাহক সংখ্যাঃ

তথ্য প্রদানের জন্য ধন্যবাদ



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

গৃহায়ন ও গণপূর্ত মন্ত্রণালয়

নগর উন্নয়ন অধিদপ্তর

প্রিপারেশন অফ ডেভেলপমেন্ট প্ল্যান ফর ফরটিন উপজেলাস প্রকল্প, প্যাকেজ নং-৪

আনুষ্ঠানিক অর্থনৈতিক কর্মকাণ্ড জরিপ প্রশ্নমালা (মার্কেট/কাঁচা বাজার/হাট)

পরামর্শক প্রতিষ্ঠান: মডার্ন ইঞ্জিনিয়ার্স প্ল্যানার্স এ্যান্ড কনসালট্যান্টস্ লিঃ

প্রশ্নমালা নংঃ জরিপের তারিখঃ সময়ঃ.....

তথ্য প্রদানকারীর নাম :

(শুধুমাত্র দাপ্তরিক কাজের জন্য)

সাক্ষাৎকার গ্রহণকারীর নাম ও মোবাইল নম্বর :

সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর :

তথ্য নিরীক্ষকের নাম ও স্বাক্ষর :

☐

সকল তথ্য নেয়া হয়েছে

☐

অসম্পূর্ণ

১. মার্কেট/কাঁচা বাজার/হাট

১.১ মার্কেট/হাট/বাজারের নামঃ

১.২ এই মার্কেট/হাট/বাজার কোন সংস্থার কর্তৃত্বাধীন (কোড) :

কোড ১.২ : মালিকানা

১. ব্যক্তি মালিকানাধীন	২. উপজেলা পরিষদ	৩. স্থানীয় সরকার প্রকৌশল বিভাগ	৪. সিটি কর্পোরেশন
৫. সমবায় সমিতি	৬. জেলা পরিষদ	৭. অন্য কোন সরকারি প্রতিষ্ঠান	৮. অন্যান্য

১.৩ এই মার্কেট/হাট/বাজার কিভাবে পরিচালিত হয়? (কোড) :

কোড ১.৩ : পরিচালনার ধরন

১. সমিতির মাধ্যমে	২. উপজেলা পরিষদ কর্তৃক সরাসরি	৩. ইজারাদার কর্তৃক
৪. মালিক কর্তৃক	৫. সিটি কর্পোরেশন কর্তৃক সরাসরি	৬. অন্যান্য

১.৪ ইজারাদার দ্বারা পরিচালিত হলে বর্তমান অর্থ বছরে ইজারার পরিমাণ : টাঃ

১.৫ মার্কেট/হাট/বাজারের আয়তন : একর/বিঘা

১.৬ মার্কেট/হাট/বাজারে কত সংখ্যক দোকান আছে?

১.৭ কত ধরনের ব্যবসা হয় এই মার্কেট/বাজার বা হাটে? (সম্ভব হলে পাশে দোকানের সংখ্যা লিখুন)

মুদি দোকান	ক্রোকোরি সামগ্রী	মাংস বিক্রির দোকান
ষ্টেশনারি দোকান	হাড়ি-পাতিলের দোকান	গরু/ছাগলের হাট
কনফেকসনারি দোকান	সেলুন	প্লাস্টিক আসবাব ও সামগ্রী
মোবাইল বিক্রয় ও মেরামত	সজির বাজার	মাইক ভাড়া
মোবাইল কার্ড ও ফ্লেক্সিলোড	মাছের বাজার	সি আই সিট
ঘড়ি ও ইলেক্ট্রনিক্স সামগ্রী	চাপকল ও এর যন্ত্রাংশ	কামারের দোকান
জুতার দোকান	স্যালো ইঞ্জিন মেরামত	রেস্তুরা
তৈরি পোষাকের দোকান	হার্ডওয়্যার সামগ্রী	পাইপের দোকান
কাপড়ের দোকান	স্যানিটারি সামগ্রী	নির্মাণ সামগ্রী
দর্জি দোকান	মটর সাইকেল মেরামত	স্বর্ণের দোকান
সিমেন্ট	রড	অন্যান্য

১.৭ (ক) হাট বসার ধরন (কোড) :

কোড ১.৭(ক) : হাট বসার ধরন

১. দৈনিক	২. সাপ্তাহিক	৩. সপ্তাহে দুই/তিন দিন
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১.৭ (খ) বাজার বসার ধরন (কোড) :

কোড ১.৭(খ) : বাজার বসার ধরন

১. দৈনিক	২. সকাল	৩. সন্ধ্যা
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১.৭ (গ) এই মার্কেট/হাট/বাজার এর বিদ্যুৎ সরবরাহঃ

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১.৭ (ঘ) এই মার্কেট/হাট/বাজার এর খাবার পানি সরবরাহ (কোড) :

কোড ১.৭(ঘ) : খাবার পানি সরবরাহ

১. টিউবওয়েল	২. পুকুর	৩. সিটি কর্পোরেশনের পাইপ লাইন	৪. সরবরাহ নাই
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১.৭ (ঙ) এই মার্কেট/হাট/বাজার এর গণ শৌচাগার ব্যবস্থা (কোড) :

কোড ১.৭(ঙ) : গণ শৌচাগার ব্যবস্থা

১. স্যানিটারী টয়লেট	২. পিট ল্যাট্রিন	৩. ব্যবস্থা নাই
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১.৮ এই মার্কেটে মাসিক লেন-দেনের পরিমাণ?

১.৯ মাসে কি পরিমাণ ভাড়া বা টোল আদায় হয়?

১.১০ বর্জ্য অপসারণের দায়িত্ব কার? (কোড) :

কোড ১.১০ : বর্জ্য অপসারণকারী

১. ইজারাদার	২. দোকানদার মালিক সমিতি	৩. সিটি কর্পোরেশন	৪. মার্কেট/হাট/বাজার কমিটি
৫. দোকানের মালিক	৬. বেসরকারি সাহায্যসংস্থা	৭. জেলা পরিষদ	৮. অন্যান্য :

১.১১ কিভাবে বর্জ্য অপসারিত হয় (কোড) :

কোড ১.১১ : বর্জ্য অপসারণের মাধ্যম

১. নিজস্ব লোক দ্বারা	২. নিজস্ব ভ্যানে করে	৩. কমিউনিটি ভ্যানে করে
৪. বেসরকারি সংস্থার ভ্যানে করে	৫. বেসরকারি সংস্থার ট্রাকে করে	৬. সিটি কর্পোরেশনের গাড়িতে
৭. বর্জ্য অপসারণের ব্যবস্থা নেই	৮. অন্যান্য :	

১.১২ কোথায় বর্জ্য ফেলা হয় (কোড) :

কোড ১.১২ : বর্জ্য ফেলার স্থান

১. নিকটস্থ ডাষ্টবিনে	২. বর্জ্য ফেলার নির্দিষ্ট স্থানে	৩. রাস্তার পার্শ্বে	৪. নিচু/পতিত জমিতে
৫. নদীতে বা খালে	৬. অন্যান্য :		

১.১৩ মার্কেট/হাট বাজারে/যাতায়াতের ব্যবস্থা (কোড) :

কোড ১.১৩ : যাতায়াত ব্যবস্থা

১. রাস্তা	২. নৌ পথ	৩. রাস্তা নেই	৪. অন্যান্য :
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১.১৪ আপনার প্রতিষ্ঠানের নিম্নবর্ণিত প্রতিবেদন থাকলে সরবরাহ করার অনুরোধ করা হলো :

- বাৎসরিক প্রতিবেদন
- মার্কেটের লে আউটপ্ল্যান
- পরিবেশ সংক্রান্ত প্রতিবেদন
- প্রতিষ্ঠান পরিচালনার বাজেট
- প্রতিষ্ঠানের উন্নয়ন, ট্রেনিং বা কর্মকর্তা কর্মচারীদের গুণগত মান উন্নয়নের জন্য নীতিমালা

- ভূমি উন্নয়ন, পানি নিষ্কাশন, পয়নিষ্কাশন, পরিবহন সংক্রান্ত প্রতিবেদন

১.১৫ পরিচালনা কমিটি/সমিতির বক্তব্য

১.১৫.১ মার্কেট/হাট-বাজার ব্যস্থাপনায় কোন সমস্যা থাকলে উল্লেখ করুন :

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১.১৫.২ সমস্যা উত্তরণের সম্ভাব্য সমাধান বা দিক নির্দেশনামূলক কিছু বলুন :

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তথ্য প্রদানের জন্য ধন্যবাদ



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

গৃহায়ন ও গণপূর্ত মন্ত্রণালয়

নগর উন্নয়ন অধিদপ্তর

প্রিপারেশন অফ ডেভেলপমেন্ট প্ল্যান ফর ফরটিন উপজেলাস প্রকল্প, প্যাকেজ নং-৪

আনুষ্ঠানিক অর্থনৈতিক কর্মকাণ্ড জরিপ প্রশ্নমালা (এন.জি.ও.)

পরামর্শক প্রতিষ্ঠান: মডার্ন ইঞ্জিনিয়ার্স প্ল্যানার্স এ্যান্ড কনসালট্যান্টস্ লিঃ

প্রশ্নমালা নংঃ জরিপের তারিখঃ সময়ঃ

তথ্য প্রদানকারীর নাম :

(শুধুমাত্র দাপ্তরিক কাজের জন্য)

সাক্ষাৎকার গ্রহণকারীর নামঃ সাক্ষাৎকার

গ্রহণকারীর স্বাক্ষর ও
.....

তথ্য নিরীক্ষকের নাম ও
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সকল তথ্য নেয়া হয়েছে

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অসম্পূর্ণ

১. এন.জি.ও. (নন গভমেন্ট অর্গানাইজেশন)

১.১ এন.জি.ও.-র নাম :

১.২ এন.জি.ও.-র ঠিকানা :

১.৩ প্রতিষ্ঠানের কর্মকাণ্ড পরিচালনার ব্যাপ্তি (কোড) :

কোড ১.৩ : প্রতিষ্ঠানের কর্মকাণ্ড পরিচালনার ব্যাপ্তি

১. সারাদেশ	২. সিটি কর্পোরেশন এলাকা	৩. ওয়ার্ড ভিত্তিক
৪. গ্রাম ভিত্তিক	৫. স্বল্প আয় শ্রেণির জন্য	৬. বিভাগ ভিত্তিক
৭. জেলা ভিত্তিক	৮. অন্যান্য	

১.৪ সেবার ধরন (কোড) :

কোড ১.৪ : সেবার ধরন

১. বিভিন্ন ট্রেডে প্রশিক্ষণ	২. উন্নত বীজ সরবরাহ	৩. সামাজিক বনায়নে উদ্বুদ্ধকরণ
৪. তামাক প্রক্রিয়াজাতকরণ	৫. পানির আর্সেনিক দূরীকরণ বা সতর্কীকরণ	৬. চারাগাছ বিতরণ
৭. ঋণ প্রদান	৮. ভূমির উর্বরতা হ্রাস ও প্রতিকার বিষয়ে প্রশিক্ষণ	৯. বিভিন্ন জনগুরুত্বপূর্ণ বিষয়ে জনসচেনতা সৃষ্টি
১০. অন্যান্য :		

১.৫ কর্মকাণ্ডের সুবিধাভোগী শ্রেণি

কোড ১.৫ : সুবিধাভোগী শ্রেণি

১. নিম্ন আয়ের জনসাধারণ	২. পেশা ভিত্তিক জনগোষ্ঠী	৩. ইস্যুভিত্তিক সুবিধাভোগী
৪. বিশেষ বৈশিষ্ট্য এলাকাভিত্তিক সুবিধাভোগী	৫. অন্যান্য	

১.৬ সমিতির মোট সদস্য সংখ্যা : জন

১.৭ গ্রাহক কর্তৃক মোট বাতসরিক প্রিমিয়াম গ্রহণের পরিমাণ : টাকা

১.৮ গ্রাহককে টাকা সরবরাহ করার পরিমাণ (বাতসরিক) : টাকা

১.৯ গ্রাহকদের সংখ্যা (পুরুষ : মহিলা) : জন

তথ্য প্রদানের জন্য ধন্যবাদ

Annexure-II: Some Photographs of Collecting Data during Field Survey



Training session



Informal Activities



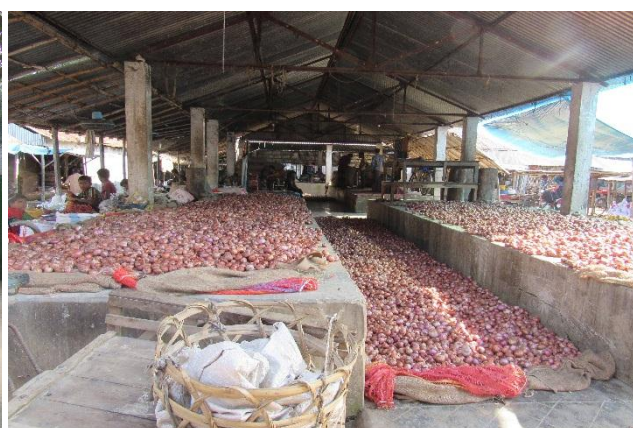
Kutchra Bazar



Wood Industry



Formal Activities



Sariakandi Bazar