

CHAPTER 2

Geographical Profile of the Study Area

2.0 Geographical Profile of the study area

2.1 History of Maldah District

The word 'Mal' in Arabic means wealth and the name 'Maldah' probably signifies that it was an important centre of trade. It holds nearly the central geographical position in West Bengal. Throughout mediaeval periods Pandua and Gaur of the district were capital cities of Bengal. Gaur and Pandua are almost equidistant north and south from English Bazaar and on opposite sides of Mahananda, Gour being on the west and Pandua on the Eastern. Maldah has its rich heritage and colonial history is indeed one of the most cherished tourist destinations of West Bengal. Maldah was previously known as 'English Bazaar' and it got its name (English Bazaar) from the English Factory which was established here in 1771.

2.1.1 Pre-History

Maldah is the chief halt for visiting Gaur and Pandua. Gaur, capital to three dynasties of ancient Bengal – the Buddhist Palas, the Hindu Senas and the Muslim Nawabs – has seen three distinction eras of glory and has a major share in the history of India.

Pandua, once the alternate seat power to Gour, has the third largest concentration of Muslim monuments in Bengal.

The Barind or Barendrabhumi of Sen dynasty, in which pandua lies, comes into history earlier as part of the kingdom of Panduavardhana. The chief city of kingdom was Pandua Nagar identified by some authorities with Pandua. The Chinese traveler Hiuen Tsang, who visited India from 629-645 A.D. describes Panduavardhana as a kingdom of 700 miles circumference, the capital having a circumference of 5 miles. The really authenticated history of pandua begins in Mahomedan times with the removal of the capital there from Gaur by Shamsudding Ilyas Shah about the year 1353 A.D.

It is unlikely that the Hindu and Buddhistic remains to be found in pandua should been brought from Gaur to the almost utter obliteration of such remains in the latter place. These remains are found over large areas in Dinajpur District also, whereas they are comparatively uncommon in Maldah District proper.

The location of Gour is 15 km south of Maldah town on the border of Bangladesh. In the 7th century Gour was capital of king Shasanka and was capital of Bengal for several centuries. Gour and Pundabardhana were very important trade centres to carry out trade in the Middle East and the South East Asia during the Maurya Empire. The Chinese pilgrim, Hiuen Tsang's accounts also gives information on the ancient history of Maldah.

The inscriptions discovered in the district of the undivided Dinajpur and other parts of North Bengal along with the Allahabad pillar inscriptions of Samudragupta clearly indicate that the whole of North Bengal as far east as kamrup formed a part of the Gupta empire.

When the Guptas over powered the Mauryas, the entire region of North Bengal came under the rule of the Guptas. As a result the kingdom of Pundravardhana became the part of Gupta Empire.

After the Guptas the beginning of the 7th century in Pundravardhana is marked with the rise of Shashanka in the history of Maldah. Shashanka, the most potential king ever been in Bengal, was originally the king of karnasuvarna. Shashanka occupied the extended area of Gour & retained his sovereignty for a span of long three decades.

2.1.1.1 PALA DYNASTY:

The dynasty of Pala kings begins at the end of the 8th century of the Christian era. The pala kings were originally Budhists, though the later members of the family became Hindus under Brahminical influences. Important kings of the Pala dynasty were Dharmapala (about 800 A.D.), Narayan Pala (900-925 A.D.) and Mahipala (980-1035 A.D.). It was in the reign of Mahipala, about 1030 A.D., that a famous gathering of Buddhistic monks attended by envoys from Tibet took place.

2.1.1.2 SEN DYNASTY:

The first member of the Sen Kings, Samanta Sen, is vaguely described as Brahma Khatreya by Caste. His great-grandson, Ballal Sen, the most famous Hindu King of Bengal, was reigning in Gaur in 1169 as a ruler of Bengal and Mithila. The fame of Ballal Sen rests mainly on the institution of Kulinism.

Lakshman Sen, the Son of Ballal, gave his name in the form of Lakhnauti or Lakhmanavati to the northern Suburbs of Gaur. He was the last of the Hindu Kings of Gaur, in 1194. He was overthrown at Nadia by Bakhtiyar Khilji, the Lieutenant of the Delhi Emperor, who led the Mohamedal invasion of Bengal.

2.1.2 MEDIEVAL AGE

2.1.2.1 MAHOMEDAN RULE:

Bakhtiyar Khilji made his headquarters at Gaur and from that centre established Mahomedan rule over the greater part of Northern and central Bengal. After the death of Bakhtiyar Khilji Ghiyasaddin Khilji ruled from 1211 to 1227 A.D. Ghiyasaddin is said to have corresponded with the Caliphs of Bagdad through the Arab traders who visited Bengal by sea.

After Ghiyasadin, his son Nasiraddin became Governor in 1227 A.D. The period of direct dependence on Delhi lasted till the middle of the 14th century ; in this time the Mahomedan Power was Consolidated at Gaur.

Resistance to the power of Gaur came mainly from Orissa. Timur Khan, the Governor of Oudh, seized Gaur and ruled till his death (1246 circa).

Barbak, son of Nasiraddin ruled strongly and Gaur had prosperity till his death in 1478. After him, however, there was a period of frequent change of rulers. Faroz Shah built the Firoz minar in Gaur and several mosques.

After the death of Firoz Shah, Hossain Shah established himself in 1494. He ruled for 27 years and completely restored the fortune of Gaur, so much so that Gaur became a synonym for Bengal.

It was in the reign of Hossain Shah in the year 1509 that the famous religious reformer Chaitanya Deb became a sanyasi and founded the Bairagi Culture. Chaitanya himself visited Ramkeli near Gaur, when Rup and Sonatan lived. The well known 'Bairagi Mela' at Ramkeli perpetuates their memory. Another great disciple of Chaitanya was Nityananda, from whom derives the local Goswami family of Goyeshpur.

Hussain Shah built the Dakhil gate of the fort in Gaur and the tomb of Akhi Serajaddin at Sadullapur. He was succeeded by his son Nasrat Shah Who married the daughter of the Afgan Emperor of Delhi and gave Shelter to the Chiefs of that dynasty

after it had been over thrown at Panipath (1526) by the Moghuls under Babar. During his reign the Baradarwari Mosque and Kadam Rasul were built in Gaur.

In 1537 A.D. the Pathan adventurer, Sher Khan latter the Emperor Sher Shah, who had established himself in Bihar adanced against Gaur, which he took and sacked. Mahmud, uncle of Nasrat applied to the Portuguese for assistance against Sher Khan, but that the squadron of nine ships sent to him not arrives in Bengal till after the surrender of the city.

2.1.2.2 DECLINE OF GAUR:

Mahmud also applied for assistance to the Emperor Humayun, who invaded Bengal and retook Gaur Shortly after Mahmud's death. Mahmud was buried at Sadullapur and with him died the last independent king of Bengal.

From this time may be dated the beginning of the decline of Gaur, lost its strategic importance as the power of Delhi extended eastward, whilst at the same time a period of development of trade and commerce in Bengal was commencing with the coming of the Portuguese and other traders from the west.

Humayun remained for some three months in Gaur enjoying its amenities. He renamed it Jannatabad (the city of Heaven) as he dislike the word Gaur.

Later, in 1540, sher khan defeated Humayun and made himself Emperor. He introduced the fiscal division of the paragana into Bengal that in which Gaur lies bears the name 'Shershabad'.

After Sher Shah's death in 1545 Mohamed Khan, had been appointed as Governor of Bengal. He was defeated and killed by the Emperors general Himu. His son Bahadur Shah, however, established himself at Gaur and died there.

A pestilence broke out in which thousands died in 1573. As a result Gaur became depopulated and practically deserted as a result of this pestilence which is generally believed to have been some form of malaria. Thousands died daily; the livings were wearie with burying the dead. The few people that survived the plague left the city which was never again populated to any extent. Gaur was the capital of hundred kings, the seat of wealth and luxury; it had extended 2000 years. In one year it was humbled to the dust and became the adobe of monkeys and leopards. ⁽¹⁾

2.1.3 MODERN ERA:

There after the Muslim rule lasted for about five hundred years before Sirajuddoulah was defeated by Lord Clive at the battle of Plassey in 1757 whence the British rule started. The period of British history of Maldah, points out, Maldah served as the part of Rajshahi and Bhagalpur till 1905. During the partition of Bengal plan in 1905, Maldah was decided to incorporate with the areas of East Bengal and Assam. But finally through a declaration of the Radcliff Award, in 17th August 1947 the district of Maldah was attached with the areas of West Bengal. So, Independent day of Maldah is on 17th August, 1947.

2.2 Physical Setup of the District

2.2.1 Topography:

The river Mahananda flowing through the district divides the district into two regions-

- 1) The Eastern Region and
 - 2) The Western Region
- 1) The Eastern Region: The Eastern Region is known as "Barind". The Barind Region consists mainly of old alluvium and relatively infertile soil. The Eastern part is comparatively high and undulating.
 - 2) The Western Region: The western region of Mahananda is further divided into two parts by river Kalindri flowing west to east from the Ganges. The northern part of Kalindri is known as "Tal" and the southern part of Kalindri is known as "Diara".
 - a) Tal Region: Tal is a low lying area of the northern part of Kalindri and vulnerable to inundation during rainy season. Tal floods deeply as the river rises and drains by meandering streams into swamps or into the Kalindri.
 - b) Diara Region: The southern part of Kalindri consists of very fertile soil and is thickly populated, being commonly known as "Diara". It is silted throughout by old courses of the Ganges, upon the banks of one of which the city of 'Gour' once stood.

The district is a part of lower Ganga Plain and there are no hills, unless a few elevated tracts in the "Barind" be so described. Height of these highlands ranges

between 30m-50m, and being frequently intersected by deep water channels, stimulate the appearance of small hills. (Map 2.1)

2.2.2 Geology: The district is covered by alluvium. The Barind region is formed by older alluvium. The Barind region is usually composed of massive argillaceous beds of a rather pale reddish- brown hue, often weathering yellowish, disseminated throughout which occur kankar. The low land of the west of Mahananda and in the south is of more recent formation which consists sandy clay and sand along the course of the rivers. The formation is similar to the older alluvium of Barind in the west of the Mahananda.

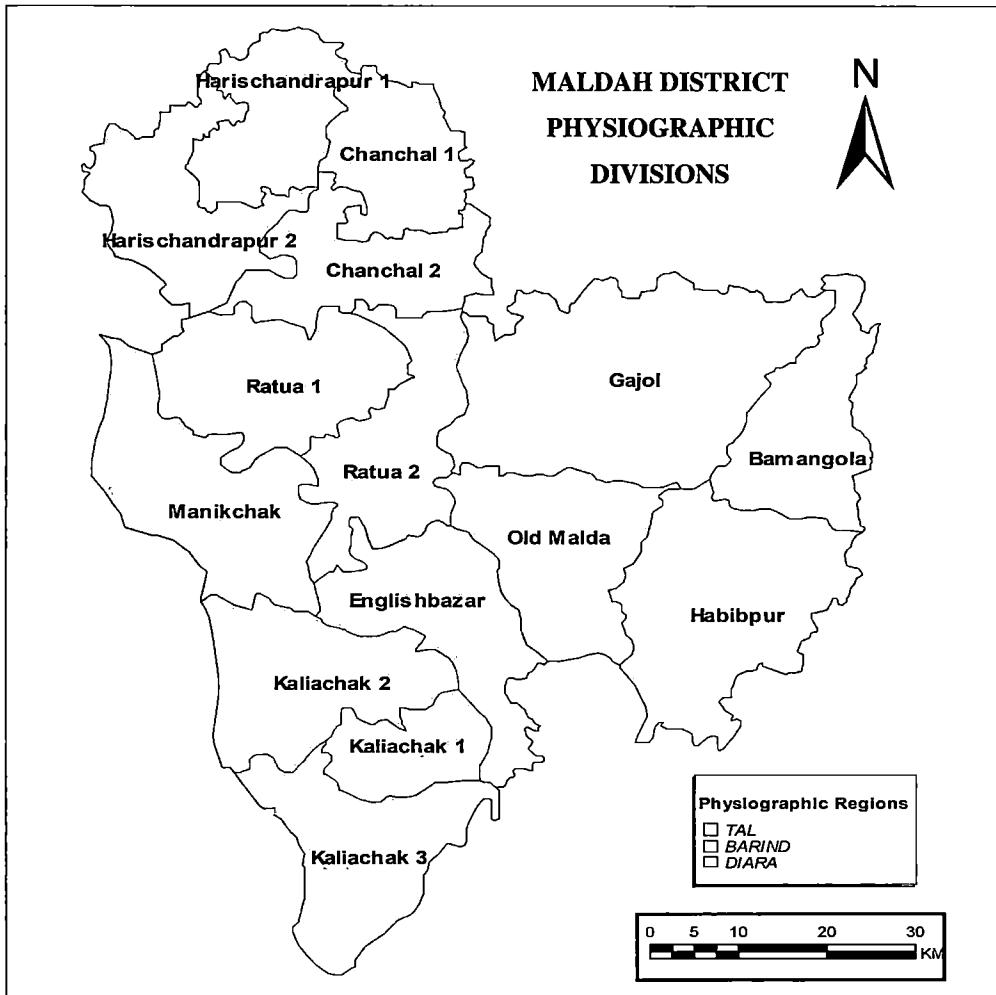
The present surface of the district is the result of denudation of the old alluvium of North Bengal.

2.2.3 Climate:

The climate of the district is generally hot in summer and cold in winter with temperature ranging from 4⁰c to 43⁰c and the highest annual rainfall of 1329 mm was recorded in 2006, during 2002-2006.

2.2.3.1 Rainfall :

Highest amount of rainfall was recorded in Maldah in the month of July (331mm) in 2003 , in October (515mm) 2004 ,in July(528 mm) and in September(405 mm)2006.Total yearly rainfall ranges between 1329 mm to 1919 mm from 2000-2006.



MAP 2.1

Table-2.1***Rainfall and Temperature in Maldah District***

Year	Rainfall (mm)	Temp. in Degree Celsius	
		Max.	Min.
2002	1381	38	8
2003	1652	41	4
2004	1919	43	9
2005	1579	42	11
2006	1329	41	5

Source: Meteorological Department, Govt. of India 2005.

Monthly Rainfall: Table-2.2 represents monthly rainfall of the district in 2006. Highest amount of rainfall was recorded in the month of September (405mm), followed by 260mm in August, 220mm in July and 178mm in July in the year 2006(Figure-2.1).

Table-2.2***Monthly Rainfall in the District Rainfall in Milimeter***

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	OCT.	NOV.	DEC.
RF (mm)	0	0	12	62	105	178	220	260	405	71	15	1

Source : Meteorological Department, Govt. of India 2007

2.2.3.2 MAXIMUM AND MINIMUM TEMPERATURE

In 2006 the maximum temperature was recorded in the month of April (41⁰c) and the minimum temperature was 5⁰c which was recorded in the month of January. So the annual range of the temperature in 2006 was 36⁰ C. During 2002 to 2006, the maximum temperature was 43⁰c which was recorded in May, 2004 and the minimum temperature was 4⁰c which was recorded in January, 2003(Figure-2.2).

Table-2.3***MAXIMUM AND MINIMUM TEMPERATURE***

Month Temp. ⁰ c	J	F	M	A	M	J	Jl	A	S	O	N	D
Max(⁰ c)	27	37	39	41	39	39	37	37	35	35	32	29
Min(⁰ c)	5	13	18	18	21	23	26	25	24	18	14	12

Source: Meteorological Department, Gove of India, 2005.

2.2.3.3 Wind Condition:

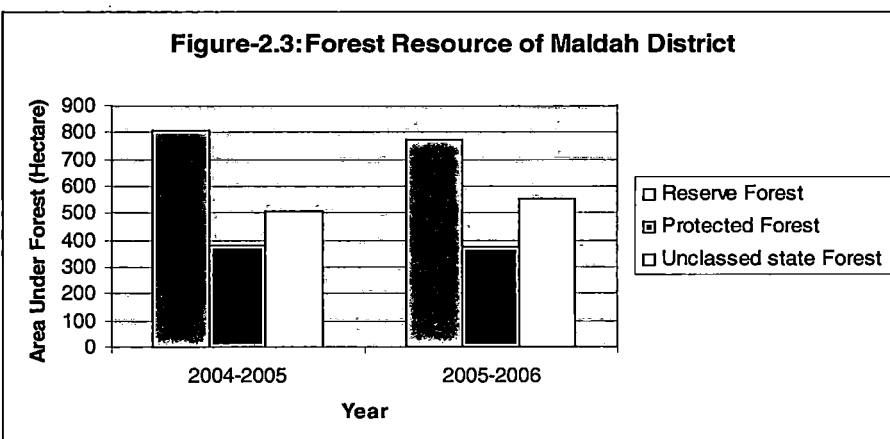
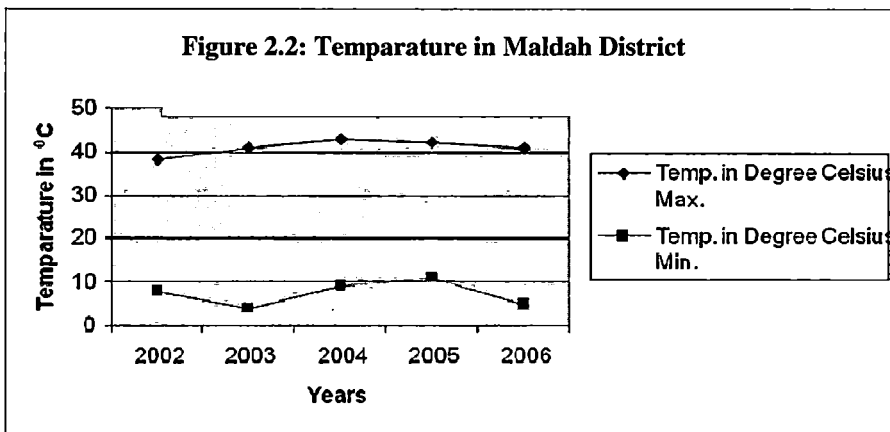
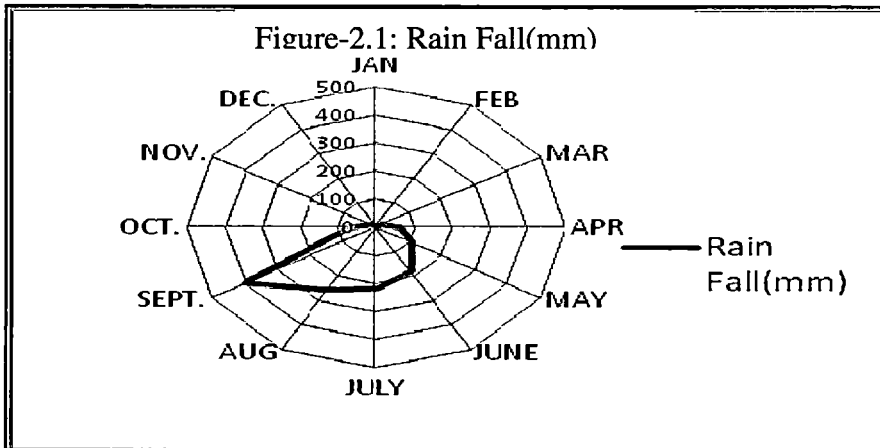
From middle of March to middle of May there are strong winds, hot and generally accompanied by thunderstorms, rain and after by hail of a great size. In December and January the cold weather disappears with the coming of the paschima of west winds which are usual in March and April. In May and June the air becomes stagnant and oppressive as the wind changes to the east.

2.2.4 Soils of Maldah Districts:

The soils of Maldah district are hard silty clays or a radish hue that has developed through accumulation of sesquioxides. Organic residues in this soil are highly decomposed, leading to non-acidic soil PH at levels as low as 6.8 in the Barind tracts of Maldah. Organic carbon content in the soils is also generally low at 0.54 percent in Maldah, as a result of which overall soil fertility remains at modest levels under unerrigated conditions. Nevertheless since the hummocky or undulating terrain in the Barind promotes or fair amount of run off and the hard of impervious clayey Barind soils permit little percolation. Diara region is a relatively well-drained flood land formed by the fluvial deposition of newer alluvium in the transitional zone between the Barind upland and the marshy Tal tracts.

2.2.5 River System:

The main rivers of the district are the Ganga, the Mahananda, Kalindri, Tangan, Purnabhaba, Fulhar, Brahmani, Pagli, Buri Ganga, Behula etc. The Ganga and Mahananda are of Himalayan origin and flow in southerly direction. A short account of the rivers of the district are given below-



2.2.5.1 The Ganges:

The Ganges first touches the district as it sweeps south round of the Rajmahal hills. At this point it is connected in the rains by various channels with the Kalindri. About two miles below Rajmahal the Ganges sends off a small stream, the Chhota Bhagirathi, which is presumably an old bed of the great river itself and is still revered as at least equal in holiness to any other part of the sacred stream. The Ganga runs first to the east and then generally in a southerly direction, bordering for about 13 miles the ruins of the city of Gaur. A little way further down, the Ganges sends off, also to the east, a larger branch, the Pagla, into which the Chhota Bagirathi ultimately flows. After their junction they flow past Kasnat merging near Tartipur into the Mara Ganga. The Ganges sends off southwards a branch which retains the name of Bhagirathi.

2.2.5.2 The Mahananda:

The Mahananda, flowing from Purnea, first touches the district at its extreme north, from which point it forms its north-eastern boundary for about 25 miles, receiving as its sole tributary the Nagar from the east. It then enters the district and divides the district two nearly equal portions, finally falling into the Ganges at the south most point of the district. Its entire course in the district would be about 80 miles in a straight line. Up to Maldah its average width is from 50 to 100 yards. Below Maldah, where it receives the water of kalindri, it widens out to an average of 200-600 yards.

2.2.5.3 The Kalindri:

The Kalindri enters the district from Purnea. The main body of its waters is brought down from the mountains of Nepal by the Panar, which assumes the name of Kalindri shortly before its entrance into the district. In the rainy season, as has been noticed, it connects with the Ganges on its right bank.

2.2.5.4 The Tangan and Purnabhaha:

The Tangan and Purnabhaha on the left bank are the most important tributaries of the Mahananda; these rivers flow from Dakshin Dinajpur district into the north-

eastern corner of the district. Both the Tangan and Punarbhaba have steep banks, particularly where they pass through their barind formation.

2.2.6 Maldah: As a flood prone ares (Brief Description of the 1998 Flood).

There was a heavy rainfall in the catchment areas of west Bengal between Ganga and Mahananda. The recorded maximum rainfall was 418mm in 48 hours (Aug.24 & 25, 1998). As a result water levels of Ganga and Mahananda were steady rised.

Due to the rise in water levels in both Mahananda & Ganga, there was drainage congestion. The tributaries (Fullhar Kalidri, Pagle, etc) of the river did not perform their intended task. Instead of draining the runoff from the catchment they started carring the flood water of the Ganga & Mahandnda River to Maldah. It affected 2.1 million people in the Maldah district, 450 people died during & after the flood, 250 cattles were lost, 200000 houses were totally destroyed, 150000 houses were damaged & Standing crops in 150000 hectares were destroyed. The estimated cost of damages of the 1998 flood in Maldah was about Rs. 10,000 million (about US \$ 250 million at 1998 price).

2.2.7 Farakka Barrage:

The Farakka Barrage was confronted in 1971 across the mighty river Ganga to divert part of the main flow from Ganga to its tributary, the Hoogly. Before 1971, the main flow of the Ganga between Farakka and Rajmahal was more or less straight. After the Completion of barrage, the Ganga river upstream of Farakka started Shifting gradually towards the east bank towards Maldah due to the deposition of sediments on the western right bank. With the Farakka Barrage at the centre the river is developing a typical meandering pattern. Upstream of the barrage, it is meandering towards Maldah and down stream of the barrage it is meandering towards Murshidabad. Being located on the outer sides of meanders, both districts of Maldah (Upstream) and Murshidabad (Down stream) are subjected to devastating erosion.

2.2.8 GANGA EROSION IN MALDAH

As a result of Ganga erosion about more than 250 sq mile of fertile land has been lost till 2006. A few sandy shoal have emerged, which create inter sate boundary dispute. The Government does not acknowledge the newly emerged settlements as revenue villages. Below Farakka the river erodes the lands of India other side some sandy shoal have emerged within Bangladesh territory, create inter national dispute. This created a class of environmental refugees. Nearly 12,000 families of the up stream and about 15,000 families of the down stream have been displaced. These evicted families settled in different sandy shoal. They have been suffering from identity crisis because these sandy shoals (Chars) are classified as un-surveyed land. However inspite of the silence from the part of the government, the local community organized by Nagarik Committee as a step to institutionalize their existence has surveyed at their own and even attempted to submit the same to the local village panchayats. As a precautionary measure, sand bags have been deposited on river embankments, about 1.5 km long, at Panchanandapur. Besides, about 100 embankments had been strengthened at Sukalapur in 2003. All these are, however, temporary measures which will not be able to meet the threat. To check erosion, more permanent measures are necessary.

2.2.9 Forest Resource of Maldah District

Although forests cover very few part of the district but it play vital role in the economy of local people. The main forest products of the district are timber fuel and pole. During 2004-2005 the area under Reserve Forest of the district was 806.50 hectares but during 2005-2006 it decreases to 773.95 hectares. Area under Protected forest was 378 hectares in 2005-2006 but it was also decreased to 373 hectares during 2005-2006. The decreasing area under forest covers clearly indicating the rapid rate of deforestation in the district. But the area under unclosed state forest increased from 509.80 hectares to 556.05 hectares during 2004-2005 to 2005-2006. (Figure-2.3).

Table-2.4

Forest Resource of Maldah District

Area by class of forest	Area under Forest (hectares)	
	2004-2005	2005-2006
Reserve Forest	806.50	773.95
Protected Forest	378.00	373.04
Unclassed state Forest	509.80	556.05

Source : Divisional Forest Officer, Maldah

2.3 CULTURAL SETUP OF THE DISTRICT

2.3.1 Population :

According to the census of India, 2001 total population of the district is 32,90,468 which is 4.10% of the total state population. The sex ratio of the district is 948 whereas the sex ratio of West Bengal is 933. Total SCs population of the district is 5, 54,165 which is the 16.84% of the district total population. The sex ratio of the scheduled castes of the district is 946 whereas the sex ratio of the scheduled castes of the West Bengal is 1044.

2.3.1.1 Growth of Population:

Table-2.5 represents the growth of the population of Maldah district from 1901 – 2001.

The index of population growth (1901 as base) in 1911 was 116 and in 1921 was 114. So, during the 1911 to 1921 there was negative growth of population. Except 1921 in all the decades population growth was positive in the district. The index of growth of population was 202 in 1961 compared to 1901 population as base. So, there was double increase in population in 60 years. In last 100 years (1901-2001) the index of growth of population of the district was 545. So, there was 5.45 times increase in the index of population growth (1901 as base) in 1911 was 116 and in 1921 was 114. So, during the 1911 to 1921 there was negative growth of population. Except 1921 in all the decades population growth was positive in the district. The index of growth of population was 202 in 1961 compared to 1901 population as base. So, there was double increase in population in 60 years. In last 100 years (1901-2001) the index of growth of population of the district was 545. So, there was 5.45 times increase in the

population during last 100 years (Figure-2.4). The regional demography of Maldah district has undergone continuous alteration over the period between 1901-2001, during which the aggregate population of the district has risen more than five times from just over 6 lakh to well over 32 lakh. Because of its contiguity of international and inter-state borders and because of its character as a cultivated region that can support human settlement of high density, Maldah district has been a important recipient of human migration waves of the 20th century.

TABLE – 2.5

Growth of population by sex in different census years

Year	Total Population	Index with 1901 as base	No. of Males	No of Female	No. of Female / 100 males	Urban Population	Rural Population	P.C. of rural population to total population
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1901	603649	100	300743	302906	101	17410	586239	97.12
1911	698547	116	348522	350025	100	18072	680475	97.41
1921	686174	114	344650	341524	99	17202	668972	97.49
1931	720440	119	362168	358272	99	19686	700754	97.27
1941	844315	140	425832	418483	98	27179	817136	96.78
1951	937580	155	476794	460786	97	35161	902419	96.25
1961	1221923	202	621990	599933	96	50785	1171138	95.84
1971	1612657	267	827706	784951	95	68026	1544631	95.78
1981	2031871	337	1042498	989373	95	97196	1934675	95.22
1991	2637032	437	1360541	1276491	94	186537	2450495	92.93
2001	3290468	545	1689406	1601062	95	240940	3049528	92.68

Source: Census of India 2001.

2.3.1.2 Density of Population

Table-2.6 represents the density of population of Maldah district in 2001. The average density of population was 706 persons per sq. km in 1991 which increased to 881 in 2001. Within the district there is great variation in the spatial pattern of density. It varies from 474 per square km in Habibpur to 2951 person per square km. in kaliachak I block.

On the basis of the population density Maldah district is distinct into 4 population density zones, these are –

1) Low Population Density Zone:-

This category includes such block of the district where the density of population is 474-665 persons per sq. km. there are four blocks under this category. These are Gazole (574), Bamangola (618), Manikchak (665) and Habibpur (474).

TABLE – 2.6

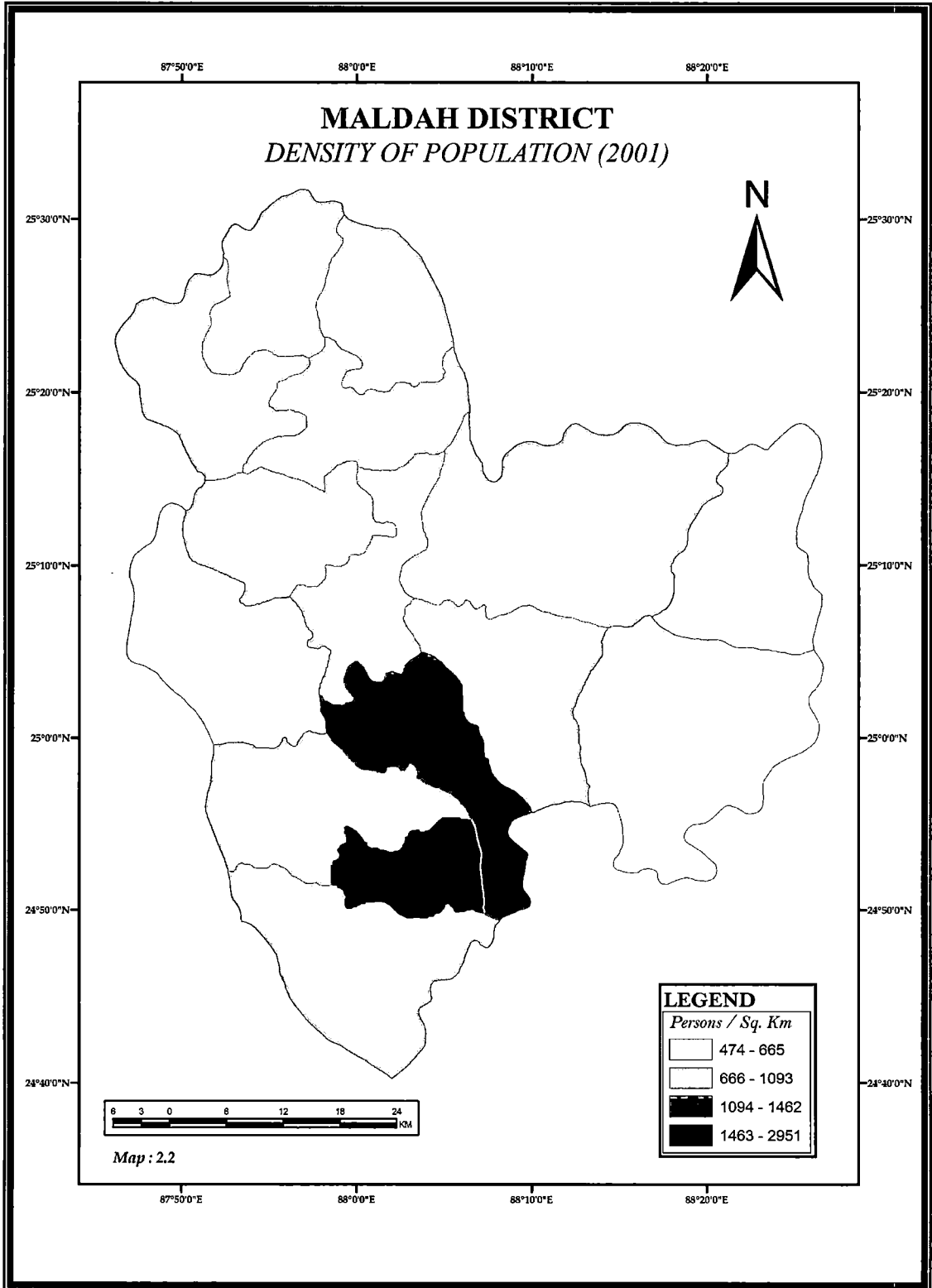
Area, Population and density of population 2001

Sub-Division/ C.D. Block / M	Area in Sq. Km	Population	Density	% of Population to District Population
(1)	(2)	(3)	(4)	(5)
Chanchal Sub-Division	1160.44	1078101	929	32.76
Harishchandrapur-I	171.41	162406	947	4.93
Harishchandrapur-II	217.21	198039	912	6.02
Chanchal – I	162.14	174204	1047	5.29
Chanchal – II	205.22	165192	805	5.02
Ratua – I	239.53	217356	943	6.61
Ratua – II	173.93	160904	925	4.89
Sadar Sub-Division	2479.43	2212367	892	67.24
Gazole	513.65	294715	574	8.96
Banongola	205.91	127252	618	3.87
Habibpur	396.07	187650	474	5.70
Old Maldah	224.66	194214	864	3.99
English Bazar	265.15	387692	1462	6.88
Manik Chak	321.77	214127	665	6.51
Kaliachak – I	105.37	310935	2951	9.45
Kaliachak – II	222.73	211406	949	6.42
Kaliachak – III	260.12	284376	1093	8.64
District – 2001	3733.00	3290468	881	100.00
1991	3733.00	2637032	706	100.00

Source : Census of India 1991 and 2001.

2) Moderate Population Density Zone :-

This category is characterized by population density between 666-1093 persons/sq.km. It includes the blocks of Harichandrapur – I (947), Harischandrapur II (912), Chanchal II (805), Ratua I (943), Ratua – II (925), Old Maldah (864), Kaliachak II (949), Chanchal I (1074), and Kaliachak III (1093) blocks.



3) High Population Density Zone:-

The blocks of the district includes in this category wherein the population density is between 1094-1462 persons / sq. km. English Bazar (1462) block falls under this category.

4) Very High Population Density Zone:-

This category includes such blocks of the district where the density of population is 1463-2951 person / square km. There is only one block (Kaliachak I) with very high population density of 2951 person per square km. (MAP-2.2)

2.3.1.3 Working Population: Industrial Categories of Workers:

According to 2001 census, of the total working population there are 20.83% cultivators, 30.72% agricultural laboures, 15.61% household industry workers and 32.84% are other workers. Of the total rural workers 22.04% is cultivators, 32.52% agricultural labourer, 16.22% are house hold industry workers and 29.22% are other workers. Of the total urban workers, only 0.95% is cultivators, 0.90% is agricultural labourer, 5.54% are household industry workers and 92.61% are other workers. Whereas among the scheduled castes 23.88% is cultivators, 38.98% agricultural laboures, 8.30% household industry workers and 28.84% is other workers. (Figure-2.6a).

Table-2.7a

Working Population-2001

Social Category	Region	Cultivators %	Agricultural Labourers %	Household Industry Workers(%)	Other Workers %
General	Maldah	20.83	30.72	15.61	32.84
	Rural	22.04	32.52	16.22	29.22
	Urban	0.95	0.90	5.54	92.61
Scheduled Castes	Maldah	23.88	38.98	8.30	28.84
	Rural	25.05	40.87	8.22	25.86
	Urban	1.01	1.78	9.80	87.34

Source:-Census of India 2001

Work Participation Rate (WPR):

Gender differentials in WPR among different social categories in Maldah district in 2001 is shown in Table 2.7b.

Table -2.7b

GENDER DIFFERENTIALS IN WORK PARTICIPATION RATES, 2001

Social Categories	WPR for Men	WPR for Women	Gender Gap in WPR
General	78.03 %	21.68 %	56.35 %
SC	66.43 %	33.57 %	32.86 %
ST	55.84 %	44.15 %	11.69 %

Source:-Census of India 2001

The above table represent that among general categories the WPR for men is 78.03% and for women is 21.68% so the gender gap 56.35% in terms of WPR in scheduled cast the WPR for main is 66.43% and for women is 33.57% the gender disparity among scheduled casts is 32.86%. So the disparity among SCs is lower than general casts. On the other hand the gender disparity among scheduled tribes is very low (11.69%) in terms of work participation rates. It is also observed that the WPR for women is high (33.57%) among SCs compare to general castes (21.68%)(Figure-2.6b).

2.3.1.4 Sex Ratio:-

Table-2.8 represents recent change in sex ratio in the district compared to West Bengal and India. It is observed that in 1991 the FMR of the district was 938 and in 2001 it increased to 948. So, the decadal change in FMR was + 10/1000 whereas this change was +17/1000 and +6/1000 for West Bengal and India respectively. (Figure-2.7).

Table – 2.8

Recent Change in Female-Male Ratios, 1991-2001

Unit Area	Census		Decedal Change (1991-2001)
	1991	2001	
India	927	933	+6/1000
West Bengal	917	934	+17/1000
Maldah	938	948	+10/1000

Source : Census 1991 & 2001

2.3.1.5 Literacy: In terms of Human Development Index (HDI) computed for the West Bengal Human Development Report (2004), the district of Maldah ranked 17th of the 18 West Bengal districts. Educational attainments do reflect the nature and quality of human capital information in a society. But unfortunately the performance of Maldah district regarding general literacy and female literacy is very dissatisfactory. There is tremendous gender gap in rural urban, SC/ST categories. Table – 2.9 represents the position Maldah District regarding literacy in comparison with West Bengal and India (Figure-2.8).

Table : 2.9

Comparative Position of Gender Literacy 2001

Unit Area	General Literacy (%)	Male Literacy (%)	Rank in State	Female Literacy (%)	Rank in state	Gender Literacy Gap (%)
India	65.4	75.9	-	54.2		21.7
West Bengal	69.22	77.58	-	60.22		17.36
Maldah	50.30	59.74	18	41.67	16	18.07

Source : Census of India – 2001.

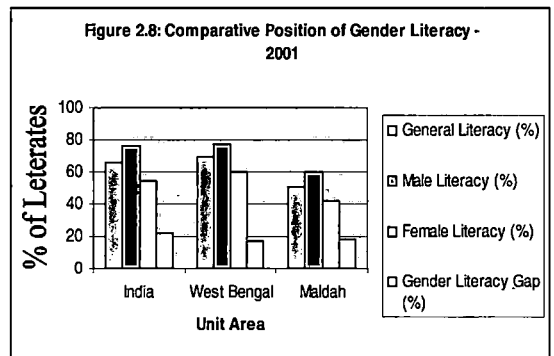
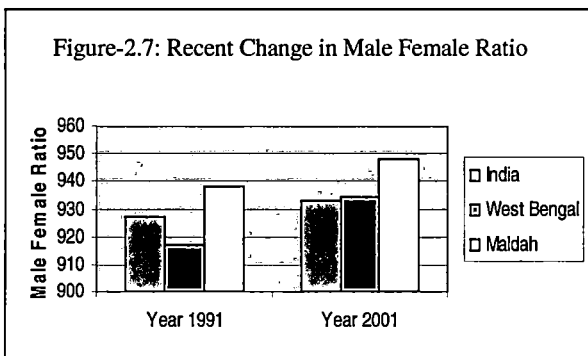
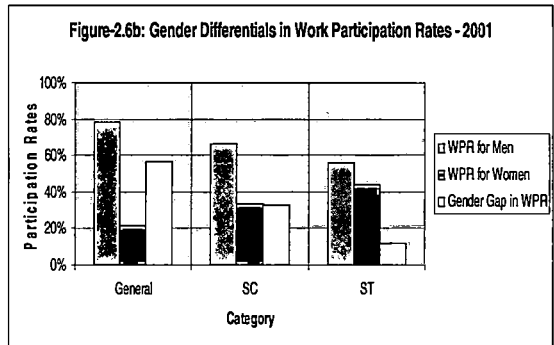
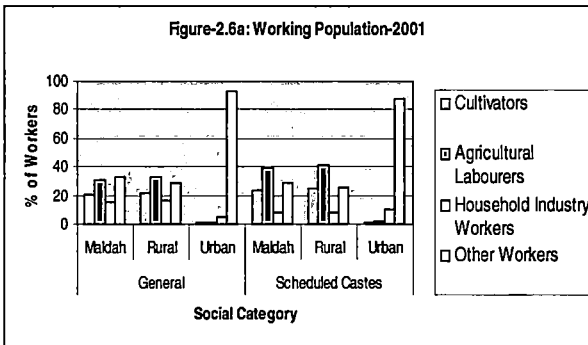
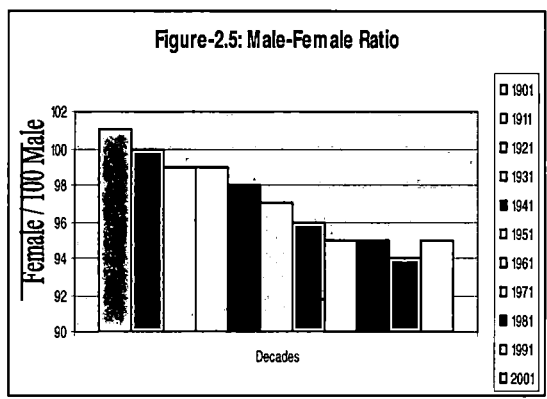
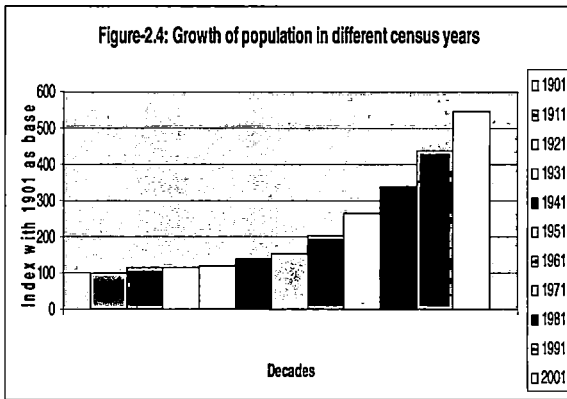
The table –2.10 represents the rural urban and male female percentage of literacy in Maldah district during last two decades-

Table : 2.10

Rural Urban and Male Female percentage of Literacy

Rural / Urban	1991			2001			Gender Gap	
	Male	Female	Total	Male	Female	Total	Year 1991	Year 2001
Urban	79.81	65.83	72.11	84.65	73.99	79.47	14.98	10.66
Rural	46.42	29.57	38.28	61.4	48.33	55.06	16.85	13.07

Source : Census of India Rs. 1991 and 2001.



From the above table it is clear that in rural areas the trend of poor percentage of literacy and higher gender gap in female literacy is higher than urban areas. Only the economic factor is responsible for this worse percentage of general and female literacy of rural area of Maldah district. Though the encouraging fact is that the gender gap in both rural and urban areas is decreased in 2001 compared to 1991(Figure-2.9).

2.3.1.6 Ethnical and Anthropological Characteristics:

According to 2001 census 92.68% population of total population live in rural area and 7.32% in urban area. So, the population of this district is mainly rural. The villages of Maldah vary considerably in size as well as in population. Starting from the partition of Bengal, a large displaced population from East Pakistan had settled in bordering thanas namely, Bamangola, Habibpur, Maldah and Kaliachak. The “Barind” area is inhabited mostly by a huge Santal population. In those areas which have considerable population of weavers of silk rearers of silk-reelers the village tend to become small townships of which Kaliachak, Sujapur, Peasbari, Manikchak, Ratua, Chanchal, Harischandrapur etc. may be cited as examples.

There are 554165 scheduled castes population which is 16.84% of the total population of Maldah district. There are 59 sub-communities of Scheduled castes population, of which Rajbanshi, Namasudra, Polia, Tiyer, Keet and Poundra are the main sub castes (Table-Appendix-II). Of the total Population of Maldah district 6.9% are scheduled tribe. There are 38 sub communities of scheduled tribes of which Santal, Oraon , Mores, Mundas and Malpaharias are main sub communities. In Gazole, Bamangola, Habibpur and Old Maldah blocks of “Barind” areas about 88% of S.T. population are concentrated. The scheduled tribes and scheduled castes people of this district are very much backward economically as well as educationally.

2.3.1.7 Religion:

The religious composition of the district population in Maldah is finely balanced between the Hindus and Muslims .According to the 2001 census 49.28%population of the district belongs to Hindu and 49.72% belongs to Muslim.So 99% population of

the district belongs to these two religions. and the religious composition of the district population in Maldah is finely balanced between the Hindus and Muslims. Other religious composition of the district population are Christians, Sikhs, Jains and others.

2.3.2 The Economy:

Maldah district is one of the most under developed districts of West Bengal. The backwardness of the district is characterised by low per capital income, low yield per acre of agricultural land, backwardness in industrialization, shortage of capital, lack of infrastructural facilities and shortage of large labour surplus.

Agriculture is the main economic activity of the district. The district has no known mineral resources. The main agricultural products are paddy, wheat, and jute and Rabi crops.

Production of mango is another aspect of Maldah economy. About forty thousand acres of land are covered by mango orchards, which, in normal years produce 3, 60,000 tonnes mangoes which in money terms comes to about Rs. 5.5 crores.

2.3.2.1 Agriculture:

Man is increasingly in need of food. Directly or indirectly he has to depend on plant for food. So, cultivation of plant or agriculture is man's basic and primary occupation. Successful cultivation depends on some suitable conditions – ecological and social. Maldah district provides with the most suitable combination of these conditions. A great variety of crops are grown in the district. This includes Kharif and Rabi and their intermediate varieties as well, covering both food crops and cash crops. Agriculture of Maldah is conducted both on subsistence and commercial bases.

Yield rates of Major Crops in Maldah District:

Table-2.11 shows that the production of rice per hectare has gone up from 2001 to 2006. In 2001-2002 the yield rate for rice was 2513 kg/hectare and in 2005-2006 it gone up to 2910 kg/hectare. But the production of wheat per hectare has gone down during same period. During 2001-2002 yield rate for wheat was 2616 kg/hectares

while it gone down to 2220 kg/hectare. Starting from 2001-2002 to 2004-2005 the yield rate of total cereals has gone up from 2524 kg/hectare to 2917 kg/hectare. During 2001-2002 to 2005-2006 the yield rate of total pulses was highest in 2004-2005 (909 kg/hectare) and lowest in 2002-2003 (738 kg/hectare). The yield rate for total food grains in the district was highest in 2005-2006 with 2615 kg/hectare while during 2002-2003 the yield rate per hectare was 2343 kg which was lowest yield rate during 2001-2006 (Figure-2.10).

Table-2.11

Growth of Yield rates of Major Crops (In Kg. per hectares)

Crop	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Rice	2513	2545	2745	3045	2910
Wheat	2616	2592	2431	2439	2220
Barley	1036	1010	1226	2044	1412
Maize	3229	2354	2638	2931	2660
Potato	17838	21805	20440	19337	15243
Total cereals	2524	2537	2663	2917	2778
Total Pulses	840	738	902	909	852
Total foodgrains	2352	2343	2490	2727	2615

Source : Directorate of Agriculture, Govt. of W.B.

Production of Rice: Cultivation of rice in the district is closely related to the availability of irrigation water. Three types of rice produce in the district –

- a) Aus, the Autumnal Rice
- b) Aman, the Winter Rice and
- c) Boro, the Summer Rice

Among these three types of rice Aman is cultivated widely in the district followed by Boro and Aus.

Table-2.12
Production of Rice
(Production in Thousand Tonners)

Year Rice	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Aman	276.1	292.6	329.4	405.6	391.7
Boro	239.5	234.0	222.4	237.3	231.1
Aus	20.6	19.4	20.8	18.7	13.3

Source : Directorate of Agriculture, Govt. of West Bengal

By studying the above table we can say that the production of Aman increased from 276.1 thousand tonnes in 2001-2002 to 405.6 thousand tonnes in 2004-2005. But in 2005-2006 the production of Aman as well as Boro and Aus decreased as compared to 2004-2005. Production decreased 13.9 thousand tonnes in case of Aman, 6.2 thousand tonnes in Boro and 5.5 thousand tonnes in Aus production from 2004-2005 to 2005-2006 (Figure-2.11).

Wheat Production

The Highest wheat production during 2001-2006 recorded in 2003-2004 with 133.9 thousand tonnes followed by 132 thousand tonnes in 2004-2005, 129.1 thousand tonnes in 2001-2002 and 125.2 thousand tonnes in 2002-2003. In 2005-2006 total wheat production of the district was 101.8 thousand tonnes, which was 30.2 thousand tonnes short production compared to 2004-2005 (Figure-2.12).

Table-2.13
Wheat Production 2001-2006

Year production	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Thousand Tonnes	129.1	125.2	133.9	132.0	101.8

Source : Directorate of Agriculture, Govt. of W.B.

Figure- 2.9: Rural Urban and Male Female Literacy

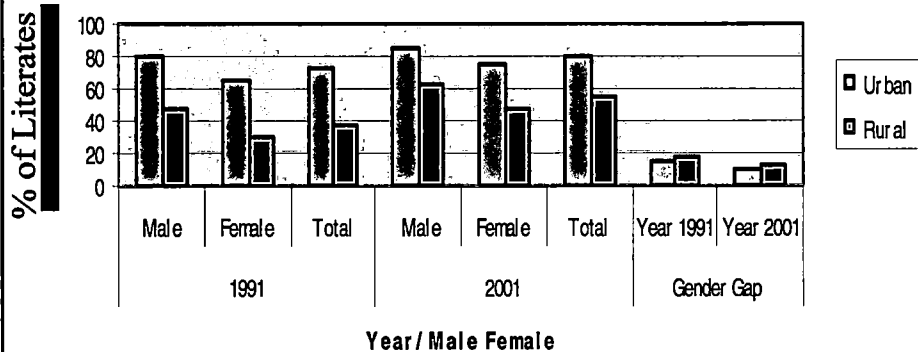


Figure-2.10: Growth of Yield Rates of Major Crops

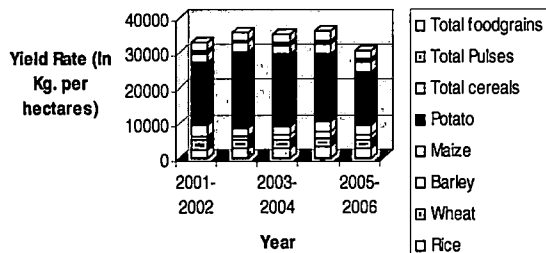


Figure-2.11: Rice Production

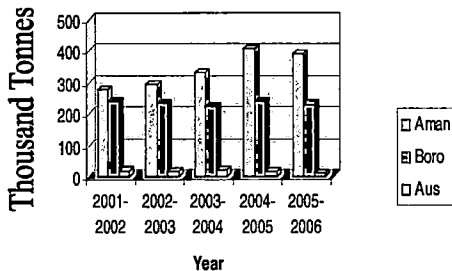


Figure-2.12: Wheat Production 2001-2006

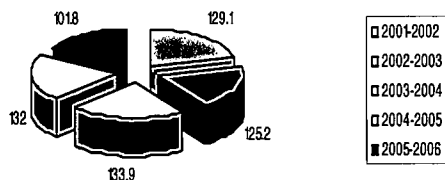
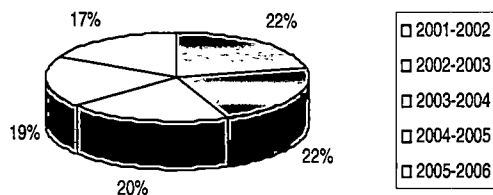


Figure-2.13: Jute Production



Jute Production

During 2001 - 2006, highest jute production was recorded in 2002-2003, while the lowest production is observed in 2005-2006 (Figure-2.13). The production of Jute in the Maldah district is shown in the table below –

Table-2.14

Jute Production (1000 bales of 180 kgs each)

Year	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Production	370.8	372.5	341.9	324.1	298.1

Source : Directorate of Agriculture, Govt. of W.B.

Production of Sugarcane: Production of Sugarcane in terms of gur was highest during 2001-2002 with 299.8 thousand tonnes while the lowest production of 207.5 thousand tones was observed in 2004-2005. (Figure-2.14).

Table-2.15

Production of Sugarcane (In terms of Gur)

Year	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Thousand Tonnes	299.8	239.8	268.6	207.5	288.7

Source : Directorate of Agriculture, Govt. of W.B.

Potato Production: The Production of Potato in the district was not uniform during 2001 to 2006. In 2001-2002 total potato production of the district was 44.5 thousand tonnes, 55.5 thousand tonnes in 2002-2003 and 38.5 thousand tonnes in 2005-2006 (Figure-2.15).

Table-2.16

Potato Production

Year	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Production (Thousand Tonnes)	44.5	55.5	52.2	48.8	38.5

Source : Directorate of Agriculture, Govt. of W.B.

Tobacco, Chillier and Ginger Production

In Maldah district the production of tobacco, dry chillies and ginger decreased from 2001. The Production of tobacco was 0.6 thousand tonnes in 2001-2002 and in 2005-2006 it was 0.1 thousand tones. Dry chillies produced 1.9 thousand tonnes in 2001-2002 and it decreases to 1.5 thousand tonnes in 2005-2006. Ginger production of the district was 0.4 thousand tonnes in 2001-2002 and in 2005-2006 0.2 thousand tonnes ginger produced in Maldah district (Figure-2.16).

Table-2.17

Tobacco, Chillies (Dry) and Ginger Production

(Production in Thousand Tonnes)

Year Crops	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Tobacco	0.6	0.6	0.3	0.2	0.1
Dry Chillies	1.9	1.9	1.8	1.7	1.5
Ginger	0.4	0.4	0.4	0.2	0.2

Source: Directorate of Agriculture, Govt. of W.B.

Pulses: Total pulses production in Maldah during 2005-2006 was nearly 22 thousand tones. The total area under cultivation in the same period was 25.4 thousand hectares for pulsés (Figure-2.17).

Table-2.18

Production of Pulses and Area under Pulses cultivation during 2005-2006

(Production in 1000 Tonnes)

Year Pulses	2001-'02	2002-'03	2003-'04	2004-'05	2005-'06
Gram	5.2	5.6	7.7	10.8	5.1
Tur	0.1	0.1	0.1	0.1	<50 tonnes
Other Pulses	20.3	18.3	19.1	16.1	16.6
Area (Thousand Hectares)	30.5	32.5	29.8	29.8	25.4

Source: Directorate of Agriculture, Govt. of W.B.

Figure-2.14: Sugarcane Production (In terms of Gur)

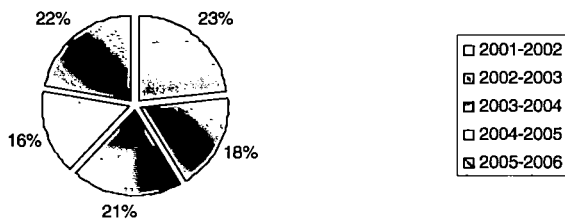


Figure-2.15: Potato Production

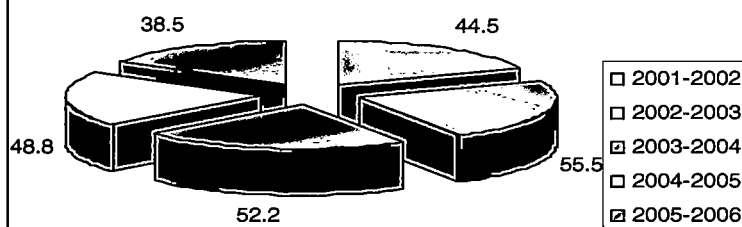


Figure-2.16: Tobacco, Chillies (Dry) and Ginger Production

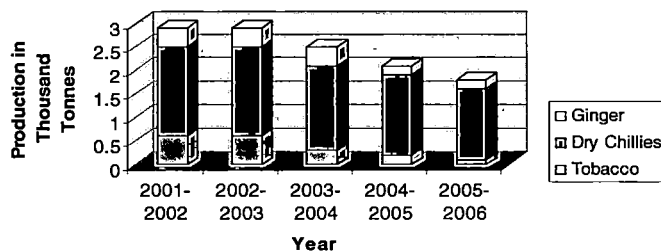
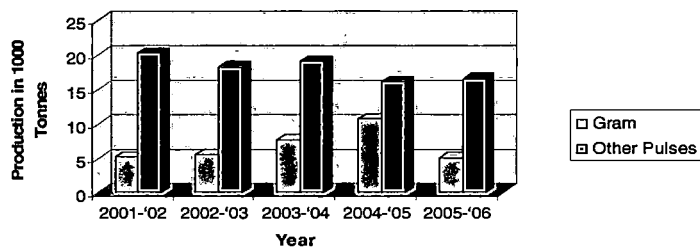


Figure-2.17: Production of Pulses



Barley Production: Among the barley producing blocks in the Maldah district the important blocks are Ratua II Gazole, Bamongola, Habibpur, Old Maldah, and Manikchak are important. Average barley yield rates of these blocks were nearly 1412 kg per hectare. During 2004-'05 yield rate of the district was 3 thousand tonnes and during 2005-'06 the production was 1.9 thousand tonnes.

Maize Production: During 2005-'06 the maize production of the district was nearly 29.7 thousand tones and the area under cultivation during same period was 11.2 thousand hectares. Production during 2001-2006 has gone up from 11.2 thousand tones to 29.7 thousand tones (Figure-2.18).

Table-2.19
Maize Production

Year	2001-'02	2002-03	2003-'04	2004-'05	2005-'06
Production (Thousand Tonnes)	11.2	8.4	20.4	31.9	29.7
Area (Thousand Hectares)	3.5	3.6	7.7	10.9	11.2

Source: Directorate of Agriculture, Govt. of W.B.

2.3.2.2 Production of Fruits in Maldah District

The important fruits produced in the district are Mango, Banana, Papaya, Guava, Jackfruit, Litchi and Sapota (Figure-2.19).

Table-2.20
Production of Fruits

Fruits	Production in thousand tonnes				
	2001-02	2002-03	2003-04	2004-05	2005-06
Mango	253.88	63.68	86.00	145.00	150.00
Banana	11.60	12.53	12.70	12.84	13.15
Pineapple	-	-	2.70	3.30	3.80
Papaya	6.15	6.48	6.66	6.76	6.85
Guava	4.70	4.92	4.90	5.06	5.31
Jackfruit	3.40	3.46	3.71	4.06	4.31
Sapota	2.57	2.59	2.54	2.66	2.71

Source: Directorate of Food Processing Industries and Horticulture, Govt. of West Bengal.

Figure-2.18: Maize Production and Area Under Cultivation

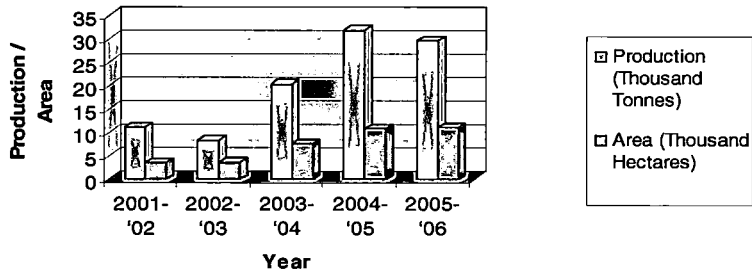


Figure-2.19: Production of Fruits

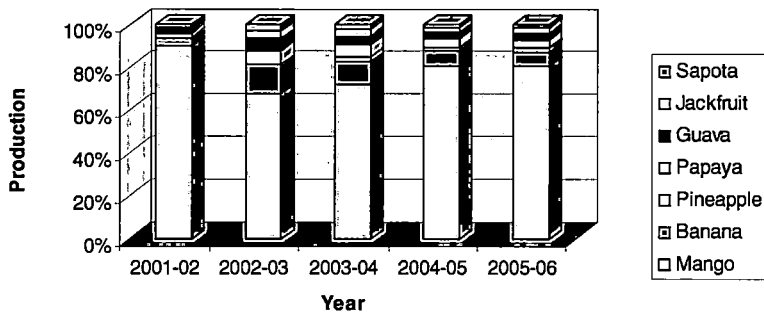
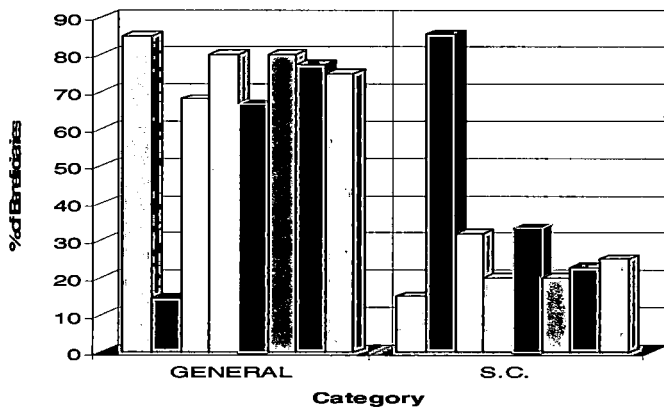


Figure-2.20: SPECIAL SCHEMES FOR THE SERICULTURE FARMERS, 2009-2010



- SUPPLY OF BED DISINFECTANTS Bivoltine Rearers
- SUPPLY OF BED DISINFECTANTS Other Rearers
- SUPPLY OF KNAPSACK (SPRAY MACHINE)
- SUPPLY OF MICROSCOPE
- SUPPLY OF HUMIDIFIER
- SUPPORT TO LICINIATE SEED PRODUCER (L.S.P) FOR CONSTRUCTION OF GRAINAGE BUILDING
- SUPPLY OF ELECTRONIC WEIGHING BALANCE FOR L.S.Ps.
- EXHAUST FAN TO REARERS

1.Mango: For production of high quality of mango Maldah is famous and is known as “Mango City” of West Bengal. During 2001-2002 total production of mango was 253.88 thousand tonnes but during 2002-2003 the mango production decreases to 63.68 thousand tonnes, 145 thousand tonnes mango produced during 2004-2005 and during 2005-2006 the production was 150 thousand tonnes. The area under production of mango was 24.26 thousand hectares during 2001-2002 and it increased to 25.25 thousand hectares in 2005-2006.

The mango trade is one of the most important feature of the economy of this district and one which leaves important impact on the economy of this district. The price of mango varies according to its class and the effect of weather on the crop. For hail and heavy rains are most injurious to the formation of a good fruit. In recent years, there have been several failure of crops and there seems to be a cycle of good and bad years. A bumper crop usually comes once in four years and is followed by a bad year in which the production may come down to 25-30% of the average production ranging between 45-50% followed by a second bad year. The only consolation for such a bad year is that the price rises in proportion to the extent of failure of crop. Such fluctuation in the total production and price make it very difficult to reach an accurate estimate of the annual value of the mango trade.

2. Banana: During 2001-2002 the area under Banana production was 0.65 thousand hectares and the production were 11.60 thousand tonnes. The area under cultivation increased to 0.74 thousand hectares and the production was also increased to 13.15 thousand tonnes during 2005-2006.

3. Papaya: 6.48 thousand tonnes papaya produced during 2001-2002 and the area under cultivation was 0.19 thousand hectares during same period. The area under cultivation was 0.22 thousand hectare and production was 6.85 thousand tonnes during 2005-2006.

4. Guava: The production of guava increased from 4.70 thousand tonnes to 5.31 thousand tonnes and the area under production was also increased from 0.28 thousand hectares to 0.32 thousand hectares during 2001-2002 to 2005-2006.

5. Jackfruit: The production of Jackfruit also increases from 2001 to 2006. In 2001-2002 the production was 3.40 thousand tonnes and the area under cultivation was 0.29 thousand hectares. During 2005-2006 the production was increased to 4.31 thousand tonnes and the area under cultivation increased to 0.34 hectares.

6. Sapota: Sapota production was 2.57 thousand tonnes during 2001-2002 and 2.71 thousand tonnes during 2005-06. The area under cultivation was increased from 0.21 thousand hectares in 2001-02 to 0.23 thousand hectares in 2005-06.

2.3.2.3 Sericulture:

For the production of raw-silk yarn, Maldah occupies an important place in the map of West Bengal, despite of all backwardness. The annual estimated production of raw-silk yarn in Maldah is about 85% of the total output of the state. The production of raw-silk yarn in terms of money accounts to approximately 4 crore rupees.

Maldah district is famous for the sericulture. The economy of Maldah is significantly supported by the production of raw silk in Maldah. Maldah is the largest producer of raw silk in West Bengal and in the state's economy Maldah shares an important role. Table- 2.21 represents various government schemes for the development of sericulture farmers. The schemes are supply of bed disinfectants materials, supply of spray machine, supply of microscopes, support to L.S.P., supply of exhaust fan to rearers. It is clear that percentage of SCs is very low compared to the General beneficiaries. Only 15% SCs bivoltine rearers benefited under supply of bed disinfectants materials, 32% got spray machine, 20% received microscopes, 25% supplied exhaust fans 22.73% supplied electronic weighting balance.

Table-2.21***SPECIAL SCHEMES FOR THE SERICULTURE FARMERS, 2009-2010***

SCHEMES		GENERAL	S.C.	TOTAL
SUPPLY OF BED DISINFECTANTS MATERIALS	Bivoltine Rearers	34(85%)	06(15%)	40
	Other Rearers	175(14.58%)	1025(85.42%)	1200
SUPPLY OF KNAPSACK (SPRAY MACHINE)		68(68%)	32(32%)	100
SUPPLY OF MICROSCOPE		08(80%)	02(20%)	10
SUPPLY OF HUMIDIFIER		10(66.67%)	05(33.33%)	15
SUPPORT TO LICENCIATE SEED PRODUCER(L.S.P) CONSTRUCTION OF GRAINAGE BUILDING	FOR	04((80%)	01(20%)	05
SUPPLY OF ELECTRONIC WEIGHTING BALANCE FOR L.S.Ps.		17(77.27%)	05(22.73%)	22
EXHAUST FAN TO REARERS		75(75%)	25(25%)	100

Source:-Deputy Director of Textiles (Sericulture); Maldah; Govt. of W. Bengal.

References

(1) Lambourn, G.E., 1819; Bengal District Gazetteers-Maldah. The Bengal Secretarial Book Depot, Calcutta. p.p11-24.

(2) *ibid* pp. 8-9