Chapter 4

Setting and Social Ecology

In social science research, to perceive and interpret accurately, the data obtained, a clear concept of the people and their surroundings of the concerned area of study, should be understand. And research setting is indispensible to frame, to know the interactions and interrelations of various components regarding the particular topic. So, a study on perception of the farm women about the issues demands a local, natural background, demography of the area, crop ecology, institutional set up, health and educational aspects and the culture. A socio-demographic background of the local people in a rural setting has been critically presented in this chapter.

The present study was done at **Boinchigram** village, at **Bantika-Boinchi** gram panchayat, at **Pandua** Block in **HOOGHLY** district of **West Bengal**.

A brief description the Hooghly district in general and the block and village in particular:

4.1. Area of Study

The area of study is located in the state of West Bengal which is in eastern part of India. West Bengal is enriched with a unique socio-cultural background having a balanced ecology as well. These influence the lives of the dwellers in many ways. The Pandua block of Hooghly district of West Bengal has been selected for this purpose. The village Boinchigram is opted as the area of study.

Occupational Hazards and Farm Women: Agony and Understanding

4.1.1. West Bengal: At a glance

West Bengal is located on the eastern part of India stretching from the Himalayas in the north to the Bay of Bengal in the south. Being the nation's most fourth populous state, over 91 million people reside in this state with the population density of 1, 029/Km2 being 13th in terms of area and is divided into 20 districts. WB has a total area of 88, 752 square kilometres (34, 267sq.mile). It is bounded by Sikkim and Bhutan on the north Nepal on the North-west, Assam on the east, by Bihar, Jharkhand and Orissa on the west and by Bay of Bengal on the south.

WB is a major agricultural producer and the sixth-largest contributor. It is noted for its cultures and customs having a number of famous cultural and educational institutions. Capital city Kolkata is known as " cultural capital of India ". The state has a varied and enriched heritage from famous novelists to intellectual film-makers and artists, folk to Rabindrasangeet. It is the state having a good number of Nobel laureates from Rabindranath Tagore, Mother Teresa to Amartya Sen and the Oscar winner personality Satyajit Ray. West Bengal is also the admirer of the games football and cricket.

4.1.1.1. Geography

West Bengal is surrounded by three countries viz. Nepal, Bhutan and Bangladesh and five Indian states Sikkim, Bihar, Jharkhand, Orissa and Assam. Sikkim and Bhutan are located at the north of the state, Nepal at the northwest side, Bihar, Jharkhand and Chhattishgarh at the west, Odisha at the southwest, the Bay of Bengal at the south, and Bangladesh and Assam are at the east. West Bengal is the only state of India that has both the Himalayas in the north and the Bay of Bengal at the south. In between them, the river Ganges enters the state from west, before it branches off into its main distributaries: The Hooghly River, which flows southwards to reach the Bay of Bengal, and the Padma River, which flows eastwards into Bangladesh.

The districts that are located at the north of the Ganges—Darjeeling, Jalpaiguri, Cooch Behar, Malda, North Dinajpur, South Dinajpur and Alipurduar—are often referred to collectively as 'North Bengal'.

Occupational Hazards and Farm Women: Agony and Understanding

Geographically, this area is divided into the Darjeeling Himalayan hill region, the Terai and Doors region, and the North Bengalplains. The Siliguri Corridor, also known as' Chicken's Neck', which connects North-EastIndia with rest of the India.

The districts situated on the south side of the Ganges—Bankura, Bardhaman, Birbhum, Purulia, Murshidabad, Nadia, West Midnapore, East Midnapore, Hooghly, Howrah, Kolkata,

North 24 Parganas and South 24 Parganas—The Rarh region intervenes between the Ganges delta in the east and the western plateau and the high lands. A small coastal region resides on the extreme south while the Sundarbans mangrove forest form geographical region of Ganges Delta. Kolkata, the capital of the state, constitutes the Kolkata district.

4.1.1.2. Climate of the State

The climate of West Bengal varies from tropical savanna in the southern parts to humid subtropical in the north side. The main seasons are summer, rainy season, a short autumn and a moderately cold winter. While the summer in the delta region is noted for excessive humidity, the western highlands experience a dry summer like northern India, with the highest day temperature ranging from 38 °C to 45 °C . At nights, a cool breeze carries moisture from the Bay of Bengal in the monsoon days. In early summer brief squalls and thunderstorms known as 'Kalbaisakhi', or 'Nor' westers', often occur.

Monsoons bring rain to the whole state from June to September. Heavy rainfall of above 250cm is observed in the Darjeeling, Jalpaiguri and Cooch Behar district. During the arrival of the monsoons, low pressure in the Bay of Bengal region often leads to the occurrence of storms in the coastal areas. Winter (December to January) is mild over the plains with average minimum temperatures of 15 °C. Acold and dry northern wind blows in the winter, substantially lowering the humidity level. The Darjeeling Himalayan Hill region experiences a harsh winter, with occasional snowfall at some places.

Occupational Hazards and Farm Women: Agony and Understanding

4.1.1.3. Demographic information of West Bengal -

1. Name of the State: West Bengal

2. State Capital: Kolkata

3. Geographical Area: 88752 Sq. Kms.

4. Population (As per 2011 Census): 91, 347, 736

a) Male: 46, 927, 389

b) Female: 44, 420, 347

c) Density of Population per sq. Km: 1028 persons

d) Decennial Population: + 13.93 percent Growth 2010-11.

e) Sex ratio (Male per 1000): 950

f) Sex ratio (Female per 1000): 940

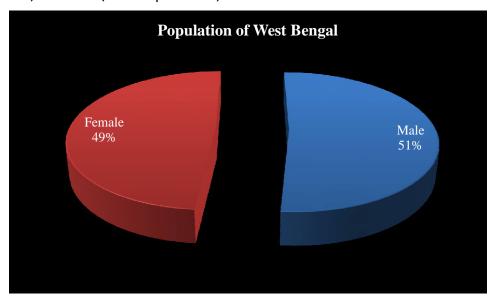


Fig. 4.1.1.3.1: Population of west Bengal

5. Literacy (percent): 76.26 a) Male: 81.64 b) Female: 77.02

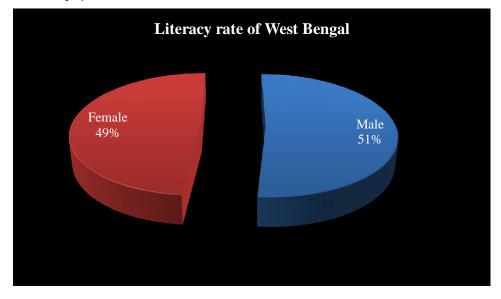


Fig. 4.1.1.3.2: Literacy rate of West Bengal

- 6. Percentage of working: 36.78 To total population
- 7. Urbanization ratio (Census-2011): 38.09 % (India-31.36%)
- 8. Administrative Set up:
- a) No. of districts: 20
- b) No. of Sub-divisions: 72
- c) No. of Development Blocks: 341
- d) Municipal Corporation: 6
- e) No. of Municipal towns: 120
- f) No. of non-Municipal towns: 256
- g) No. of Mouzas: 40782
- h) No. of Gram Panchayats: 3354
- i) No. of Panchayat Samities: 333

Occupational Hazards and Farm Women: Agony and Understanding

k) No. of inhabited villages: 37946

I) No. of Police Stations: 719

m) Villages Electrified: 83.60%

9. Major Cities: Kolkata, Siliguri, Burdwan, Haldia Durgapur, Kharagpur, Darjeeling

10.

- a) Net area sown (2012-13): 5256 Th. Hectares
- b) Total area under forest: 1173669 Hectares (as on 31st March, 2013)
- 11. Name of important forest product: Timber, Fire-wood, Bamboo Kendu leave various types of Phyto-chemical plants.
- 12. Principal minerals produced in: China clay, Coal, the State Limestone Tungsten, Fire-clay dolomite, etc.
- 13. Natural Resources: The soil is almost ideal for Vegetation, Sal and Mahogany trees abound in all parts; paddy, jute, sugarcane and pulses are among the cash crops. Apart from large deposits of coal, limestone, dolomite, granite and china clay, some zinc, copper, pyrites, lead and iron ore is mined.
- 14. Agriculture: Paddy, Wheat, Pulses, Rapeseed, Mustard, Jute, Mesta, Sugarcane, Tobacco, Potato, Chilies, Ginger, Barley, Tea.
- 15. Ports: Calcutta Port, Haldia Port
- 16. Aviation: i) NetajiSubhas Chandra Bose International Airport at Dum Dum, ii) KaziNazrul Islam domestic airport (A project under BAPL), at Andal, Durgapur, Dist.-Burdwan iii) Bagdogra Airport iv) Airport at Coochbehar.
- 17. Power: Thermal Power Station at Santhaldihi, Bandel, Kola-ghat, Titagarh, Disergarh, Durgapur Project Ltd., Durgapur Unit of DVC Hydro-electric power station at Jaldhaka and Masanjore.
- 18. Total No. of Bank Branches: 7427 (as on 31st March., 2015)

Occupational Hazards and Farm Women: Agony and Understanding

Table 4.1.1.4: Land Utilization status of West Bengal

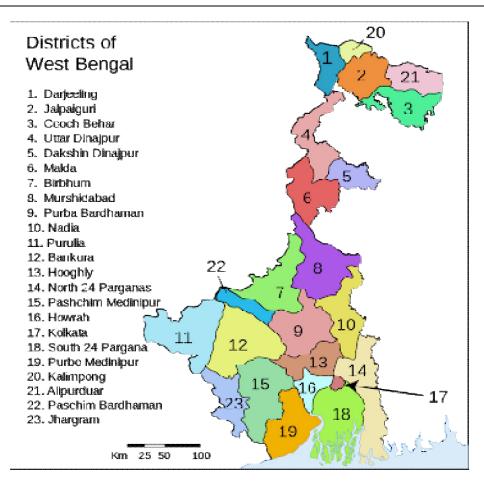
Particulars Particulars	2007-08	2007-08
	'000 ha	Percentage (%)
Geographical Area	8875.2	
Net Sown Area	5295.8	61.0
Forest Area	1173.7	13.5
Area under Non-Agricultural use	1761.9	20.3
Barren and Uncultivable Land	21.5	0.2
Permanent Pasture and other Grazing Land	6.1	0.1
Land under Misc. use	61.3	0.7
Cultivable Waste Land	32.9	0.4
Fallow other than Current Fallow	20.2	0.2
Current Fallow	310.8	3.6

4.1.1.5. Agriculture Scenario of West Bengal-

West Bengal contributes nearly 3 % of the nation's cultivable land and about 8% of the country's population. This state produces more than 8 of the total food of India Here, the average size of holding is less than 1 ha. The cropping intensity of this state has increased from 131 to 162 % in last two decades. WB has achieved an all time record in food grain production and ranked 1st in case production of rice in the country. Remarkable achievement has also noticed in last one decade in oilseeds production from 0.24 to 0.55 million tonnes. The state produces 28% of total potato (2nd) grown in India. West Bengal also produces more than 60% of the nation's jute fiber.

Occupational Hazards and Farm Women: Agony and Understanding

176



Map. 4.1.1.1: District Map of West Bengal

4.1.2. A Brief description of the district: Hooghly

Hooghly is one of the central districts of West Bengal extending between 20°30′32″ and 23°1′20″ of North latitude and between 87°30′20″ and 88°30′15″ East longitude.

The district Hooghly had derived its name from the town of Hooghly on the west bank of the river Hooghly about 40 km north of Kolkata. This town was a river port in the 15th century.

The district has thousands of years of rich cultural and demographic heritage from the time of the king Bhurshut. The first European reached in

Occupational Hazards and Farm Women: Agony and Understanding

this region was the great Portuguese sailor Vasco da Gama. In 1553, the Portuguese traders had got a permit from sultan to trade in this area and within a few decades the town of Hooghly turned into a most important commercial zone and the largest port of west Bengal. In 1599, the Portuguese traders established a convent and the famous 'Bandel church', the first Christian church in Bengal. Among other European powers Dutch traders concentrated their activities in the town Chuchura and Chandannagar became the base centre of the French. Then the era of British rule was started. In 1690, Job Charnock decided to shift the British trading centre from Hooghly-Chin surah to Calcutta. As a result, the centre of gravity of trade and commerce in the Bengal province shifted from the town of Hooghly to Calcutta and the district lost its importance as Calcutta prospered. But, the monuments, the buildings, the stories have kept the history alive, till now.

4.1.2.1. Location

Hooghly is one of the central district of West Bengal. The district of Hooghly extends between 20°30′32″ (right of the Rupnarayan river and 23°1′20″ (Guptipara Char on the Bhagirathi river) of North latitude and between 87°30′20″(Tiluri village of the Goghat P.S and 88°30′15″ (Bhabanipur Char on the Bhagirathi river) East longitude. Hooghly district surrounded by Burdawn & Bankura in the north side, Howrah district in the south, 24 Parganas (N) & Nadia district in the east side and Madinipur (W) at west side. Inspite of the fact that, Hooghly is one of the most important industrial districts of West Bengal with numerous factories flanking the Bhagirathi, but its basic rural characteristics still remains where not less then 70% of its total population depends on Agriculture. Two types of soil constitute this district viz. (1) Gangetic Alluvium soil, (2) Vindhya Alluvium soil.

4.1.2.2. Climate

The average annual rainfall of the district varies from 1200 mm to 1700 mm. The span of winter is not prolonged as compared to other North and South Eastern States. The average minimum temperature varies from 15° - 20° C and maximum temperature varies from 28° - 35° C. The cold spell prevails during Mid of November to mid of February. Since subtropical humid climate prevail in this district, humidity is a major concern as far as

Occupational Hazards and Farm Women: Agony and Understanding

infestations of pest and diseases are concerned on agricultural crops. The General Climatic features of the District have been presented in the Table

4.1.2.3. Soil

As this district lies in Gangetic alluvial plains the predominant group of soil is sandy loam to loamy soils covering area of 32.0% and 48.0% cultivated of total area respectively.

Clay soil persists in 8% area and clay loam in 12.0% area of the total cultivated areas. As far as problem is concerned flood is the major problem in Balagarh of AES-I and Arambagh subdivisions of ASE-II area. The general features of the soils of this district has been represented in the Table

4.1.2.4. Economy

Hooghly is one of the most economically developed districts of West Bengal. This district is the main region of jute cultivation, jute industry and jute trade hub in the state. The jute mills are situated along the banks of the Hooghly river in Bhadreswar, Champdani, Tribeni and Sreerampur.

Being an industrially advanced, the district also retains its basic rural characteristics with over 70% of its total population depending on Agriculture and its position as one of the major producers of cereals in the State.

There are a number of industrial complexes including one of the largest car manufacturing industry in India, the 'Hindustan Motors' in Hindmotor.

It was also the home to the greatest Singur Tata Nano controversy. It is very sad to state that most of the jute factories are closed and remaining are not in good condition and Hindustan Motor plant was also closed from a long years ago. But, Bandel Thermal plant and Tribeni Tissue factory (ITC) are running smoothly.

Occupational Hazards and Farm Women: Agony and Understanding



Map.4.1.2.1.Map of Hooghly district

4.1.2.5. Agriculture scenario

Although Hooghly is industrially advanced district, but it also retains its basic rural characteristics with over 70% of its total population depending on Agriculture and its position as one of the major producers of cereals in the State.

 With highly fertile alluvial soils, well developed irrigation infrastructure, the district can safely be called as an agriculturally advanced district.
 The cropping intensity in the district is high at 241% facilitated by

Occupational Hazards and Farm Women: Agony and Understanding

strong irrigation infrastructure and the productivity levels are higher than State/National averages for select crops.

- The benefits of intensive agriculture, however is confined to a few crops especially rice and potato and to an extent vegetables.
- The local demand for other produce from agriculture & allied sectors viz., pulses, oilseeds, fruits, vegetables, milk & meat products and fish far exceeds the production despite available opportunities for localized production
- The need is for a reorientation of the development process towards a balanced growth of both agriculture and allied sectors through judicious use of land, water and human resources.

4.1.2.6. Land Utilization

The total geological area of this District is 314900 ha of which 2188717 ha (69.5%) is under cultivation.

Out of the total area under cultivation 62% area is covered by irrigation. There are lower DVC projects in the district. The main source of irrigation is ground water. According to Agricultural Censes 2000 - 2001 there are 3, 32, 008 no of farming families of which 38, 309nos. belongs to marginal category, 8, 377 nos. belongs to small category, 10331 nos. Belongs medium category and rest 15 nos. belongs to big farmers category. Since more than 95% of land belongs to small and marginal farmers and average size of land holdings ranges from 0.66ha it becomes difficult for application of advanced technology in farmers field. Paddy is the major crop of this district which covers an area of 80% of the total cultivated area of the district during kharif. Other major crops are vegetables, Oilseeds, Wheat & pulses. The major cropping pattern of the District is Til/Jute/ Aus/ Veg-Kharif Paddy Veg- / Oilseeds/ Pulses/ Boro Paddy. Due to high dependence on chemical fertilizer and unscientific cropping system, continuous puddling of soil, soil fertility is deteriorating day by day. On the other hand contamination of chemicals on all agricultural produce and living organism is a serious concern. In order to overcome this problems State Department of Agriculture has introduced several programmes like, Organic farming, Bio-village, Soil Health

Occupational Hazards and Farm Women: Agony and Understanding

Management etc. and massive training programmesat different levels with the small and marginal farmers. The main problems which hinder development of farming in this District are small landholdings, resurgence of insect pest, poor marketing facilities and on and often natural calamities like drought, flood, hailstorm and heavy population pressure on land etc. In order to minimize such constraints some measures have already been taken by the State Govt. The ground water resource of the most blocks of this district has been overexploited and ground water level is declining day by day. Depletion of ground water table is really a serious problem to supply of water for drinking and for any agricultural production. As a result major emphasis has been given on rain water harvesting for which several schemes have been introduced.

Table 4.1.2.7: Number of persons engaged in agriculture in the blocks of Hooghly for the year 2010-11

Sl.	Block	Bargadar	patta holder	small farmers	marginal famers	Agril.labourers	

1	Dhaniakhali	11620	7900	2598	18532	59377
2	Pandua	9075	8349	15841	28635	56576
3	Balagarh	5378	7886	2718	5121	30894
4	Chinsurah- Mogra	1808	2390	841	2870	9169
5	Polba- Dadpur	8201	7072	2551	8820	50642
6	Tarakeswar	6943	3157	77184	77164	20557
7	Haripal	8834	4277	7500	10548	33654
8	Singur	3025	1123	776	20264	15584

Occupational Hazards and Farm Women: Agony and Understanding

9	Jangipara	9508	3654	13579	32096	27812
10	Chanditala-					
11	Chanditala-	5649	1607	920	2042	11382
	II	1188	244	1650	5800	514
12	Serampur - Uttarpara	796	189	180	3350	2685
13	Goghat-I	4079	8292	2030	670	18144
14	Goghat-II	6817	10247	4755	1585	22327
15	Arambagh	7119	5132	4450	13350	29227
16	Khanakul-I	13193	1963	2417	29208	20519
17	Khanakul-II	9941	1659	897	18445	17933
18	Pursurah	4276	1185	2358	14223	14190

4.1.2.8. Vision

Transformation of the district, which at present juncture forms an integral part of the "Rice Bowl" of the State, into the "food bowl" through sustainable development of food crops, fruits and vegetables by bringing about 15000 ha of additional areas under pulses, oilseeds, and vegetables through crop diversification, Soil health management through crop rotation, INM (Integrated Nutrient Management) with balanced fertilizers, organic and biofertilisers.

- Optimum use of ground water resources with appropriate irrigation management practices, crop and technology options like SRI
- Productivity enhancement through effective extension and input support mechanism
- Greater emphasis on development of allied sectors horticulture crops, more specifically vegetables, dairy, poultry, fisheries sector to meet the ever increasing demand
- Facilitate development of food processing industries especially, for vegetables, potato and milk by increasing the production base catering to processing industries 'requirements.

4.1.2.9: Table General info of Hooghly district (Census 2011 data)

Particulars	Information/ data
1. Area	3, 149 km2 (1, 216 sq m)
2.Total population	5, 520, 389
3.Male	2814653
4.Female	2704492
5.Sex ratio	961
6.Population density	1, 800/km2 (4, 500 / sq.m)
7.Population growth rate	9.49 %
8. Average literacy rate	81.80 %
9.Male literacy rate	87.03%
10.Female literacy rate	76.36%
11.Proportion to WB population	6.05%
12.Sub-divisions	4
13.Police station	23
14.CD Blocks	18
15.Gram Panchayat	210

Occupational Hazards and Farm Women: Agony and Understanding

16.Municipalities	12
17.District Headquarter	Hooghly-Chinsurah
18.Major highways	NH 2, NH 6, Grand Trunk Road
19. Average annual precipitation	1, 500 mm

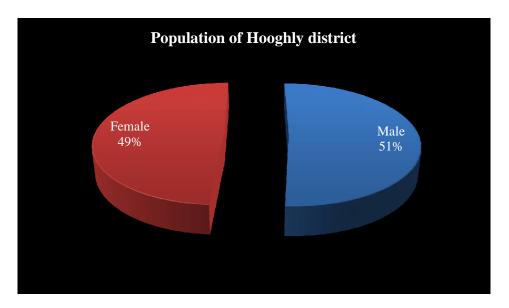


Fig. 4.1.2.9.1: Population of Hooghly District

Table 4.1.2.10: Educational facilities of Hooghly district

Type of institutions	Total number of institutions
1.Primary schools	2992
2.High schools	408
3. Higher secondary schools	127
4.Colleges	22
5.Technical institutes	6

Occupational Hazards and Farm Women: Agony and Understanding

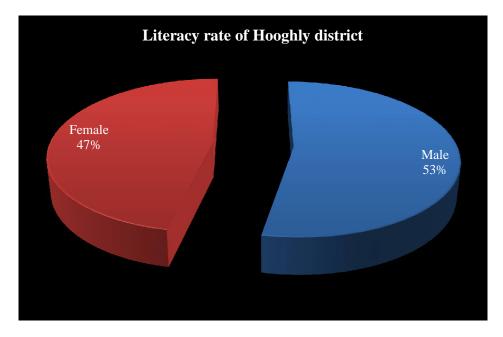


Fig. 4.1.2.10.1: Literacy rate of Hooghly District

4.1.3. Profile of Pandua Block

Pandua is a Community Development block. It forms an administrative section of Chinsurah subdivision of Hooghly district in the Indian state of west Bengal.

This block is a part of Hooghly-DamodarPlain, one of the three natural regions in the district of the flat alluvial plains that forms part of the Gangetic Delta. The region has many depressions which receive water from the surrounding lands during the rainy season and discharge the water through small channels.

4.1.3.1. Geography

Pandua is located at 23°05'N 88°17'E. Pandua is block is surrounded by Kalna 2 block in Burdwan district and in the north side Balagarh and Chinsurah-mogra block in the east, Polbadadpur CD block in south and Dhaniakhali and Memari 1 block (burdwan district) in the west side.

Occupational Hazards and Farm Women: Agony and Understanding



The block is located 27 km from Chinsurah (district HQ).

Map.4.1.3.1. Map of Pandua block

4.1.3.2 Weather and climate

In Pandua block, the weather is hot in summer. Summer days temperature is in between 29 to 39°C. Average temperatures of January is 17°C, in February 22°C, March is 28°C, April 30°C and in May it is 31°C and likewise.

4.1.3.3. Economy

The economy of this Pandua block is largely depends on agriculture. Main agricultural products are rice, potato, vegetables, jute and some orchards.

Occupational Hazards and Farm Women: Agony and Understanding

There are a good number of cold storages for potato. And some fishery activities are also done in this block. Besides, some zariworks, chikon embroidery, silk and cotton printing on saree are done in this block.

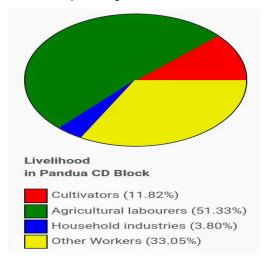


Fig. 4.1.3.3.1: Livelihood pattern in Pandua Block (Source:Google)

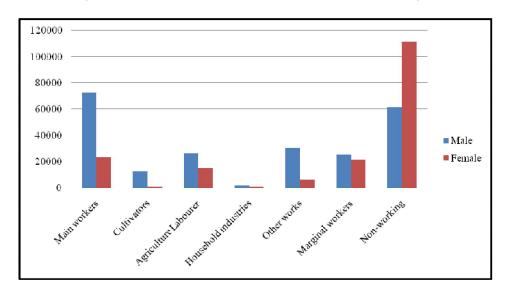


Fig. 4.3.3.2: Proportion of male-female in livelihood pattern in Pandua block (Source: computed from the Goggle data)

Occupational Hazards and Farm Women: Agony and Understanding

4.1.3.4 Agro-ecology of the Pandua block

Panduablock is blessed with a rich agriculture. There are a good number of cold storage. Though rice is the prime crop of the district, the agricultural economy of this area is largely dependent on potato, jute, vegetables and orchard products. Though potato is cultivated in maximum of the blocks viz. Dhaniakhali, Arambagh, Goghat, Pursurah, Haripal, Polba- Dadpur, Tarakeswar, Pandua and Singur contribute much of its production.

Some of the primary and other markets in this block are at Boinchi, Khanyan, Pandua and Simlagarh.

Fertilizer Depots: 127

• Seed Stores: 54

Fair price shops: 61

Table 4.1.3.5. Irrigation Status (2013-14)

Total area irrigated: 29, 092 ha

Type of irrigation	Area under irrigation (ha)
Canal water	15, 175
Tank water	1, 850
River lift irrigation	860
Deep tube wells	4, 040
Shallow tube wells	7, 167

Table 4.1.3.6: Land ownership pattern(2013-14)

Ownership types	Percentage
Bargadars	7.73%
Patta holders	7.29%
Small farmers	3.07%
Marginal farmers	19.4%
Agricultural labourers	62.51%

Occupational Hazards and Farm Women: Agony and Understanding

Table 4.1.3.7: Crop Production Status of Pandua Block (Average production from 2006-07 to 2013-14)

Type of crop	Name of crop	Area in ha	Production in / ha
1.Cereals -a	Aus paddy	1252.75	4.6mt
b	Aman paddy(Hy)	20933.625	4.6mt
С	Amon(local)	55.25	3.5mt
d	Aman hybrid	9.12	0.3mt
е	Boro paddy	6487.625	5mt
f	Wheat	191.625	2.5mt
2.Pulses- a	Kalai	9.25	300kg
b	Arhar	2	250kg
С	Gram	4.25	380kg
d	Lentil	8	360kg
е	Motor	14.75	1100kg
f	Khesari	4.5	353.5 kg
g	Moong	6.5	375.62 kg
3.Cash crop-a	Jute	11.75	2528.125
b	Potato	8264.625	27.191kg
4.Vegetables-a	B/vegetables	426	57.8 mt
b	W/vegetables	584.5	10.8mt
Type of crop	Name of crop	Area in ha	Production in / ha
C	Onion	12.75	
d	S/vegetables	374.5	
5.Spices-a	B/chilli	10	5.76 mt
b	Turmeric	2	3mt
С	Ginger	1.8	4.6mt
d	R/chilli	15.37	5.56mt
е	Condiments	3.62	1.71mt
6.Fodder crop-a	Maize	2	0.2 mt
b	B/fodder	20.62	20mt
7.Fruit crop-a	Coconut	25.5	10.75mt
b	Other fruits		
8.Oilseeds-a	Mustard	646.5	0.97mt
b	S/Groundnut	24.5	0.86mt
С	S/Til (sesame)	686.625	1.02mt
d	S/Maize	7.37	2.34mt
е	Sunflower	1.75	0.47mt

Occupational Hazards and Farm Women: Agony and Understanding

Table 4.1.3.8: General Information of Pandua Block

Particulars	Information
Total area	276.43 km2(106.73 sq m)
Government type	Representative democracy
Loksabha constituency	Hooghly
Bidhansabha constituency	Pandua
Elevation	18 m(59 ft)
Panchayatsamiti	1
Gram panchayat	16
Gram sansads	247
Mouza	157
Villages	163

Table 4.1.3.9: Population

Particulars Particulars	Information
Total population	3, 16, 197
Population density	1, 100/km2
Male	159, 323(50%)
Female	156, 874(50%)
Decadal growth rate	16.12%
Schedule Caste population	101, 302(32.04%)
Schedule Tribe population	48, 555(15.36%)
Literate	215701(75.86%)
Literate male	117, 603(82.22%)
Literate female	98, 098(69.41%)

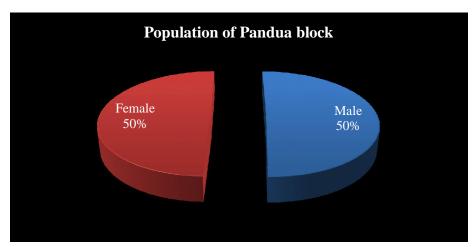


Fig. 4.1.3.9.1: Population of Pandua Block

Occupational Hazards and Farm Women: Agony and Understanding

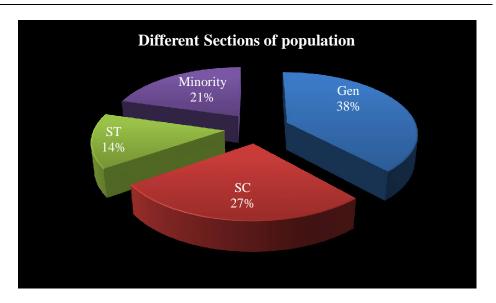


Fig.4.1.3.9.2: Different Sections of Population in Pandua Block

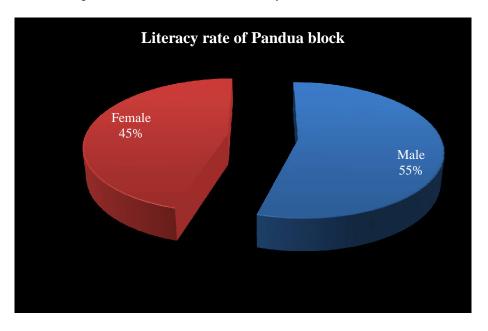


Fig. 4.1.3.10.1: Literacy rate of Pandua block

Table 4.1.3.10: Educational facilities

Particulars	Information
Primary schools	185
Middle schools	8
High schools	25
Higher secondary school	13
General college	1
Technical/	4
Professional college	
Institution for special and Non-formal education	613

Table 4.1.3.11.Banking facilities

Particulars	Information
Commercial banks	14
Grameen banks	3

Table 4.1.3, 12: Health facilities

Particulars	Information
Rural hospital	1
Primary health centres	6
Private nursing homes	4

4.1.4. Some information on Bantika-Boinchi Gram Panchayat

Bantika-Boinchi is not a village, it is a panchayat which is located on BoinchigraminPandua block under Hooghly district. Other part of this panchayat are Boinchi, ChouberaandAlipur. The elevation of this gram panchayat is 18 meters. It belongs to Burdwandivision. Located at 27 Km towards North from the district headquater Hooghly-Chinsurah and 66 km from state capital Kolkata.

4.1.4.1 Geography

Bantika-boinchi gram panchayat is surrounded by Kalna II block towards North, Polba-Dadpur block towards South, Chinsurah-Magra block in South and Memari I block towards west.

Pandua, Memari, Chinsurah, Bandel are the nearby cities to Bantika-Boinchi. This place is in the border of the Hooghly district and Burdwandistrict.

Occupational Hazards and Farm Women: Agony and Understanding

Particulars	Information
Total area	
Total population	21, 780
Literacy rate	82.36%
Sex ratio	971
Latitude	23.11900N
Longitude	88.19496E
High schools	5
Primary schools	8
Health centre	1
Health sub-centre	2
Co-operative society	1
Banks	2
Colleges	3

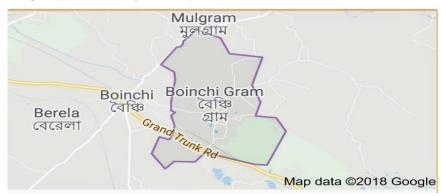
Table 4.1.4.2: General information on Bantika-Boinchi Gram panchayat

4.1.4.3. Agriculture scenario

30-40 % people of Bantika- Boinchi are engaged in agricultural activities. Potato, paddy and vegetables are the main crops of this area. Irrigation requirements are mainly met with Water from Damodarcanal, shallow and deep tube-wells.

4.1.5. Boinchigram village at a glance

Boinchigram is one of the oldest and enriched villages in Hooghly district. It is located at 66 km from Kolkata. This village is under Bantika-Boinchi gram panchayat under Pundua block and belongs to Burdwan sub-divisions. In this village approximately 10000 people reside.



Map. 4.1.5.1: Map of Boinchigram

Occupational Hazards and Farm Women: Agony and Understanding

- **4.1.5.1. Agriculture**: a good percentage of people are engaged in agricultural work. Main crops cultivated are potato, rice, mustard, sesame and vegetables.
- **4.1.5.2. Education**: This village is a educationally progressive area. Here four primary schools, two 10th standard schools and one 12th standard schools had established. The 12 th standard school Boinchi Biharilal Mukherjee's Free Institution is one of the oldest schools of Hooghly district, Panditlswar Chandra Vidyasagaradviced to open that school to the zaminder of that village B.L. Mukherjee. This village has one very old and big library also.
- **4.1.5.3. Health**: One Primary Health Centre (PHC) with 10 beds is also situated at Boinchigram.

Table 4.1.5.4: A list of frequently used medicines by farm women at Boinchigram hasbeen furnished below (As the study has conducted on farm women):

A. Non-opioid Analgesics, Antipyretics and non-steroidal Anti-inflamatory Medicines –

Medicines	Route of Administration/ Dosage form	Strengths
Acetyl Salicylic Acid	Tablets	325mg, 350mg
Ibuprofen	Tablets	200mg, 400mg
	Syrup	100mg/5ml
Paracetamol	Injection	150mg/ml
	Syrup	125mg/5ml
	Tablets	500mg
	Suppository	80mg, 170mg

B. Antiallergics-

Medicines	Route of Administration/ Dosage form	Strengths
Adrenaline Bitartrate	Injection	1mg/ml
Promethazine	Tablets	10mg, 2mg
	Syrup	5mg/5ml
Cetrizine	Tablets	10mg
	Syrup	5mg/ml

Occupational Hazards and Farm Women: Agony and Understanding

C. Antidotes and other substances used in poisonings

Medicines	Route of Administration/ Dosage form	Strengths
Calcium gluconate	Injection	100mg/ml

D. Anticonvulsants/ Antiepileptics

Medicines	Route of Administration/ Dosage form	Strengths
Magnesium sulphate	Injection	500mg/ml
Phenytoin Sodium	Capsules	50mg
	Syrup	100mg
	Injection	25mg/ml
		50mg/ml
Loazepam	Injection	2mg/ml

E. Anti-infective Medicines

Anthelminthics

Medicines	Route of Administration/ Dosage form	Strengths
Piperzine	Tablets	4.5gm
	Solution	750mg/5ml
Praziquantel	Tablets	600 mg

Antibacterials

Medicines	Route of Administration/ Dosage form	Strengths
Azithromycin	Tablets	100, 250, 500mg
	Suspension	100mg/5ml
	Injection	500mg

Antituberculosis medicines

Medicines	Route of Administration/ Dosage form	Strengths
Ethambutol	Tablets	200mg, 400mg, 600mg, 800mg
Ofloxacin	Tablets	100mg, 200mg
	Syrup	50 mg/5ml
Pyrazinamide	Tablets	500mg, 750mg, 1000mg, 1500mg
Streptomycin Sulphate	Injection	0.75 g, 1 g

Occupational Hazards and Farm Women: Agony and Understanding

Antifungal

Medicines	Route of Administration/ Dosage form	Strengths
Clotrimazole	Pessaries	100mg, 200mg
	Gel	2%
Fluconazole	Tablets	50mg, 100mg, 150mg
Nystatin	Tablets	500, 000 IU
	Pessaries	100, 000 IU

Antiviral

Medicines	Route of Administration/ Dosage form	Strengths
Acyclovir	Tablets	200mg, 400mg
	Injetion	250mg, 500mg
	Suspension	400mg/5ml

Antiprotozoal medicine

Antiamoebic and Antigiardiasis medicines

Medicines	Route of Administration/ Dosage form	Strengths
DiloxanideFuroate	Tablets	500mg
Metronidazole	Tablets	200mg, 400mg
	Injection	500mg/100ml

Antimalarial

Medicines	Route of Administration /Dosage	Strengths
	form	
Artesunate	Tablets	50mg
Chloroquine phosphate	Tablets	150mg base
	Injection	40mg/ml
	Syrup	50mg/5ml
Primaquine	Tablets	2.5 mg, 7.5 mg
Pyrimethamine	tablets	25mg
Quinine sulphate	Tablets	300mg300mg/ml
	Injection	
Sulfadoxine+Pyrimethamine	Tablets	500mg+25mg

Occupational Hazards and Farm Women: Agony and Understanding

F. Antimigraine

.For acute

Medicines	Route of Administration /Dosage form	Strengths
Acetyl Salicylic Acid	Tablets	300-350 mg
Dihydroergotamine	Tablets	1 mg
Paracetamol	Tablets	500mg

For Prophylaxis

Medicines	Route of Administration /Dosage form	Strengths
Propranolol hydrochloride	Tablets	10mg, 40 mg

G. Medicines affecting the blood

Antianaemia medicines

Medicines	Route of Administration / Dosage form	Strengths
Cyanocobalamin	Injection	1mg/ml
Ferrous sulphate/	Tablets	Tablets equivalent to 60mg
Fumerate	Oral solution	elemental iron
		25 mg elemental iron (as
		sulphate)/ ml
Folic Acid	Tablets	1mg, 5mg
Iron Dextran	injection	50 mg iron/ml
Pyridoxine	Tablets	10mg

Medicines affecting coagulation

Medicines	Route of Administration /Dosage form	Strengths
Heparin Sodium	Injection	1000 IU/ml
		5000 IU/ml
Phytomenadione	Injection	10 mg/ml

Occupational Hazards and Farm Women: Agony and Understanding

H. Cardiovascular medicines

. Antianginal

Medicines	Route of Administration /Dosage form	Strengths
Isosorbide 5	Tablets	10 mg,
Mononitrate/		20 mg
Dinitrate		

Antiarrhythmic medicines

Medicines	Route of Administration /Dosage form	Strengths
Adenosine	Injection	3 mg/ml
Diltiazem	Tablets	30 mg, 60 mg
	Injection	5mg/ml

Antihypertensive medicines

Medicines	Route of Administration /Dosage form	Strengths
Amlodipine	Tablets	2.5mg
		5mg
Losartan	Tablets	25mg,
Potassium		50mg

I. Dermatological medicines

Anti infective medicines

Medicines	Route of Administration /Dosage form	Strengths
Framycetin Sulphate	Cream	0.5%
Neomycin + acitracin	Ointment	5mg + 500 IU /g

Anti inflammatory and Antipruritic medicines

Medicines	Route of Administration /Dosage form	Strengths
Betamethasone	Cream	0.05%
Dipropionate	Ointment	

Occupational Hazards and Farm Women: Agony and Understanding

Medicines affecting skin differentiation and proliferation

Medicines	Route of Administration /Dosage form	Strengths
Glycerin	Solution	
Salicylic Acid	Solution	5%

J. Diagnostic agents

ophthalmic medicines

Medicines	Route of Administration /Dosage form	Strengths
Flurescein	Eye drops	1%

K. Disinfectants and antiseptics Antiseptics

Medicines	Route of Administration /Dosage form	Strengths
Acriflavin + Glycerin	Solution	
Cetrimide	Solution	20%
Chlorhexidine	Solution	5%
Ethyl Alcohol 70%	Solution	
Povidone Iodine	Solution	5%, 10%

Disinfectants

Medicines	Route of Administration /	Strengths
	Dosage form	
Bleaching Powder	Powder	Contains not less than 30% w/w of
		available chlorine
Formaldehyde	Solution	Dilute 34 ml of formaldehyde
Solution		solution with water to produce 100
		ml
Potassium	Crystals for solution	
Permanganate		

L. Gastrointestinal medicines

Antacids and other antiulcer medicines

Medicines	Route of Administration /Dosage form	Strengths
Omeprazole	Capsules	10mg, 20mg, 40mg
Ranitidine	Injection	25mg/ml
Pantoprazole	Injection	40 mg

Occupational Hazards and Farm Women: Agony and Understanding

Antiemetics

Medicines	Route of Administration /Dosage form	Strengths
Metoclopramide	Tablets	10mg
	Syrup	5mg/5ml
	Injection	5mg/ml

Laxatives

Medicines	Route of Administration /Dosage form	Strengths
Ispaghula	granules	

Medicines used in Diarrhoea Oral dehydration salts

Medicines	Route of Administration /Dosage form	Strengths
Oral Rehydration Salts	Powder for solution	

Anti diarrhoeal medicines

Medicines	Route of Administration /Dosage form	Strengths
Zinc Sulfate	Syrup	20mg/5ml

M. Hormones, other endocrine medicines and contraceptives

Hormonal contraceptives

Medicines	Route of Administration /	Strengths
	Dosage form	
Ethinylestradiol	Tablet	0.03mg+0.15 mg
Ethinylestradiol+	Tablets	0.035 mg+1 mg
Norethisterone		

Intrauterine devices

Medicines	Route of Administration /Dosage form	Strengths
IUD containing copper		

Occupational Hazards and Farm Women: Agony and Understanding

Estrogens

Medicines	Route of Administration /Dosage form	Strengths
Ethinylestradiol	Tablets	0.1 mg
		0.05 mg

Medicimes used to treat hypoglycaemia

Medicines	Route of Administration /Dosage form	Strengths
Glucagon	Injection	1mg/ml
25% Dextrose	Injection	100 ml

Ovulation inducers

Medicines	Route of Administration /Dosage form	Strengths
Clomiphene citrate	Tablets	50mg
		100mg

Thyroid and anti thyroid medicines

Medicines	Route of Administration /Dosage form	Strengths
Levothyroxine	Tblets	50µg
		100µg
lodine	Solution	8mg/5ml

N. Immunologicals

Medicines	Route of Administration /Dosage form	Strengths
Rabies Vaccine	Injection	
Tetanus Toxoid	Injection	

O. Muscle Relaxants and Cholinesterase Inhibitors

Medicines	Route of Administration /Dosage form	Strengths
Pyridostigmine	Tablets	60mg
	Injection	1mg/ml
Succinyl choline chloride	Injection	50mg/ml

P. Opthalmological

Medicines	Route of Administration /Dosage form	Strengths
Prednisolone	Drops	0.1%

Occupational Hazards and Farm Women: Agony and Understanding

Q. Psychotherapeutic medicines

Psychotic Disorders

Medicines	Route of Administration /Dosage form	Strengths	
Chlorpromazine hydrochloride		25mg, 50 mg	,
	Syrup Injection	100mg 25mg/5ml	
		25mg/ml	

Medicines used in Depressive disorders

Medicines	Route of Administration /Dosage form	Strengths
Amitriptyline	Tablets	25 mg
Fluxetine hydrochloride	Capsules	20mg
Imipramine	Tablets	25mg, 75mg

Medicines used for Generalized Anxiety and Sleep Disorders

Medicines	Route of Administration /Dosage form	Strengths
Alprazolam	Tablets	0.25mg, 0.5 mg
Diazepam	Tablets	2mg, 5mg

Medicines used for obsessive compulsive disorders and panic attacks

Medicines	Route of Administration /Dosage form	Strengths
Fluoxetine hydrochloride	Capsules	20mg

R. Medicines acting on the respiratory tract

Medicines	Route of Administration /Dosage form	Strengths
Hydrocortisone sodium succinate	Injection	100mg, 200mg, 400mg
Ipratropium bromide	Inhalation	20µg/metered dose

Occupational Hazards and Farm Women: Agony and Understanding

S. Solutions correcting water, electrolyte and acid-base disturbances

. Oral

Medicines	Route of Administration /Dosage form	Strengths
Oral Rehydration Salts	Powder for solution	

Parenteral

Medicines	Route of Administration /	Strengths
	Dosage form	
Glucose	Injection	5% isotonic, 10%, 15%
Glucose with sodium chloride	Injection	5%+0.9%
Normal Saline	Injection	0.9%
N/2 Saline	Injection	
N/5 Saline	Injection	
Potassium	Injection	11.2%Sol.
Chloride		

T. Vitamins and Minerals

Medicines	Route of Administration / Dosage form	Strengths A
Ascorbic Acid	Tablets	100mg, 500mg
Calcium carbonate	Tablets	250mg, 500mg
Multivitamins	Tablets	
Nicotinamide	Tablets	50mg
Riboflavin	Tablets	5mg
Thiamine	Tablets	100mg
Vitamine A	Tablets	5000 IU, 50000 IU, 100000 IU
	Capules	50000 IU
	Injection	
Vitamin D	Capsules	0.25 mg, 1mg
Calcium gluconate	Injection	100mg /ml in 10 ml ampoule

(Source: Asish Bhattacharya, local medical shop keeper)

Occupational Hazards and Farm Women: Agony and Understanding