

Research Setting

In a social science research of this kind, it is not possible to know and understand the data and draw the interpretations more accurately unless a fair understanding of the characteristic of the area and attitude of people is at command of the interpreter who intends to unveil an understanding of the implications and behavioral complexes of community. The sociodemographic background of the respondents is required to understand their behavioral complex.

Area of study:

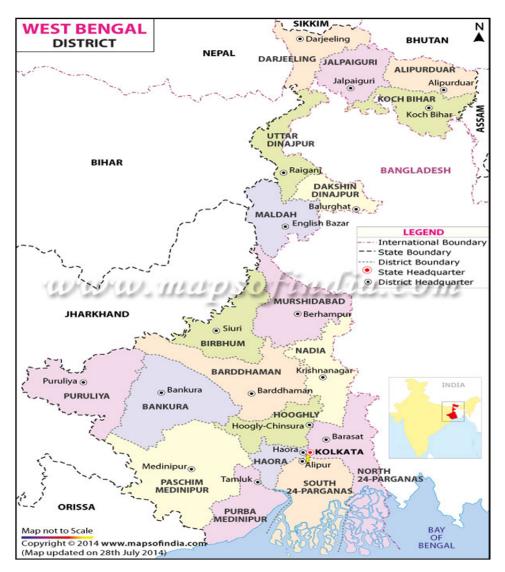
The area of investigation of this study is situated in the state of WestBengal located in the eastern part of India. The state of WestBengal has a unique social, cultural and ecological background, which influences the living standard and behavioral patterns of the people in many ways. The area of investigation belongs to Bhaluka village of Amdanga Block of North-24

Pargana and Hatikanda village of Haringata Block of Nadia District, WestBengal.

West Bengal is situated on the eastern part of India, stretching from the Himalayas in the north to the Bay of Bengal in the south. The state has a total area of 88, 752 square kilometers (34,267 sq mi). It is surrounded by Sikkim and Bhutan on the north, by Nepal on the North West, by Bangladesh and Assam on the east, by Bihar, Jharkhand and Orissa on the west and south-west and by Bay of Bengal on the south. This northern part of the state has a hilly region.

The narrow Terai region separates this region from the plains, which in turn transitions into the Ganges delta towards the south. The Rarh region intervenes between the Ganges delta in the east and the western plateau and high lands. A small coastal region is on the extreme south, while the Sundarbans mangrove forests form geographical area at the Ganges delta. It is the 4th largest state in terms of population having a total population of 91,347,736 and population density of 1,029 /km2. The state is 13th in terms of area and is divided into 19 districts. The capital city is Kolkata.

State Map of WestBengal



Description of the State:

The State is in the Eastern region of India. With the Tropic of Cancer running across it, the State is situated between N 21°30' & 27° 30' and E 85° 30' & 89°45'. The geography of the state is unique in the sense that its northern part is in the Himalayan Range, whereas the extreme southern part touches the Bay of Bengal and is covered by the Active Delta of the Sundarbans Mangrove forest. The greater part consists of detrital and alluvial plains.

Socio-Economic Profile:

The total area of the state is 88,752 sq Km having a dense population of more than 80 million people of which about 72% live in the Rural areas covering 85427.26 sq Km, i.e., 96% of the total geographical area and the population density is 903 per square kilometer. The population has been increased by 44.25% from 1981 to 1991 and also the density of the population.

Description	2011
Total Population	91,347,736
Male	46,927,389
Female	44,420,347
Decadal Population Growth(2001-2011)-Absolute	11,171,539
Decadal Population Growth(2001-2011)-Percentage	13.93
Population Density	1029
Sex Ratio (1000 male)	947
Literacy	77.08%
Male Literacy	82.67%
Female Literacy	71.16%

Administrative Information Administrative set up:			
No. of Districts	19		
Sub-divisions	66		
Municipalities(2004)	120		
No. of Municipal Corporation (2004)	6		
No. of Blocks	341		
No. of Panchayat Samities	333		
No of towns	375		
No. of Gram Panchayats	3354		
No. of Mauzas	40782		
No. of Police Stations (includes 42 G.R.P. for Sealdah,	463		
Howrah and Siliguri			
No. of inhabited villages (2001)	37945		
No. of Family Welfare Centre	506		
No. of PHCs	922		
% of Electrified Villages	83.6		

Climate

There are 4 marked seasons: (a) cold, dry weather from December to February; (b) hot, dry weather from March to May; (c) monsoon period from June to September; (d) post monsoon period in October and November. Over 70 per cent of the rain falls between June and September. The mean annual rainfall varies from 1026 mm at Nalhati in the Birbhum District to as high as 5323mm in Buxa in the Jalpaiguri District. The state also has as long as 350 Km of coastal line. The other important characteristic is that Southern West Bengal has the confluence of Fresh Water Rivers and Tidal water river system.

In general, the climate of West Bengal varies from sub-humid to per-humid with uniformity of temperature. The tropic of cancer runs across the middle of Nadia, Burdwan, northern parts of Bankura and Purulia districts. In spite

of its position in equatorial zone, the Himalayan Mountains in the north, Bay of Bengal in the south and extensive network of rivers, canals, tank etc. do not allow extreme climatic conditions to prevail in the state.

Heavy rainfall occurs in the northern part of West Bengal and gradually decreases towards south forming an area of moderate rainfall zone around central part of West Bengal. The annual rainfall is maximum (>3000 mm) at the foothill region on the north (sub-Himalayan West Bengal). Whereas, the coastal region in the south receives around 1500-2000 mm of rainfall, and it decreases to 900 mm in South West. The average annual rainfall in the state is about 1,900 mm of which 1,600 mm occurs during monsoon months.

In the Northern part of the state that includes the mountain region (Himalayas), temperature ranges from freezing point to 10°C in winter. It hovers around 12°C to 18°C in the plains. January is the coldest month and winter starts from the end of November and extends to February. Darjeeling has a normal mean temperature ranging from 5.8°C to 17.0°C where snowfall also occurs occasionally. Rest of the area has mean winter temperature ranging from 9C to 14°C. The summer season begins from the month of March and temperature starts rising upto June. May is the hottest month. The summer temperature shows variation from 20°C in Darjeeling district to about48°C in Purulia district. Temperature in the rainy seasons is more or less uniform in the plains and it varies from 21°C at Kolkata to 30°C at Canning. This uniformity indicates the influence of southwest monsoon in lowering temperatures.

Soil of West Bengal:

In the Himalayan region the soils are predominantly shallow to moderately shallow but also deep at places, well drained, coarse-loamy to gravelly loamy in texture. These soils occur on steep side slopes. They are classified as Typic Haplumbrepts and Typic Udorthents. In the foothills of Himalayas and in piedmont plains the soils are deep to very deep, imperfectly drained and coarse-loamy to fine loamy in texture and are placed in Aquic Ustifluvents and Fluventic Eutrochrepts. Soils of the alluvial plain which includes Indo-gangetic alluvium (recent, active and old) are also very deep, imperfectly to poorly drained, fine-loamy and also coarse-loamy in texture and with moderate flooding problem in some cases. These soils are classified as Aeric Haplaquepts, Typic Fluvaquents, Typic Haplaquepts, and Typic Ustochrepts.

The western part of the state i.e., predominantly Chhotanagpur plateau area have soils shallow to very shallow, well-drained and gravelly loam and coarse-loamy in texture with moderate erosion where as soils in the remaining part are deep to very deep, well drained, fine loamy in texture. They are classified as Lithic Haplustalfs and Typic Haplustalfs.

Coastal plain is represented by soils of both sandy as well as fine in texture, very deep with salinity problems in some places. Soils are placed in Aquic Ustipsamments and Vertic Haplaquepts. Whereas soils of delta plain are very deep, imperfectly to poorly drained, fine in texture and has the problem of inundation and salinity and classified as Aeric Haplaquepts and Typic Haplaquepts.

Flora and fauna

As of 2013, recorded forest area in the state is 16,805 km² (6,488 sq mi) which is 18.93% of the state's geographical area, compared to the national average of 21.23%. Reserves, protected and unclassed forests constitute 59.4%, 31.8% and 8.9%, respectively, of the forest area, as of 2009. Part of the world's largest mangrove forest, the Sundarbans, is located in southern West Bengal.

From a phytogeographic viewpoint, the southern part of West Bengal can be divided into two regions: the Gangetic plain and the littoral mangrove forests of the Sundarbans. The alluvial soil of the Gangetic plain, compounded with favourable rainfall, make this region especially fertile. Much of the vegetation of the western part of the state shares floristic similarities with the plants of the Chota Nagpur plateau in the adjoining state of Jharkhand. The predominant commercial tree species is Shorea robusta, commonly known as the Sal tree. The coastal region of Purba Medinipur exhibits coastal vegetation; the predominant tree is the Casuarina. notable from Sundarbans the Α tree the is ubiquitous *sundari* (*Heritiera fomes*), from which the forest gets its name. The distribution of vegetation in northern West Bengal is dictated by elevation and precipitation. For example, the foothills of the Himalayas, the Dooars, are densely wooded with Sal and other tropical evergreen trees. However, above an elevation of 1,000 metres (3,300 ft), the forest becomes predominantly subtropical. In Darjeeling, which is above 1,500 metres (4,900 ft), temperate-forest trees such as oaks, conifers, and rhododendrons predominate.

District Map North 24 Pargana:



North 24 Parganas has a geographical area of 0.42 million hectares of which 0.37 million hectares is rural. 0.05 Million hectares containing 55 urban units constitutes urban area of the district. According to Census 2001, 54 percent of the population of the district belongs to urban areas, which is

why the occupational pattern of the district has a tilt in favour of urban activities.

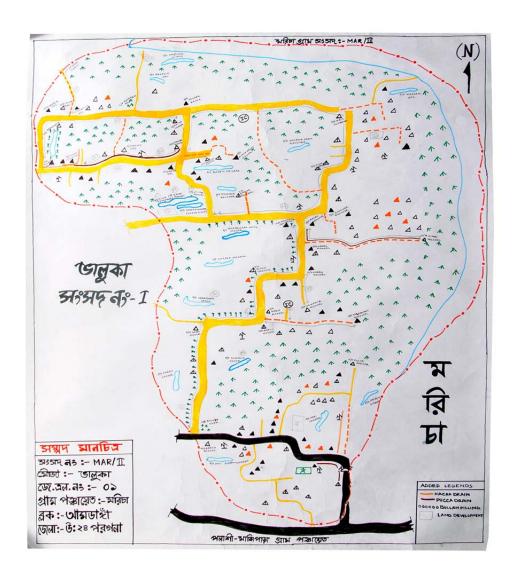
Description of the district:

North 24 Parganas lies between 21°25'30" and 23°16'50" north latitudes and 88°01'10" and 89°06'15" east longitudes. The district resembles an irregular triangle in shape. It has artificial land frontiers as well as natural water boundaries. Nadia district lies to its north and the Bay of Bengal to its south. Much of its eastern boundary is with Bangladesh. On the west it is bounded by Calcutta and the river Hooghly. The southwest boundary of the district is with 24 Parganas (south). As a border district 24 Parganas (north) is of special importance because of its proximity to Kolkata, the gateway to Eastern India. The district has five Sub-divisions and 37 police stations with District Head Quarter at Barasat.

According to Census 2001, there are 1571 inhabited villages distributed over 22 development blocks. The district has 22 Panchayat Samities and 200 Gram Panchayats with 2923 Gram Sansads. In urban North 24 Parganas there are 27 municipalities, 20 Census Towns, 7 Urban Outgrowths and one town under Cantonment Board. The annual rainfall in the district had been 1347 mm. in 2003. The temperature of the district varies from 40° Celsius to 8° Celsius.

Geographical Data	2011Cencus
i) Latitude	23°15'2" N
	22°11′6" N
ii) Longitude	89°5' E
	88°20' E
iii) Geographical Area	18539 Sq.Km

iv) Male	5172138
v) Female	4910714
vi) Rural population	4275724
vii) Male literacy rate	83.92
vii) female literacy rate	71.72



Village map of Bhaluka (Maricha Gram Panchayat)

Survey of Amdanga block

01	Block / Municipality:	Amdanga Development Block		
02	GPs / Wards:	Maricha Gram Panchayat		
03	Location (give rough	Attached with this report in a separate		
	sketch in a separate	sheet.		
	sheet			
04	Population & No of	Population: 24946 Nos.(M-12910, F-		
	Household:	12036)		
	(Taken from GP Office)	Household: 4989 Nos.		
05	Type of hazards &	1. Cyclone (Moderate).		
	frequency:	2. Drought (Moderate).		
		3. Hail Strom (Moderate).		
		4. Thunder Storm (Moderate).		
		5. Water Logging(Moderate)In the		
		village of Maricha & Bhaluka		
06	Disasters (type & year)	1. Flood in 2000		
		2. Cyclonic Stram (AILA) in 2009		
		3. Drought in 2010		
		4. Hail Stram in 2013		
07	Occupation (type of	Major Occupation: Cultivation & Day		
	Occupation, major &	Labour.		
	Minor)	Minor Occupation: Grocer, Mason, Small		
		portion of the total people are engaged in		
		service sector and Other's Business etc.		

Types of Resoueces:

01	No. of School /	No. of College:01			
		Chakra Teacher Training College at			
		Westdhania.			
		No. of Primary School: 09			
		1.Bhaluka F.P School. 2. Dikpala F.P.			
		School, 3.Anokha Kundapara F.P. School,			
	Shelter.	4.Natungram Durlavpur F.P. School,			
		5.Gadamarahat Nimna Buniyadi F.P. School,			
		6.Harbati Pasardanga F.P. School,			
		7.Baikunthapur G S F.P. School, 8.Madanpur			
		F.P. School, 9.Maricha F.P. School.			
		No. of Secondary School: 01			
		1. Bhagabati Smrity Vidyamondir High			
		School.(H.M. Contact No9434971247)			
		No. of HS (Secondary) School: 01			
		1. Baikunthapur Satish Smrity			
		Vidyamondir High School (M. No.			
		9433479185).			
		No. of Jr. High :- 02			
		1. Anokha-Kundapara Jr. High			
		2. Maricha Jr. High			
		No. of SSK :- 01			
		1. Anokha Kundapara SSK			
02	Bank / PO / Other	1. UBI Gadamarahat			
	Financial Institution	1			
	with location	3. Maricha L.S Pacs Ltd			
		4. CSP of UBI Gadamarahat (Anita			
		Ghosh-9674825435)			
		5. Mashunda Post Office			

03	Hospital / BPHC/PHC/	No. of PHC · 01			
03	<u> </u>				
	Health Sub- Centre	1. Maricha Primary Health Centre (Near			
		Gadamarahat)			
		No. of Sub-Centre : 04			
		1. Bhaluka Sub-Centre			
		2. Gadamarahat Sub-Centre (Near			
		Maricha PHC)			
		3. Madanpur Sub-Centre			
		4. Harpur Sub-Centre			
04	Flood Shelters /	There is no flood shelter or Cyclone shelter			
	Cyclone Shelter (give	in this Gram Panchayat, but the Schools can			
	details of the proposed	be used for this purpose.			
	also).				
05	Rail station / Bus	Not applicable			
	terminus				
06	NGOs / Clubs (with	Not applicable			
	contact No.)				
07	Community Hall	Birsa Bir Sporting Club at Pasardanga			

Types of Resources:

01	Road (metalled, Kachha)	1.Metalled Road: 12 Kms.(NH34: 4	
	Give details :	Kms,.	
		2.PMGSY Road : Bolde Bhagar Road: 09	
		Kms, Kailash Bose Road: 3.05 Kms,	
		Habra Road : 4 Kms	
		3.Kachha Road covered (15Kms.) in total	
		G.P.	
		4. SBFS & Jhama Bats Road : 40 Kms	
		Covered Maricha G.P area	
02	Other means of Not applicable.		
	Communication:		
03	Electricity (total covered	Electricity covered Household: 3995	
	area & no. of household	Nos.(Approx)	
	having it) & other		
	sources		

04	Availability of	Land line connection of total		
	Telephone, Mobile	household:15%.		
	connection:	Mobile connection of total household:		
		95%.		
05	Sourcesf of water (piped	Yes,		
	Drinking water,	1.Tubewell: 60%.		
	Tubewells & Other	2.Piped Drinking Water :30%		
	sources):	3. Others Source : 10%.		
06		Pukka houses of total G.P: 70%.		
	Pukka & Kachha	Kachha houses of total G.P: 30%		
	houses)			
07	7 Helath services Different types of vaccina			
	,	Programmes are arranged here regular		
	1 0 ,	basis. Many camps are arranged sansad		
		wise ,Immunisation &antenatal checked		
	awareness campaign) :	up(4times) Urine Test, Blood, Sugar,		
		Weight& height, abdominal palpitation		
		etc. of the pregnant woman are arranged		
		here regular basis. Most frequent diseases		
		are: 1.Chikenpox2. Chicungunia		
		3. Dieheria 4. Phenumonia 5. Cough & fever		
		6.Malaria 7.Warm Infestation 8. Dengue		
		9.Small part of the people suffered from		
		T.B.		



The District map of Nadia

Nadia district is situated in the middle point of Bengal delta. District on one hand there is Bhagirathi or Ganga and on the other hand there is river Mathabhanga. Because of Ganga and its tributaries, the soil of the district is mostly alluvial. The district is total 390027 sq. km. in the area and holding 11th position in terms of area. It is surrounded by Murshidabad on the

North & North-West, & North 24 on the South & South-west. The district shares an international boundary with Bangladesh.

Description of the district:

The district of Nadia falls under the Presidency Division of West Bengal and is situated between 22°53" and 24°11" North latitude and 88°09" and 88°48" East longitude geographically.

The district consists of

Sub-divisions – 4

Blocks - 19

Municipalities – 8

Nadia is in 10th position in terms of literacy rate and 9th in terms sex ratio in West Bengal.

District Profile:

According to Census Data (2011), the Total Population of the district is 46, 04,827 out of which there are 23, 66,853 males (51.40%) & 22, 37,974 females (48.60%). The population density in the district is 1173 persons per sq km.

Other major settlements in the district (in terms of a total number of populations) are Krishnanagar, Shantipur, Chakdaha, Kalyani.Almost 0.83% of population belongs to other states of India such as Bihar, Jharkhand and Assam.

It is worth mentioning that around 12.50% population is occupied only by Bangladeshis. The per capita income in the district was found out to be Rs 19980/- during the year 2003-04.

1.	Geographical Area	:	3927 Sq. km
2.	Population(2011	:	5,167,600
	census)		
3.	Male to Female Ratio	:	1000:947
4.	Literacy rate	:	74.97%
5.	Number of		4
	Subdivisions		
6.	Number of		10
	municipalities		
7.	Major Cash Crop	:	Cardamom
8.	Major Rivers		Tista, Lachung Chhu, Chakung ChhuUmram
			Chhu, Yumthang Chhu etc.
9.	Other Agricultural		Paddy, Apple, Potato, Cabbage, Corn
	Products		
10.	Major Tourist Spots	:	Mangan, Chungthang, Lachen, Lachung,
			Yumthang

Source: District Statistical Handbook, 2009

Hatikanda Village

Hatikanda is a medium size village located in Haringhata of Nadia district, West Bengal with total 320 families residing. The Hatikanda village has population of 1401 of which 719 are males while 682 are females as per Population Census 2011. In Hatikanda village population of children with age 0-6 is 123 which make up 8.78 % of total population of village. Average Sex Ratio of Hatikanda village is 949 which is lower than West Bengal state average of 950. Child Sex Ratio for the Hatikanda as per census is 1016, higher than West Bengal average of 956.

Hatikanda village has higher literacy rate compared to West Bengal. In 2011, literacy rate of Hatikanda village was 82.39 % compared to 76.26 %

of West Bengal. In Hatikanda Male literacy stands at 88.15 % while female literacy rate was 76.29 %.

As per constitution of India and Panchyati Raaj Act, Hatikanda village is administrated by Sarpanch (Head of Village) who is elected representative of village.

In Hatikanda village, most of the villagers are from Schedule Caste (SC). Schedule Caste (SC) constitutes 40.54 % while Schedule Tribe (ST) was 2.07 % of total population in Hatikanda village.

In Hatikanda village out of total population, 446 were engaged in work activities. 92.60 % of workers describe their work as Main Work (Employment or Earning more than 6 Months) while 7.40 % were involved in Marginal activity providing livelihood for less than 6 months. Of 446 workers engaged in Main Work, 43 were cultivators (owner or co-owner) while 13 was Agricultural laborer.

	Total	Male	Female
Total No. of Houses	320	-	-
Population	1,401	719	682
Child (0-6)	123	61	62
Schedule Caste	568	283	285
Schedule Tribe	29	15	14
Literacy	82.39 %	88.15 %	76.29 %
Total Workers	446	400	46
Main Worker	413	0	0
Marginal Worker	33	29	4