

Chapter-4

Research Setting: The Social Ecology

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In any social science research, it is hardly possible to conceptualize and perceive the data and interpret the data more accurately until and unless a clear understanding of the characteristics in the area and attitude or behaviour of people is at commend of the interpreter who intends to unveil an understanding of the implications and behavioural complexes of the individuals who live in the area under reference and from a representative part of the larger community. The socio demographic background of the local people in a rural setting has been critically administered in this chapter. A research setting is a surrounding in which inputs and elements of research are contextually imbibed, interactive and mutually contributive to the system performance. Research setting is immensely important in the sense because it is characterizing and influencing the interplays of different factors and components. Thus, a study on Perception of Farmer about the issues of Persuasive certainly demands a local unique with natural set up, demography, crop ecology, institutional set up and other socio cultural milieus. It comprises of two types of research setting viz. Macro research setting and Micro research setting.

Macro research setting encompasses the state as a whole, whereas micro research setting starts off from the boundaries of the chosen districts to the block or village periphery. The notion behind this form of presentation is to internalize the study environment in terms of broader perspectives with state as reference frame and district, block profile as units for in-depth study.

The present study was taken up at the Ghoragachha village, at Chakadah Block in Nadia district of west Bengal. A brief description of the Nadia district in general and the block and village in particular is given below.

Area of Study

The area of investigation of this study is situated in the state of West Bengal located in the eastern part of India. The state of West Bengal has a unique social, cultural and ecological background, which influences the living standard and behavioural patterns of the people in many ways. The area of investigation belongs to Saguna Panchayat of Chakadah block Nadia district. The study was conducted in Ghoragachha village.

Profile of the State West Bengal

West Bengal was created as a one of the constituent state of the Indian union among the 29th states in India on 15th August, 1947 as the result of partition of the undivided British Indian province of Bengal into West Bengal. West Bengal is situated in the northeastern part of India and lies between 21°37'-27°10' north latitude and 85°51'- 89°53' east longitude.

It is flanked by the Bay of Bengal on the South, Sikkim on the north, Assam on the east and Bihar, Jharkhand and Orissa on the west. It also has common borders with the three neighbouring countries viz. Nepal and Bhutan in the north and Bangladesh in the east. The tropic of cancer runs across the middle of the state and passes through four districts viz. Bankura, Burdwan, Nadia and Purulia. The

state has a total geographical area of 88,752 sq. km. representing only 2.7% of the total area of India. It is territorially divided into 19 districts like Coochbehar, Darjeeling, Jalpaiguri, Uttar Dinajpur, Dakshin Dinajpur, Malda, Murshidabad, Hoogly, Howrah, Nadia, Birbhum, Burdwan, Bankura, Purulia, 24 Pargana(N), 24 Pargana(S), Purba Midnapur, Pashim Midnapur and Kolkata. There are more than 341 Community Development blocks in West Bengal. There are 3354 Gram Panchayats and more than 42000 villages in West Bengal. In 1947, when India became independent Bengal was partitioned between India and Pakistan. India's share came to be known as West Bengal and Pakistan's share was called East Pakistan. Later, the state of Cooch Behar, French enclave of Chandranagore and some parts of Bihar were added to West Bengal. Bengal represents the lands that possess a distinct culture with its indigenous art and crafts and make it an important part of the Indian Union.

Table 1: General Information of West Bengal:

Total Population	9,13,47736
Male	46,927,389
Female	44,420,347
Population Growth	13.93%
Sex Ratio	947
Population Density	1029/ km ²
Literacy Rate	77.08%
Male	82.67%
Female	71.16%
No. Of Sub-division	66
No. Of Blocks	341
No. Of Gram Panchayat	3354
Inhabitat Village	37945
Area (sq km)	88752
% of Electrified Village	83.6

Climate of the State

In terms of the standard climate types, tropical climate viz. humid, sub humid, semi arid and arid occurs over different regions of the state. Its climate is very much influenced by monsoon rains which, in turn are of two types (I) South-West monsoon during the rainy season and (II) North-East monsoon during the winter season. Rainfall in West Bengal averages about 1750 mm, ranging from 2500 to 3500 mm in Dooars and Tarai regions to 1200 to 1800 mm in the plains. The maximum and minimum temperatures recorded during March to October are 30-40°C and 16-26°C respectively in the plains while in the hills these are 15-20°C.

Land Holding Status in West Bengal

According to 1991 census the total number of farmers is 65.47 lakh, out of which 76.42 per cent is marginal former, 16.81 per cent is small former and 0.02 per cent is big former. The per capita land is 0.13 ha and average holding size is 0.90 ha.

Table 2: Land Use pattern in West Bengal:

Geographical area (million hectare)	8.86
Net cropped area (million hectare)	5.46
Gross cropped area (million hectare)	9.23
Cropping, intensity (%)	165.34
Forest area (%)	13.72
Non agricultural use (%)	18.66
Barren and Uncultivable (%)	0.35
Fallow land (%)	0.3

District Map of West Bengal



Profile of Nadia District

Nadia district is a district of the state of West Bengal, in the north east of India. It borders with Bangladesh to the east, North 24 Parganas and Hooghly districts to the south, Bardhaman district to the west, and Murshidabad district to the north.

Most districts in West Bengal take their name from the headquarters station of the district, but Nadia district takes its name not from Krishnagar, the headquarter but from Nadia or Nabadwip hallowed by the memory of Lord Shri Chaitanya Mahaprabhu who was born here on 18th February, 1486.

Location

Nadia is situated between 22°53" and 24°11" North latitude and 88°09" and 88°48" East longitude and about 3927 Sq. Km. in Area, this District is linear in shape with orientation of North-South. The District is Approximately 46 ft. above the mean sea level. The Tropic of cancer divides the district in two parts.

Boundary

The geographical boundary of Nadia district comprises Bangladesh in the East, Bardhaman and Hugli district on the West, Murshidabad district on the North and North West and North 24 Parganas towards South and South East Situated on the main rail route connecting Howrah/Kolkata and New Jalpaiguri (NJP) including parts of North Eastern states, the Nadia district can easily be accessed by rail. The major railway stations are Nabadwip Dham, Ranaghat and others with regular trains to Kolkata/ Howrah/ NJP/ Guwahati. The proposed International Rail Link connecting India and Bangladesh will pass through Nadia District with Gende as the last railway station at Indian Border. Bifurcated by National Highway-34 on the North and East, the district can also be accessed by road from other parts of the country.

Geographical & physical Features

The soil of the district is composed of recent alluvium and the surface consists of sandy clay and sand along the course of the rivers and fine silt consolidating into clay in the flatter portions of the plains, such as in Kalantar tract between the Bhagirathi and the Jalangi. The soil varies but little over the district except in this tract and a portion of Ranaghat sub-division. It is almost universally a light sandy loam with low fertility status and incapable of retaining adequate moisture.

Climate

Based on Climate, Soil and Physiographic the South Asia Project Department, World Bank(1997) reported six agro climatic Zones of West Bengal Among them New Alluvium Zone is the biggest Zone with highest cropping intensity and crop diversity covering the western parts of Malda and Dakshin Dinajpur, Southern parts of Uttar Dinajpur, eastern part of Murshidabad, Hooghly, Burdwan and Howrah, entire Nadia and northern part of North and South 24 Parganas Climate of this zone was tropical moist sub-humid with rainfall 1427.4 mm, air temperature maximum 35.0 ° C and minimum 15.6 ° (annual normal) Soils of this zone are derived from recent alluvial deposits brought down by the river Ganga, and its tributaries hence called inceptisol Soils are deep, well drained, texturally fine foamy, neutral in reaction, with high base saturation and CEC and medium to medium to NPK Rice is the main crop cultivated in this zone over different land terrains and seasons. Aus, Sesame and Moong in pre-kharif or early wet season; jute and aman rice in kharif or wet season and wheat, different oilseeds & pulses, potato etc. are mainly grown in this zone. Boro or summer rice and sugarcane are also important crops commonly cultivated by the farmers Zonal adaptive Research

Station (New Alluvium Zone) (ZARS) started functioning in the month of October 1978 with its headquarter at Krishnanagar (88°3' N 23°24' E and 15 AMSL) to look after the agricultural problems and to adopt new agro techniques in this zone.

Table 3: General Information:

Area		3927 km ²
Total Population		5168,488
Male		2655056
Female		2513432
Sex Ratio		947
Population Density		1316/km ²
Population Growth Rate		12.24%
	52	

Average Literacy Rate		75.58%
Male Literacy		79.58%
Female Literacy		71.35%
Geographical Area		3924 km ²
Sub- division		4
Police Station		21
CD. Blocks		17
Panchayat Sammities		17
Gram Panchayat		187
Gram Samsad		2639
Municipalities		8

Table 4: Educational facilities:

No. Of Primary School			2515
No. Of Madrasha			231
Junior	High	School &	98
Madrasha			
No. Of	High	secondary	135
School			
No. Of degree Collage			15 (1 Woman + 14 Co-Ed)
Professional & technical			12
Collage			
No. Of University			2
No.	Of	Agriculture	1
University			

Public Library		110
Rural Library		113
Child Education Centre		117

Profile of Chakadah Block:

Chakadah is a town in Kalyani subdivision of Nadia District in the Indian state of West Bengal.

Geography

Chakdaha is located at 23.08°N 88.52°E. It has an average elevation of 11 metres (36 feet). It is on National Highway 34.

Gram Panchayat

Gram panchayats of Chakdaha block/ panchayat samiti are: Chanduria I, Chanduria II, Dewli, Dubra, Ghetugachhi, Hingnara, Kanchrapara, Madanpur I, Madanpur II, Saguna, Sarati, Silinda I, Silinda II, Simurali, Tatla I, Tatla II and Rautari

Table 5: Population

Population	132,855
Male	67,135
Female	65,720
Literacy rate	90.95 %

Table 6: Education Facilities:

No. Of Secondary School	5
No. Of High Secondary	3
School	
No. Of Collages	2

Saguna Gram Panchayat at a glance

Saguna Gram	Panchayat Office is in Chakdah,	Nadia	District. West
Bengal State in	India. Saguna Gram Panchayat Office Pincode is 741234 (
Gayeshpur) .	Near by railway Stations are Madanpur	Kalyani	. It is in 14

Km distance to Naihati City. Saguna Gram Panchayat Office is geographically located at latitude 22 ° 59'0" and longitude 22 ° 59'0". Total population of Saguna Gram Panchayat is 31808 with 16 Gram Samsad.

The total population of Ghoragachha village is 1663 among which the number of males is 863 while as the number of females is 800. There is one secondary school and only one Primary school in the village and also one Shishu Shiksha Kendra. Total agricultural area is 754 bigha which is very productive as it produces 3 crops per year and is the backbone of the village Ghoragachha's economy.