

Research in the field of Social Science, it is more or less not possible to know and understand the data and to draw the conclusion more accurately unless a fair understanding of the characteristics of that area and complex nature of human behavior and attitude is being interpreted. Therefore it is a pre-requisite to be familiar with the socio-demographic background of the respondents which helps in understanding their behavioral complex. So this chapter is intended to present a brief description of the area in terms of social, economical and agricultural aspects where the present study has been conducted namely the newly formed 20th district Alipurduar and historical Bankura District of West Bengal.

Area of the 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 in eastern India has a unique social, cultural and ecological background, which influence the living standard and behavioral patterns of the people in many ways. The area of investigation belongs to Kalchini block of the Alipurduar

The Ecology of Forest Fringe: Development and Livelihood ISBN: 978-93-85822-27-8 21

district and Barjora block of Bankura district. The area of the study is comprised of villages namely Porobasti, Pampu, and Srikrishnapur & Sagrakata respectively.

Profile of the State West Bengal

The name of Bengal, or 'Bangla', is derived from the ancient kingdom of Vanga, or Banga. References to it occur in early Sanskrit literature, but its early history is obscure until the 3rd century BC, when it formed part of the extensive Mauryan empire inherited by Aśoka. With the decline of Mauryan power, anarchy once more supervened.

Geography: West Bengal was created as a one of the constituent state of the Indian union among the 29 th states in India on 15^{th} August 1947 as the result of partition of the undivided British Indian province of Bengal into West Bengal. The state is situated in the northeastern part of India and lies between $27^{\circ}13'15''$ and $21^{\circ}25'24''$ North Latitudes and $85^{\circ}48'20''$ and $89^{\circ}53'04''$ East Longitudes.

West Bengal flanked by the bottle neck of India in the east, stretching from Himalayas in the north to the Bay of Bengal in the south. It is bounded on the north by Sikkim, on the east by Assam . On the south by the Bay of Bengal and on the west by Orissa, Bihar and Jharkhand. It has common borders with the, three international frontiers-to the north, east and west namely Bhutan, Bangladesh and Nepal respectively. The tropic of cancer runs across the middle of the state and passes through four district viz. Bankura, Burdwan, Nadia and Purulia.

In 1947 when India became independent Bengal was partitioned between India and Pakistan. India's share came to be known as West Bengal and

The Ecology of Forest Fringe: Development and LivelihoodISBN: 978-93-85822-27-822

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 land that possess a distinct culture with its indigenous art and crafts and make it an important part of the Indian Union.

According to the 2011 census its present population of this state is 8,01,76,197 in which about 72% are living in rural areas and 28% are living in urban areas. The sex ratio and population density of the state are 934 and 903/ sq. km (as against the national average of 312) respectively. The population growth of the state is 17.77%. The literacy rate of West Bengal is 68.66% (including male literacy 77.58% and female literacy 59.22%).

The state has a total geographical area of 88,752 sq.km. representing only 2.7 % of the total area of India and area wise position is 13th in the India. The total reported area of West Bengal is 86,87,450 ha. Including this the total cultivable area is 58,12,686 ha. And Forest area is 1,17,477 ha. It is territorially divided into 20 districts namely the newly formed Alipurduar, 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 and around 3354 Gram Panchayats and more than 40,782 villages in West Bengal.

General Information of West Bengal

Total population.		
Male		
Female		
Population growth		
Sex ratio		
Population density		
Literacy Rate		
Male		
Female		
(According to 2011 census)		
No of Sub . divisions		
No of Municipalities	120	
No of Municipal .Corporation.	6	
No of Blocks		
No of Mouza		
No of Police Stations		
No of Gram Panchayats.		
Inhabited Villages		
Area (Sq.Km.)		
No of Famay Welfare Centre.		
No of PHCs		

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 averages about 1750mm, 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 $^{\circ}$ C and 16-26 $^{\circ}$ C respectively in the plains while in the hills these are 15-20 $^{\circ}$ C.

Land use pattern of West Bengal

Geographical area (million hectare)	8.86
Net cropped area (million hectare)	5.46
Gross cropped area (million hectare)	9.23
Irrigation Area(million hectare)	4.67
Cropping intensity (%)	165.34
Forest area (%)	13.72
Non agricultural use (%)	18.66
Barren and Uncultivable (%)	0.35
Permanent pastures and Grazing (%)	0.09
Trees and Groves (%)	0.88
Cultivable wasteland (%)	0.53
Fallow land (%)	0.34

Research Setting



Map: 1 Map of West Bengal

Profile of the Bankura District

There are different opinions about the etymology of the word Bankura. In the language of the Kol-Mundas, orah or rah means habitation. Banku means extremely beautiful. It may also have come from the word banka which means zig-zag. One of the most influential deities in the district is Dharmathakur and he is locally called Bankura Roy. According to local tradition, the town, which is presently the headquarters of the district, was named after its founder, a chieftain named Banku Rai. Another legend has it the town was named after Bir Bankura, one of the twenty-two sons of Bir Hambir, the Raja of Bishnupur. He divided his kingdom into twenty-two tarafs or circles and gave one to each son. Taraf Jaybelia fell to the lot of Bir Bankura. He developed the town that now bears the name Bankura. It has also been suggested that the name is a corruption of the word Bankunda, meaning five tanks. The name Bacoonda is found in old official records.

Bankura is one of the seven districts of Burdwan Division in the Indian state of West Bengal. The district has been described as the "connecting link between the plains of Bengal on the east and Chota Nagpur plateau on the west." The areas to the east and north-east are low lying alluvial plains. To the west the surface gradually rises, giving way to undulating country, interspersed with rocky hillocks. Centre of the famous Malla kingdom of western Bengal, Bankura and its surrounding regions are identified with its historical and cultural significance for the later period of Middle Ages. Vaishnavism, which gained the status of state religion of the Malla kingdom in seventeenth century AD, shaped the culture of the region. The Malla

The Ecology of Forest Fringe: Development and Livelihood ISBN: 978-93-85822-27-8 27

Kingdom was annexed by British East India Company in 1765 and the modern Bankura district took its form in 1881 and was named after its headquarters.

Location

Bankura district lies between situated between 22° 38' and 23° 38' North latitude and between 86° 36' and 87° 46' East longitude.

Boundary

On the north and north-east the district is bounded by Bardhaman district, from which it is separated mostly by the Damodar River. On the south-east it is bounded by Hooghly district, on the south by Paschim Medinipur district and on the west by Purulia district. Bankura district has been described as the "connecting link between the plains of Bengal on the east and Chota Nagpur plateau on the west." The areas to the east and north-east are low lying alluvial plains, similar to predominating rice lands of Bengal. To the west the surface gradually rises, giving way to undulating country, interspersed with rocky hillocks. Much of the country is covered with jungles.

Climate

The climate, especially in the upland tracts to the west, is much drier than in eastern or southern Bengal. From the beginning of March to early June, hot westerly winds prevail, the thermometer in the shad rising to around 45° C (113°F). The monsoon moths, June to September, are comparatively pleasant. The total average rainfall is 1400 millimeters (55in), the bulk of the rain coming in the month of June to September. Winters are pleasant

The Ecology of Forest Fringe: Development and LivelihoodISBN: 978-93-85822-27-828

with temperatures dropping down to below $27^{0}C(81^{0}F)$ in December. This Bnkura district carries a different type of climatic condition. In summer, there are exessive heats in day tim but afternoon cool wind is blowing through his region. From early of Marc t early of June is summer season, which carries high temperature like $45^{0}C$ and sometime more excessive heat Rainy season belongs from month of June to September, average rainfall 1000mm to 1400mm is normal for this region. From early October winter season is starting, in December, temperature is being $25^{0}C$ maximum.

General Information

Area	6,882km ²
Total population	
Male	1,838,095
Female	1,758,579
Sex Ratio	
Population density	523 per.sq.km
Population growth rate	
Proportion to West Bengal Population	3.94%
Total Literate	2,232,992
Male Literate	1,299,337
Female Literate	933,655
Literacy	
Male Literacy	
Female Litercy	60.05
(According to Census 2011)	

District profile

Geographical Area	6,882km ²
Sub Division	3
Police station	21
C.D Block	
Panchayet Samiti	22
Gram Panchayet	190
Municipalities	3
Village	5187

Source: The official website of West Bengal (http://:www.bankura.gov.in)

Hills and Rivers

The hills of the district consist of outliers of the Chota Nagpur plateau and only two are of any great height – Biharinath and Susunia. While the former rises to a height of 448 metres (1,470 ft), the latter attains a height of 440 metres (1,440 ft). The rivers of the area flow from the north-east to the south-west in courses roughly parallel to one another. They are mostly hill streams, originating in the hills in the west. The rivers come down in floods after heavy rains and subside as rapidly as they rise. In summer, their sand beds are almost always dry. The principal rivers are: Damodar, Dwarakeswar, Shilabati, Kangsabati, Sali, Gandheswari, Kukhra, Birai, Jaypanda and Bhairabbanki. There are some small but picturesque water

falls along the course of the Shilabati near Harmasra, and along the course of the Kangsabati in the Raipur area.

Kangsabati Project was started during the second five year plan period (1956–1961). The dam across the Kangsabati has a length of 10,098 metres (33,130 ft) and a height of 38 metres (125 ft).



Map: 2 Map of Bankura district

Information about Barjora block

Barjora is a semi urban block renounced for recent Industrial spurt. It is situated in the ight bank of the upper catchments of river Damodar in the extreme northern part of the District. Bankura. Green forest with laterite soil embraces the entire region a picturesque set up. The main source of living bread of the population of Barjora Development Block is Agricultural, though very recently dependence on Industry amongst the people have increased. Drought, hard texture, low water retention capacity of soil, very low ground water level and inadequate surface water management and soil erosion are main barrier to agricultural growth in70% of the block area and for this migration for work was common phenomenon seen among the agricultural laborers of the locality. Acute situation has got a sea change, with the implementation of MGNREGS and some prominent welfare oriented schemes of the Government. As per order of the Delimitation Commission, No-253 Barjora (Assembly constituency) is composed of the following Barjora Community Development Block and Bhaktabandh, Gangajalghati, Gobindadham, Kapista, Nityanandapur and Piraboni Gram Panchayats of Gangajalghati Community Development Block. There exists a good and healthy relationship between the people of the locality and Block administration and people used to see the Block Administration as popular face of the governance and for this implementation of different govt. schemes are not a very hard task in this block.

Block profile :

- Location including latitude and longitude : N-23°25", E-27°16"
- Area (in square kilometre) : 393.4 sq kilometre
- Administrative division

(Name/s of Police Station/s : Barjora & Beliatore

- Number and names of GPs : 11 Nos
- 1. Barjora GP
- 2. Beliatore GP
- 3. Brindabanpur GP
- 4. Chhandar GP
- 5. Ghutgoria GP
- 6. Godardihi GP
- 7. Hat-Ashuria GP
- 8. Khandari GP
- 9. Maliara GP
- 10. Pakhanna GP
- 11. Saharjora GP
- o Number of Mouza /(Village) : 201
- **Total population** : 1,79,007
- o Male : 92,368
- o Female : 86,639
- o SC (total and percentage) : 58,119 (32.46%)
- o ST (total and percentage) : 3,221 (1.80%)
- o OBC (total and percentage) : 43,467 (24.28 %)

Profile of Alipurduar district

Location and area

Alipurduar District is the 20th district in the state of West Bengal, India . Total area of the district is 3.383 km². It consists of Alipurduar municipality, Falakata municipality and six community development blocks: Madarihat–Birpara, Alipurduar–I, Alipurduar–II, Falakata, Kalchini and Kumargram. The six blocks contain 66 gram panchayats and nine census towns. The district has its headquarters at Alipurduar. It was made a district on 25 June 2014. The district lies between 26° 16' and 27° 0' North latitudes and 88° 4' and 89° 53' East longitudes.

Population

Total population of the district according to 2011 census is 3,403,204 persons, consisting of 1,753,278 males and 1,649,926 females. The district is primarily rural with more than 80% of rural population. It has also high percentage of SC/ST population .

Geographical and physical features

The entire district lies in the Terai and Dooars region. It is irregular in shape laying north to south. The role of forest in the economy of the district is significant. The district is within the broad area of Dooars which is famous for its forests. The most important forest in Alipurduar is Buxa Tiger Reserve, which is famous for its rare flora and fauna. The forest has the status of a National Park and hosts the mosts Bengal tigers in North Bengal. The Chilapata Forests provide an elephant corridor between the Buxa reserve and the Jaldapara National Park, another important eco-tourism destination. Rajabhatkhawa, Jayanti, Bhutanghat, and Raimatang are

The Ecology of Forest Fringe: Development and Livelihood ISBN: 978-93-85822-27-8 34

situated deep inside the forest, and offer wildlife tourism. Each place has forest rest-house accommodation for limited numbers of tourist.

The highest peak of Dooars, the Chota Sinchula, is in Alipurduar. Situated at an altitude of 1733m at about 12 km from Buxa the peak offers views of the impermeable forest covers of Buxa hills and Bhutan valley.

Two rivers flowing across the district: Kaljani and Nonai. The river Dima flows on the west of the district. It is a tributary of Kaljani and meets with the latter near Smashan Khola.

Agriculture and irrigation

Agriculture plays vital role in the economy of the district. This district has diverse agro-climatic conditions suitable for growing various crops profitably. There is scope bringing more area under pre-kharif crop like summer green gram, black gram, maize etc. in the district. More areas of the district can be utilised fully by checking soil erosion and tapping natural water sources viz. aquifers and springs. This district has a potential advantage of growing crops organically. Alipurduar district has a positional advantage having international borders with Nepal, Bhutan and Bangladesh. The district is very rich in natural resources be it forest produce, building materials from the river beds or dolomites. Because of its humid climate there is scope for cultivation of ginger & turmeric in the forest fringe areas.. The tea sector which covers around 10% of the geographical area and generates 5 lakh employments.

In Alipurduar district irrigation from wells is not common. Tank irrigation is also not found. Common irrigation sources of this district are lift irrigation, either from deep tube wells, or from river and shallow tube wells.

The Ecology of Forest Fringe: Development and Livelihood ISBN: 978-93-85822-27-8 35

There are 571 deep tube wells, 285 river lift irrigation and 650 shallow tube well.

Livestock

Livestock are domesticated animals raised in an agricultural setting to produce commodities such as food, fibre and labour. Main livestock population of the district consists of cows, buffaloes, goats, hen, pig etc. Livestock also plays an important role in the economy of the district.





Information about Kalchini block

Kalchini is located at $26^{\circ}41'34''$ N and $89^{\circ}28'18''$ E. Kalchini community development block has an area of 820.63 km². Gram panchayats of Kalchini block/ panchayat samiti are: Chuapara, Dalsingpara, Garopara, Jaygaon I, Jaygaon II, Kalchini, Latabari, Malangi, Mendabari, Rajabhatkhawa and Satal'As per 2001 census, Kalchini block had a total population of 2,52,322, out of which 128,622 were males and 123,700 were females. Kalchini block registered a population growth of 24.26 per cent during the 1991-2001 decade. Decadal growth for the district was 21.52 per cent.Decadal growth in West Bengal was 17.84 per cent. Weather and Climate of Kalchini Block.It is Hot in summer. Kalchini summer highest day temperature is in between 25°C to 39°C. Average temperatures of January is 19 ° C , February is 22 ° C , March is 27 ° C , April is 29 ° C , May is 29 ° C .

In Kalchini block Porobasti is situated in southern part. All the people in this village belong to Rava community. It is 22 km away from Kalchini. In this village total population near about 800.

In Kalchini block Pampubasti is situated in eastern part. There have a mixed type of community like, Shantal, Nepali, Bengali. It is 14 km away from Kalchini block. Total population in this village is 654.