

## NADIA

### Overall scenario of the District:

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 area and holding 11<sup>th</sup> 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 international boundary with Bangladesh.

As Nadia has a good access to Bangladesh so it can enhance export and import activities to that country. The district is majorly known for Banana production.

The district consists of [as per district statistical handbook, 2009]

- Sub-divisions – 4
- Blocks – 19
- Municipalities – 8

Nadia is in 10<sup>th</sup> position in terms of literacy rate and 9<sup>th</sup> 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.

Some of the major areas in terms of density of population (according to 2001 census) are:

- Krishnanagar (M) (8716 persons per sq. km)
- Nabadwip (M) (9864 persons per sq. km)
- Santipur (M) (5619 persons per sq. km)
- Ranaghat (M) (8905 persons per sq. km)
- Birnagar (M) (4818 persons per sq. km)
- Chakdaha (M) (5598 persons per sq. km)
- Kalyani (M) (3749 persons per sq. km)
- Gayeshpur (M) (1835 persons per sq. km)

Other major settlements in the district (in terms of total number of population) are Krishnanagar, Shantipur, , Chakdaha, Kalyani.

Distribution of population over different age group (Census, 2001):

Age group	% of total population
0-4	8.85
05-24	41.86
25-59	40.89
60 and above	8.29

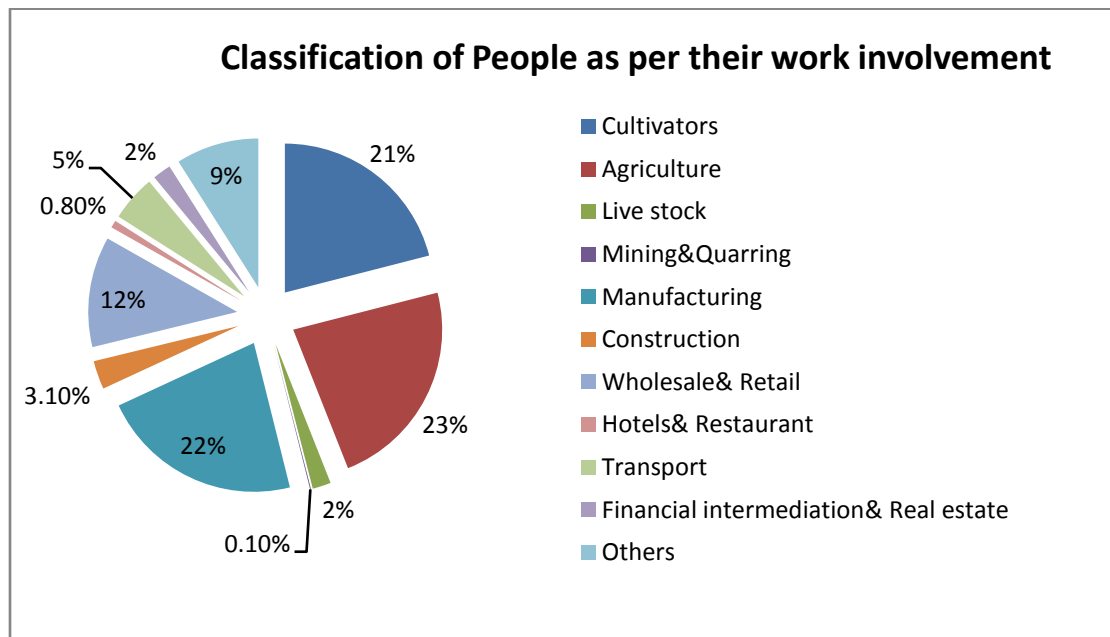
*Source: Census, 2001*

Almost 0.83% of population belongs to other states of India such as

- Bihar
- Jharkhand
- Assam

It is worth mentioning that around 12.50% population is occupied only by Bangladeshis.

Work force constitutes 30.39% of total population and the distribution of the same is as follows



Source: Census Data, 2001

The per capita income in the district was found out to be Rs 19980/- during the year 2003-04.

## Infrastructure

The district is well networked with the other part of the states through:

- Road ways
- Railways
- Waterways

### Road ways:

- National High way: NH 34 and it runs from NSC Bose Airport to Dalkhola in north Bengal. At Dalkhola it meets NH-31 that goes to Siliguri.
  - ✓ Lane : 2 (proposed for conversion to 4 lane)
  - ✓ Length of roads within the district: 117 Km.
  - ✓ Connected to other states : The NH is specific to West Bengal only.

- ✓ Connected other districts : Murshidabad, Malda, Uttar Dinajpur, Dakshin Dinajpur, Kolkata
- ✓ Blocks on the NH: The National high way-34 passes vertically through out the district and touches different blocks such as Haringhata, Chakdaha, Ranaghat, Shantipur, Dhubulia, Nakashipara, kaliaganj etc.

➤ State Highway (SH) :

- ✓ SH 3 connecting South 24 parganas, North 24 parganas and Kolkata.
- ✓ SH 8 connecting Bankura and Burdwan.
- ✓ SH 11 connecting Murshidabad.



Source: West Bengal Public Works' Department

## Railway

The proposed International Rail Link connecting India and Bangladesh will pass through Nadia District with Gede 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.

- ✓ Total 230 Km. rail track scattered through out the district.
- ✓ The train track passes through Ranaghat I & II, Santipur, KrishnanagarI, Hanskhali, Krishnaganj, Nabadwip, Kaliganj etc.

## Water ways:

Short distance ferry services are available.

## Other Social Infrastructure:

- Technical Education:
  - Engineering College: 05
  - Polytechnics: 04
  - ITI: 02
- Health:
  - Standard health network like district hospital, block hospitals and Private nursing home/clinics are observed
- Entertainment:
 

Standard cinema halls and parks are observed.

*Source: District Statistical Handbook, 2009*
- Banking Infrastructure:
 

Lead Bank - UBI Bank and following are the other banks found in the district

Name of the banks	Number of branches
State Bank of India	47
Allahabad Bank	23
Canara Bank	5
Central Bank of India	4
UCO bank	4
Bank of India	11
Gramin Bank	66

*Sources: Individual bank's website*

## Power Infrastructure

West Bengal State Electricity Transmission Company Ltd. (WBSETCL) is the only distributor of electricity in whole Nadia, where Krishnagar is Field zonal office of the district. It serves as a testing unit of the district also.

- Supply Stations (SS) are:

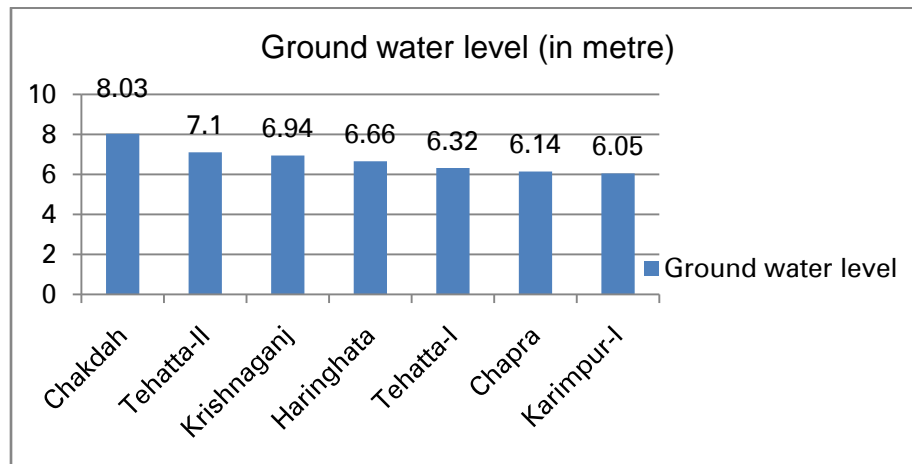
Sl. No	SS name	Capacity (KVA)
1	Debagram	132
2	Krishnanagar	220
3	Bagula	66
4	Ranaghat	132
5	Kalyani	132
6	Dharampur	132

Source: West Bengal State Electricity Transmission Company Limited

### Availability of water:

It has been observed that one of the major sources of water for food processing units in West Bengal is ground water.

Blocks with average depth of ground water more than 6 meters during April, 2011 are:



Source: State Water Investigation Directorate

### Irrigation facilities:

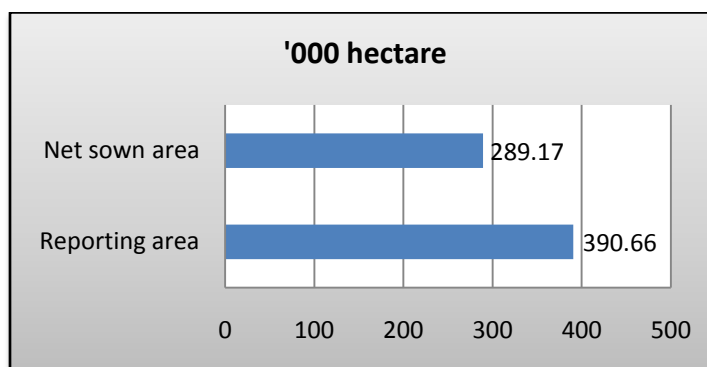
The land of the district is most fertile only because of the effect of different rivers surrounding it.

Water ways	Rivers Running through the district Nadia
Baghirathi (Plassey to Kalyani)	187 KM
Jalangi (Gopalpur to Swarupganj)	206 KM
Bhagirathi (Jamserpur to Brtai)	32 KM
Mathabhanga (Majdia to Gobindapur)	19 KM
Ichhamati (Baranberia to Purnagar)	68 KM

Source: Dept. of Irrigation & Waterways, GoWB

### Agriculture & Horticulture:

Reporting area in the district is 390660 hectare. Net sown area is 74% of total reporting area.



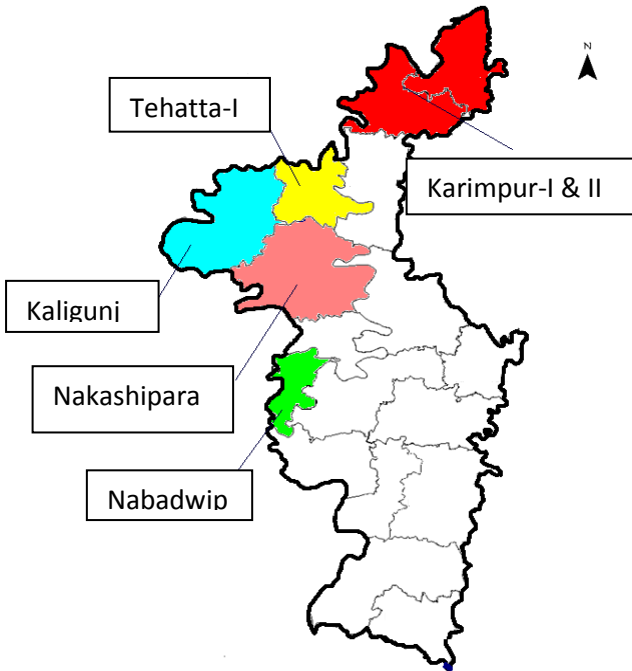
Source: District Statistical Handbook, 2009

### Agriculture, Horticulture and Livestock production:

Nadia	Crops/ Veg/ Fruits/ livestock	Rank in the state	Production, in '000' MT	% to states' production
<b>Agricultural produce</b>	Cereals (excluding rice)	4 <sup>th</sup>	103.66	8.29
	Pulses	2 <sup>nd</sup>	32.38	21.52
<b>Oilseeds &amp; Others</b>	Til (Sesamum)	2 <sup>nd</sup>	21.76	14.21
	Rapeseed & Mustard	2 <sup>nd</sup>	69.63	15.72
	Linseed	1 <sup>st</sup>	0.39	28.32
	Groundnut	4 <sup>th</sup>	11.17	9.89
	Sunflower	3 <sup>rd</sup>	1538.00	11.66
<b>Sugarcane</b>		4 <sup>th</sup>	87.15	8.7
<b>Vegetables</b>	Tomato	3 <sup>rd</sup>	102.54	9.77
	Cabbage	2 <sup>nd</sup>	203.54	9.88
	Cauliflower	2 <sup>nd</sup>	203.91	11.63
	Peas	2 <sup>nd</sup>	25.26	20
	Brinjal	2 <sup>nd</sup>	268.31	9.59
	Onion	3 <sup>rd</sup>	37.89	13.06
	Lady's Finger	1 <sup>st</sup>	115.60	13.78
	Beans	3 <sup>rd</sup>	3.70	3.34
	Aurum	2 <sup>nd</sup>	27.98	
<b>Fruits</b>	Mango	4 <sup>th</sup>	57.52	9.95
	Banana	1 <sup>st</sup>	394.90	40.21
	Papaya	5 <sup>th</sup>	26.89	8.35
	Guava	5 <sup>th</sup>	12.53	7.12
	Jackfruit	5 <sup>th</sup>	17.40	9.11
	Litchi	3 <sup>rd</sup>	9.29	11.34
<b>Live stock product</b>	Bovine Milk	5 <sup>th</sup>	363.96	8.4

Source: Evaluation wing, Directorate Agriculture GoWB 2009-10, Bureau of Applied Economics & Statistics, Livestock population Handbook 2009, FPI&H Dept, 2010-11

- ✓ Cereals include Wheat, Barely, Maize,
- ✓ Pulses include Gram, Tur, Mung, Maslai, Lentil
- **Pulses**

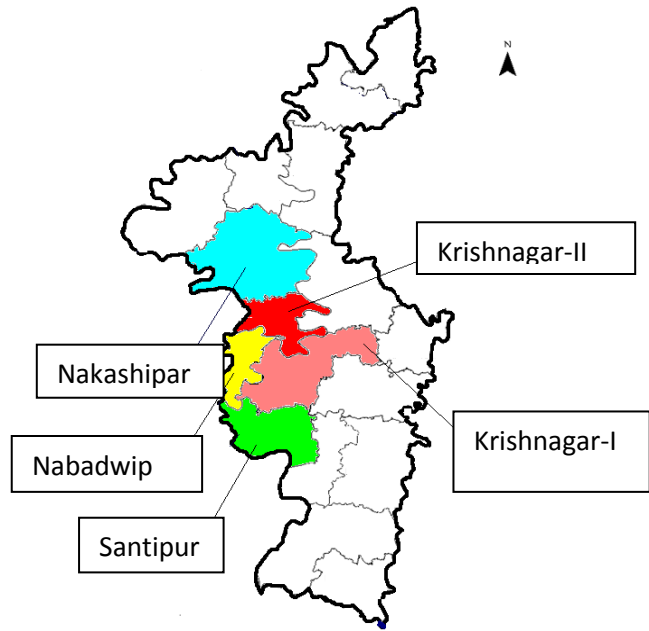


<b>Nadia accords the 2nd position in the state in terms of production of Pulses</b>	
	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block

Sources: Office of Deputy Director of Agriculture, Nadia

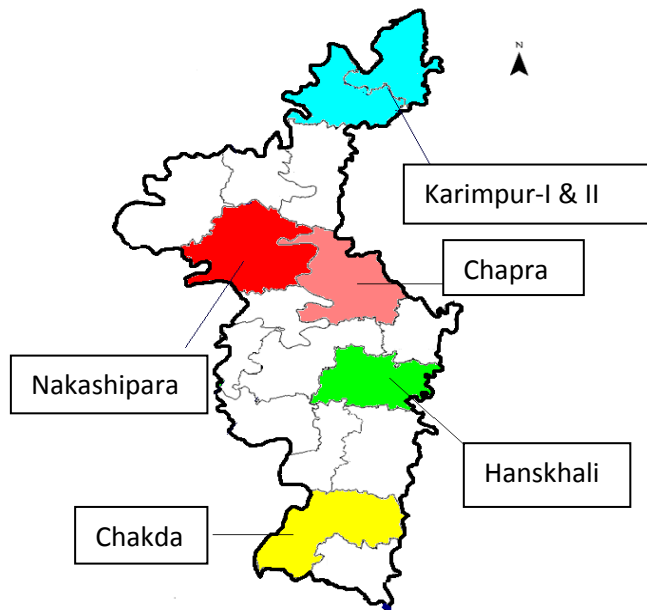
➤ **Mustard**

<b>Nadia accords the 2nd position in the state in terms of production of Mustard</b>	
	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block



Sources: Office of Deputy Director of Agriculture, Nadia

➤ **Til**



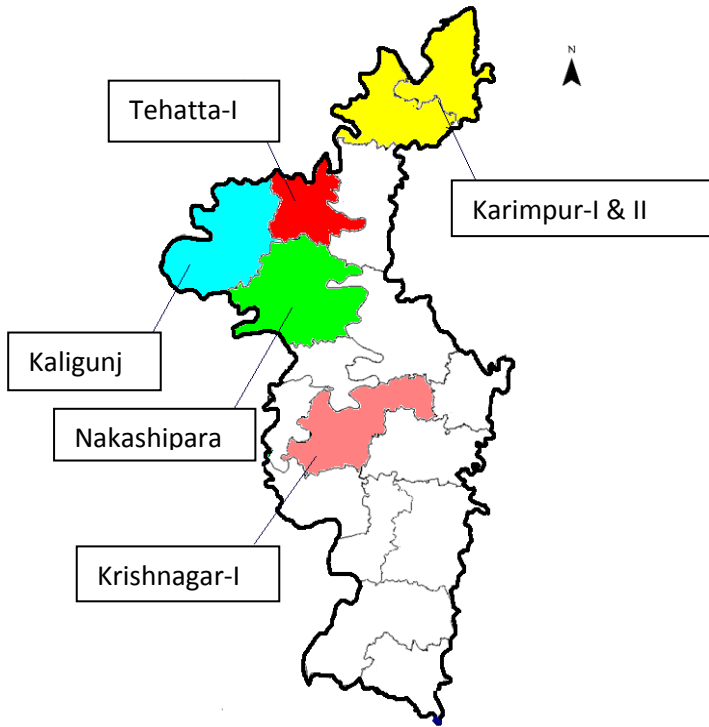
<b>Nadia accords the 2nd position in the state in terms of production of Til</b>	
<span style="display:inline-block; width:15px; height:15px; background-color: #f08080; border: 1px solid black;"></span>	Highest producing block
<span style="display:inline-block; width:15px; height:15px; background-color: #ffff00; border: 1px solid black;"></span>	2 <sup>nd</sup> Highest producing block
<span style="display:inline-block; width:15px; height:15px; background-color: #90ee90; border: 1px solid black;"></span>	3 <sup>rd</sup> Highest producing block
<span style="display:inline-block; width:15px; height:15px; background-color: #ff0000; border: 1px solid black;"></span>	4 <sup>th</sup> Highest producing block
<span style="display:inline-block; width:15px; height:15px; background-color: #00bfff; border: 1px solid black;"></span>	5 <sup>th</sup> Highest producing block

Sources: Office of Deputy Director of Agriculture, Nadia

➤ **Wheat**

**Nadia accords the 3rd position in the state in terms of production of Wheat**



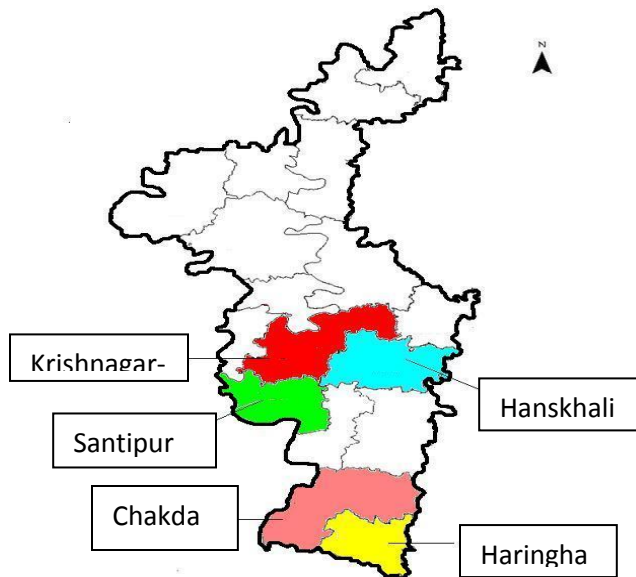


	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block

Sources: Office of Deputy Director of Agriculture, Nadia

### Vegetables

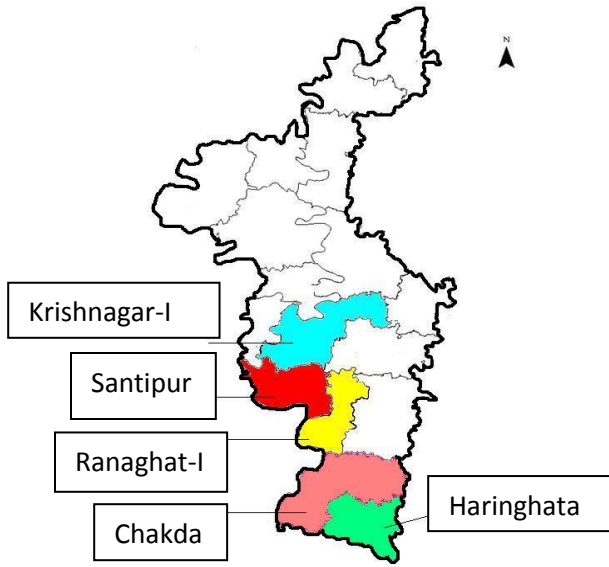
- **Tomato**  
Top five growing blocks



<b>Nadia accords the 3<sup>rd</sup> position in the state in terms of production of Tomato</b>	
	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block

Sources: Office of District Horticulture Officer, Nadia

➤ **Cabbage**



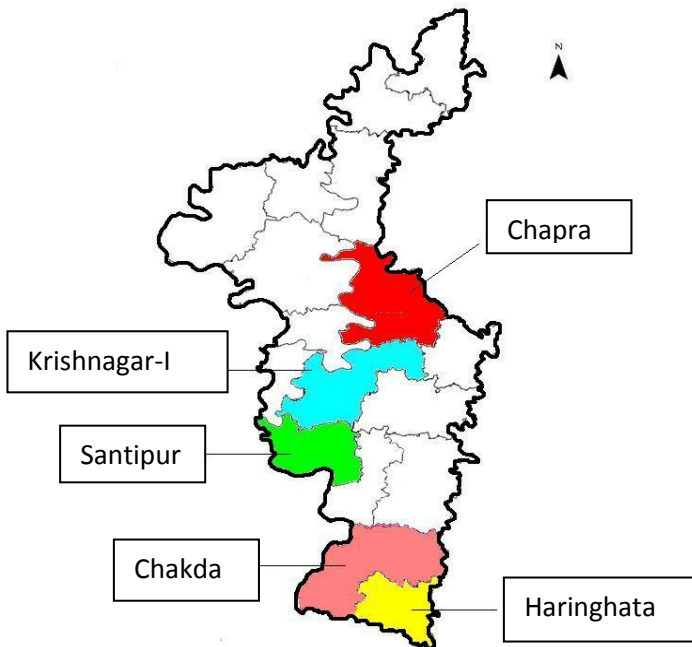
**Nadia accords the 2<sup>nd</sup> position in the state in terms of production of cabbage**

	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block

Sources: Office of District Horticulture Officer, Nadia

➤ **Cauliflower**

Top five growing blocks



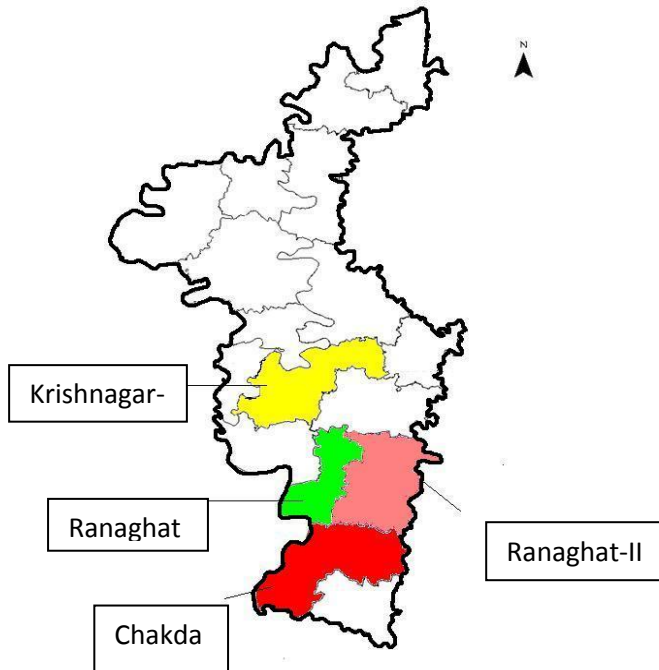
**Nadia accords the 2<sup>nd</sup> position in the state in terms of production of cauliflower**

	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block

Sources: Office of District Horticulture Officer, Nadia

➤ **Peas:**

Top five growing blocks



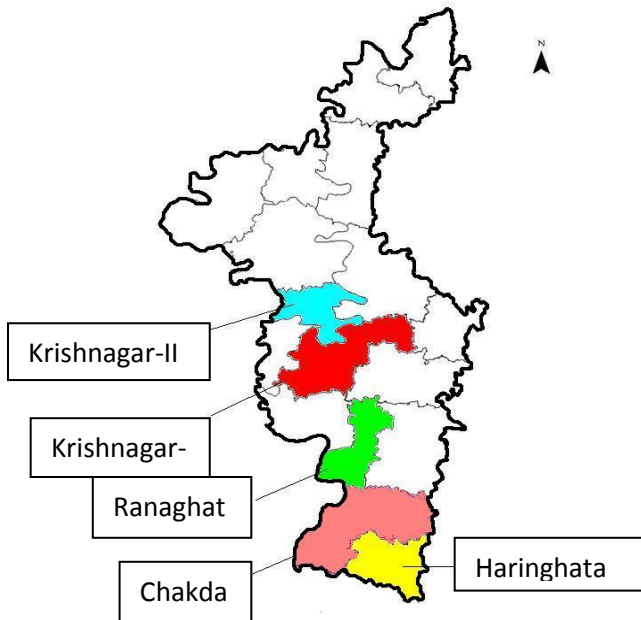
**Nadia accords the 2<sup>nd</sup> position in the state in terms of production of Peas**

	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block

Sources: Office of District Horticulture Officer, Nadia

➤ **Brinjal:**

Top five growing blocks



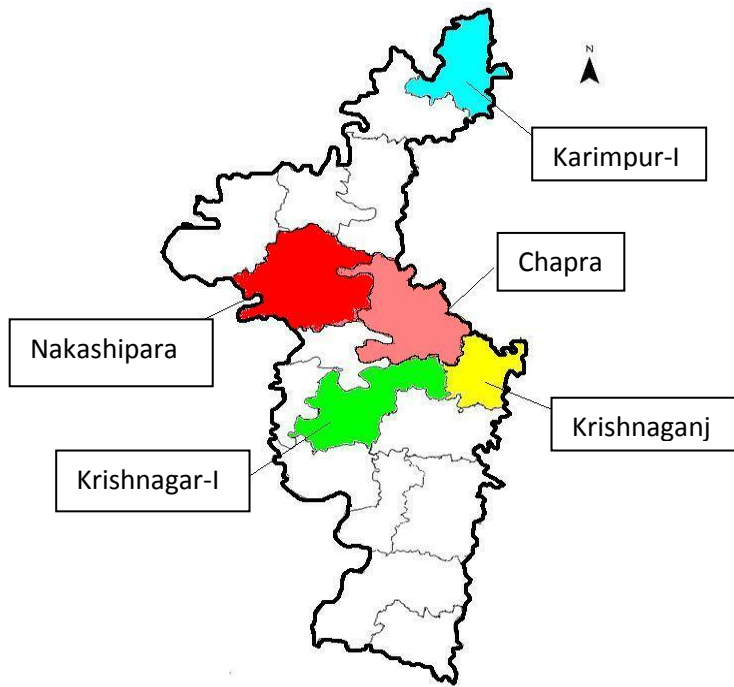
**Nadia accords the 2<sup>nd</sup> position in the state in terms of production of Brinjal**

	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block

Sources: Office of District Horticulture Officer, Nadia

➤ **Onion:**

Top five growing blocks



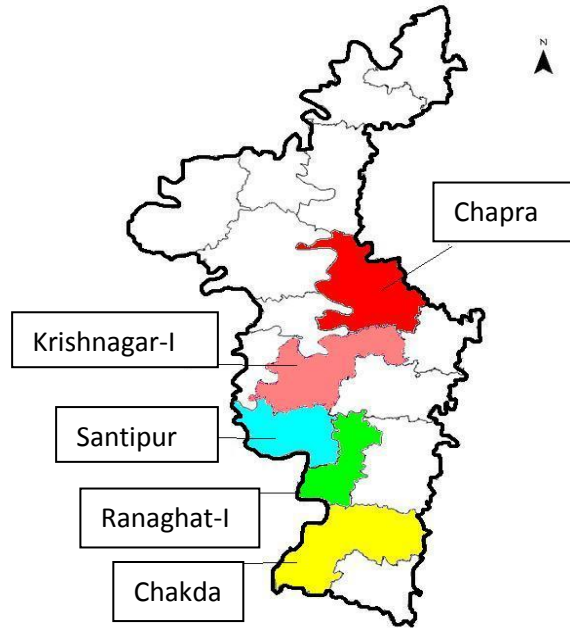
<b>Nadia accords the 3rd position in the state in terms of production of Onion</b>	
<span style="color: pink;">■</span>	Highest producing block
<span style="color: yellow;">■</span>	2 <sup>nd</sup> Highest producing block
<span style="color: green;">■</span>	3 <sup>rd</sup> Highest producing block
<span style="color: red;">■</span>	4 <sup>th</sup> Highest producing block
<span style="color: cyan;">■</span>	5 <sup>th</sup> Highest producing block

Sources: Office of District Horticulture Officer, Nadia

➤ **Lady's Finger:**

Top five growing block

<b>Nadia accords the 1st position in the state in terms of production of Lady's Finger</b>	
<span style="color: pink;">■</span>	Highest producing block
<span style="color: yellow;">■</span>	2 <sup>nd</sup> Highest producing block
<span style="color: green;">■</span>	3 <sup>rd</sup> Highest producing block
<span style="color: red;">■</span>	4 <sup>th</sup> Highest producing block
<span style="color: cyan;">■</span>	5 <sup>th</sup> Highest producing block

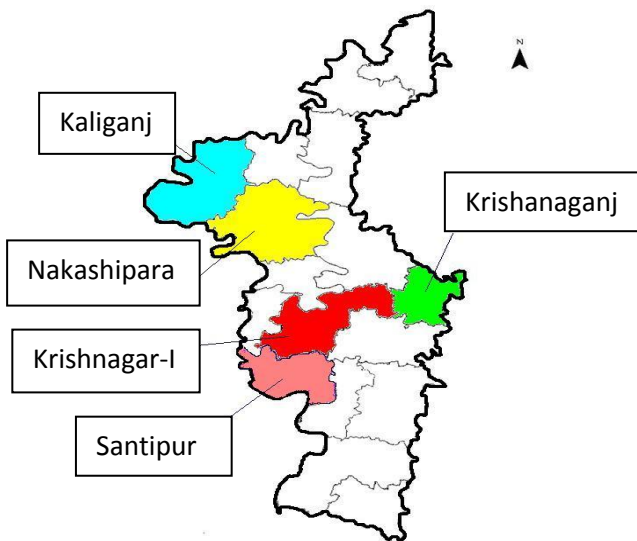


Sources: Office of District Horticulture Officer, Nadia

**Fruits**

➤ **Mango:**

Top five growing blocks



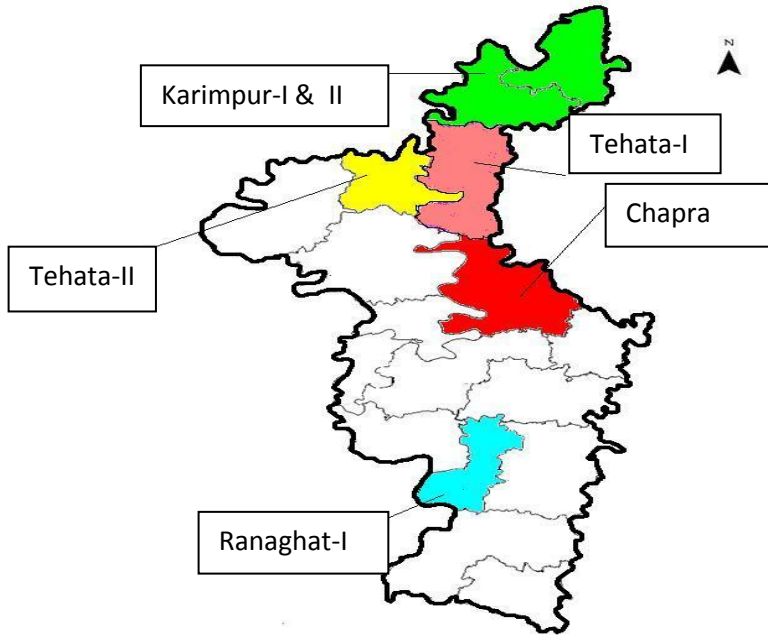
**Nadia accords the 4th position in the state in terms of production of Mango**

<span style="color: red;">■</span>	Highest producing block
<span style="color: yellow;">■</span>	2 <sup>nd</sup> Highest producing block
<span style="color: green;">■</span>	3 <sup>rd</sup> Highest producing block
<span style="color: red;">■</span>	4 <sup>th</sup> Highest producing block
<span style="color: cyan;">■</span>	5 <sup>th</sup> Highest producing block

Sources: Office of District Horticulture Officer, Nadia

➤ **Banana:**

Top five growing blocks



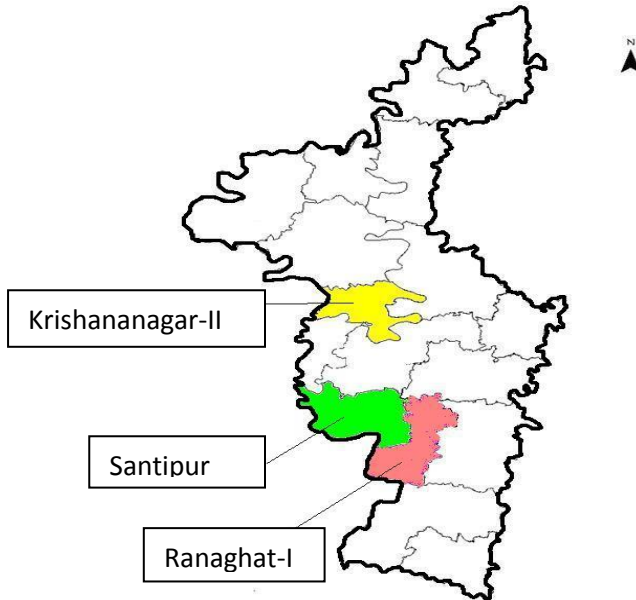
**Nadia accords the 1st position in the state in terms of production of banana**

	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block

Sources: Office of District Horticulture Officer, Nadia

➤ **Papaya:**

Top three growing blocks

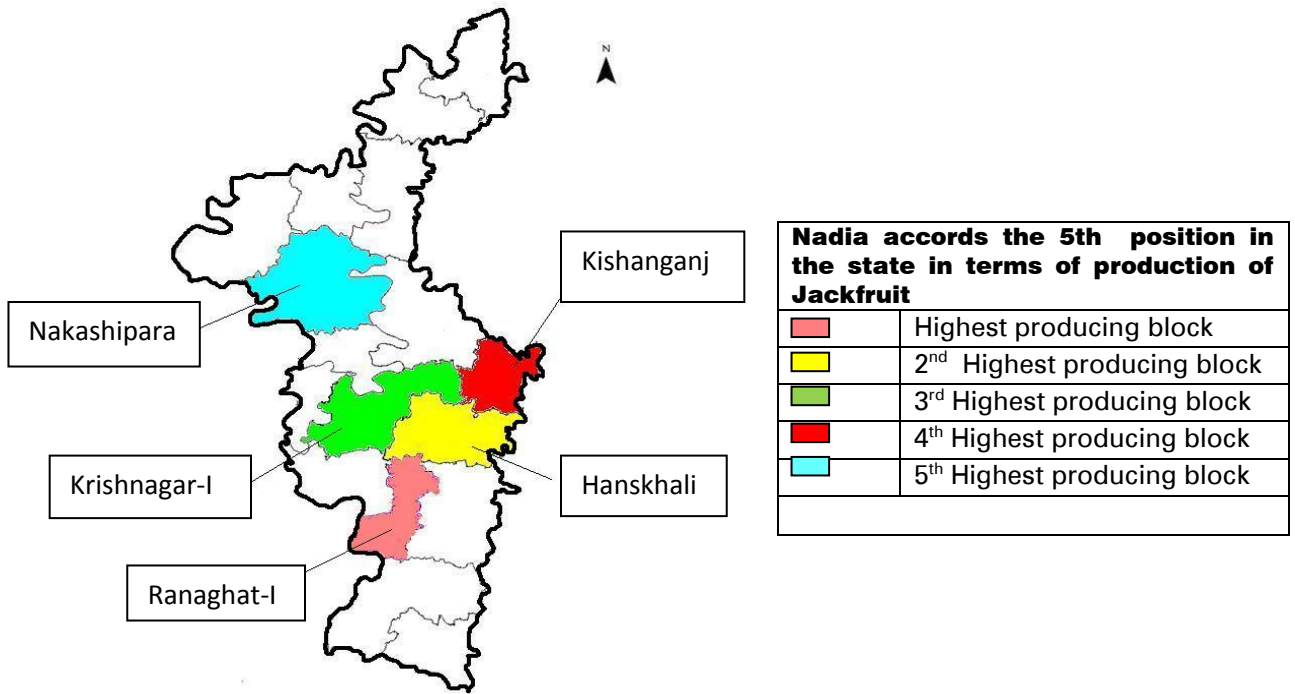


**Nadia accords the 5th position in the state in terms of production of Papaya**

	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block

Sources: Office of District Horticulture Officer, Nadia

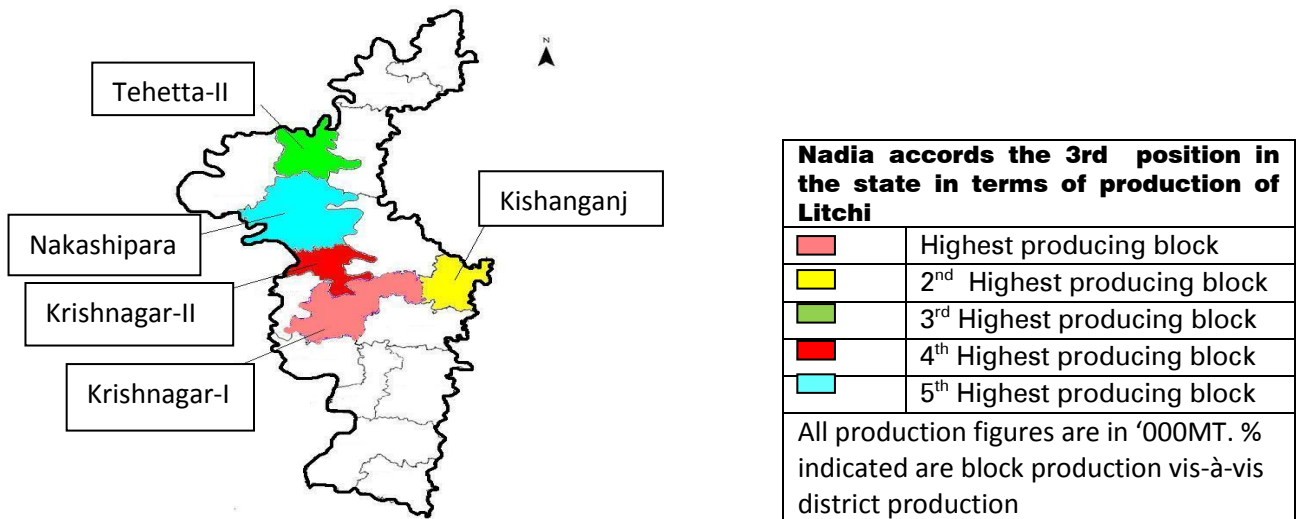
➤ **Jackfruit:** Top five growing blocks



Sources: Office of District Horticulture Officer, Nadia

➤ **Litchi:**

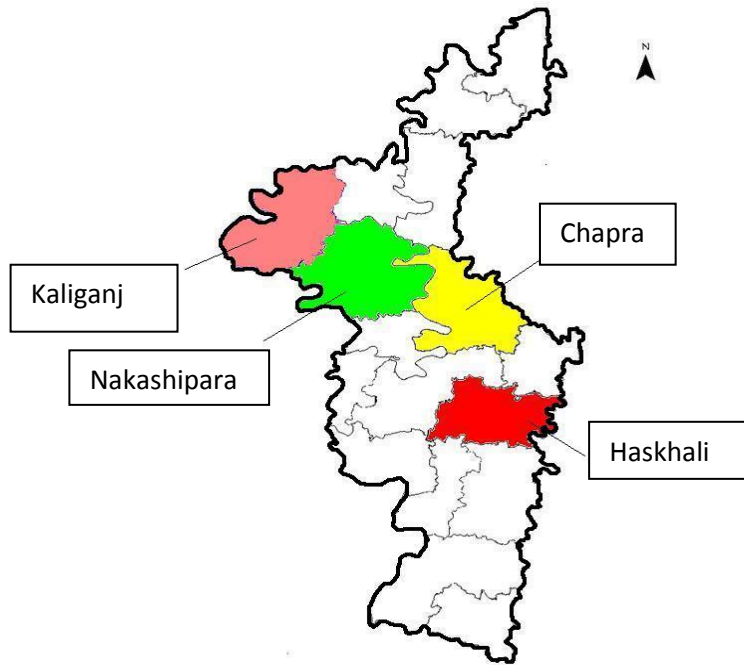
Top five growing blocks








Sources: Office of District Horticulture Officer, Nadia

➤ **Guava:**

Top five growing blocks



**Nadia accords the 5th position in the state in terms of production of Guava**

	Highest producing block
	2 <sup>nd</sup> Highest producing block
	3 <sup>rd</sup> Highest producing block
	4 <sup>th</sup> Highest producing block
	5 <sup>th</sup> Highest producing block

All production figures are in '000MT. % indicated are block production vis-à-vis district production

Sources: Office of District Horticulture Officer, Nadia

**Bovine Milk:**

Top five blocks in terms of Bovine population

Block	No. of animal	% of district's production
<b>Krishnanagar-I</b>	79401	8.87
<b>Kaliganj</b>	74452	8.32
<b>Ranaghat-II</b>	70651	7.89
<b>Chakdaha</b>	67094	7.50
<b>Nakashipara</b>	66397	7.42

Source: Animal resource development dept. 2010-11

**Related infrastructure:**

- Research station:



Name	Location	Area in acre
State Horticultural Research and Development Station	Krishnanagar, Nadia	198.09

### Major agricultural/ horticultural markets:

Regulated market:

- Karimpur regulated market
- Bethuadahari regulated market
- Kalyani regulated market.

### Storage facilities:

➤ Potato storage:

- 2 potato cold storages out of which the capacity of one cold storage is 96,608 quintal.

➤ Multipurpose cold storage:

Block	No.	Total capacity (qt)
Kalyani	2	35512
Bethuadahari RMC (U/C)	1	870
Karimpur RMC (U/C)	1	870
Kalyani (U/C)	1	870

*Source: Directorate of Agri Marketing, West Bengal State Marketing Board*

### Industrial growth centre:

➤ Kalyani phase –I

- Location of growth centre: Within Kalyani Township-under Gayespur municipality.
- Area of Land: 102 acres
- Prominent industries: Tega India Ltd., International Ferrities Ltd., Phonix Yule Ltd., Kolmak Chemicals Ltd.

➤ Kalyani Phase II

- Location of growth centre: Within Kalyani Township – under Kalyani Municipality.
- Area of Land: 134 acres

➤ Kalyani Phase III:

- Location of growth centre: Within Kalyani Township – under Kalyani Municipality.
- Area of Land: 88 acres
- Prominent industries: UIC Wires Ltd., Global Environment Research Foundation, Shiv Raj Kiran Caps Pvt. Ltd., JIS.

Sources: WBIIDC

### Food Processing Industries:

New units registered since 2007 is as given below. According to definition of MSME act 2006, the distribution of the units is as follows:

Sector wise and year wise distribution of the units is as follows

Sector	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Cereals & Pulses Processing	4	12	9	5	5	35
Cold Storage(Multipurpose)						0
Confectionery/Biscuit	3	9	2	4	3	21
Diary & Milk	9	1	4	3	5	22
Fruits & vegetable processing	1	2	1		2	6
Oil	25	8	8	11	19	71
Others	7	5	1	16	2	31
Packaged Drinking Water	1	1			6	8
Paddy Processing	12	21	29	14	28	104
Snacks/Pasta	3	3	1	2	4	13
Spices	3	1		4		8
Total	68	63	55	59	74	319

Source: I-Win Survey & DIC

Employment scenario in the food processing industry of the district is shown in the table below:

Sector	2007-08		2008-09		2009-10		2010-11		2011-12		Total	
	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem
Cereals & Pulses Processing	8	3	113	2	26	9	35	0	15	5	197	19
Confectionery/Biscuit	15	0	54	15	10	1	41	7	18	0	138	23
Diary & Milk	50	2	7	0	14	8	25	0	21	0	117	10
Fruits & vegetable processing	0	3	4	5	17	5		0	23	9	44	22
Oil	117	8	37	0	36	0	47	2	79	0	316	10
Others	60	46	26	41	3	5	178	12	11	2	278	106
Packaged Drinking Water	6		11	0					71	10	88	10
Paddy Processing	63	14	118	22	178	23	67	37	136	6	562	102
Snacks/Pasta	25	0	13	0	6	0	11	0	22	6	77	6
Spices	44	1	4	0			19	2			67	3
Total	388	77	387	85	290	51	423	60	396	38	1884	311

Source: I-Win Survey & DIC

Hence a total of 2195 people are directly involved in the food processing industry for their livelihoods. Out of which 14.17% is female worker.

**Some of the big players having manufacturing unit in the district are:**

Name of the company	Product
Kalyani Soap Industries Ltd	Coconut oil
Goldmine Food Products Ltd	Aerated drinking water
Indo Danish Dairy Ltd	Milk and milk products

*Source: Dept of C & I, GoWB, DIC, I-Win Analysis*

**Food processing units under FSSAI [erstwhile FPO]:**

No. of units in the district which acquired FPO license under different food category is given below:

Group Name	No. of Units
Jam Group, Squash Group, Tomato sauce, Vegetable Sauce, Non Fruit-Vinegar, Pickles, Chutney ,Non Fruit Jelly,Sauces(Other than Tomato & Soya)	6
SSAW(without Juice/Pulp)	1

*Source: Food Safety and Standard Authority of India, Eastern region*

**Special cluster**

- Strawberry:
  - Concentration in Santipur block
  - Area under production: 9 acre

**Investment opportunities:**

- Last two to three years farmers are also producing strawberry in the district and it has been observed that the productivity is satisfactory in terms of commercial production of the item. Based on success of last year's performance around 9 acre land has been devoted under cultivation of strawberry.
- Sorting, grading and packaging units can be set up in numbers in small and micro level for both table purpose and processing purpose for vegetables and fruits
- For further processing an Individual Quick Freezing (IQF) unit can be set up to serve the export market. It is observed from the export data that a considerable amount of fresh vegetables is exported through custom stations of West Bengal to other countries.
- The district holds first rank in Banana production and presently Bananas of the district is transported to other states namely Jharkhand, Orissa, Bihar. 3-4 banana ripening chambers can be set up in the district.

- A hoya processing plant can be set up in the district on the basis of raw material available in Nadia and North 24 Parganas. Here raw material is hoya available during Chhana preparation from milk.
- Cold storage for sweet water fish preservation.
- Chilling plant of capacity of 10-20 TLPD can be set up in the district.