

Executive Summary

West Bengal is a state of 9,13,47,736 consumer (as per census, 2011), the fourth largest market in India (in terms of total population) after Uttar Pradesh, Bihar and Maharashtra and 2nd densely populated state after Bihar among these four states. Around 13550 registered micro & small, 721 medium and 360 large units are operating in the state.

Survey of Food Processing Industries

A survey on Food Processing Industries has been conducted under the aegis of Department of Food Processing Industries and Horticulture, Government of West Bengal. The survey covered 341 blocks of 18 districts and Kolkata and period covered was April, 2012 to September, 2012.

The survey covered district wise information on

- Consumer base in terms of age group, population concentration
- Patterns of livelihood
- Connectivity in term of road ways, rail ways and airways
- Availability of other necessary infrastructure like technical educational institute, financial institutions, power supply station, facilities for entertainment
- Raw material base in terms of availability of agricultural, horticultural, live stock resources
- Related infrastructure like major markets for sourcing of raw materials, cold storage facilities including multipurpose facilities, cold chain facilities, agriculture & horticulture research station, milk chilling plants, irradiation facilities
- Category wise food processing industry
- Employment scenario
- Major players in the districts
- Investment opportunities

West Bengal in the context of India

West Bengal has six agro-climatic zones namely Northern Hill, Terai-Tista Alluvial, Gangetic Alluvial, Vindhyan Alluvial, Coastal Saline and Undulating Red & Lateritic. It is a riverine state with decent rain fall, has a huge agricultural and horticultural base as compare to entire nation. According to National Horticulture Board Report, 2010-11 the state is:

- 1st in Pineapple production
- 1st in Brinjal production
- 1st in Cabbage production
- 1st in Cauliflower production
- 1st in Fish production
- 2nd in Potato production
- 2nd in Litchi production
- 2nd in Sweet Potato production
- 4th in Papaya production
- 4th in Tomato production
- 5th in Guava production

In the national scenario West Bengal contributes a significant quantity for the number of agricultural, horticultural & livestock produces:

Agriculture

Product	Area	% to all India	Production	% to all India	Yield	Rank
Rice	5.63	13.43	14.34	16.10	2547	1 st
Rapeseed & Mustard	0.41	7.34	0.44	6.70	1080	4 th
Lentil (Musur)	0.05	3.38	0.05	4.85	1000	4 th
Wheat	0.32	1.11	0.85	1.05	2490	9 th

Area - Million Hectares, Production - Million Tonnes, Yield - Kg./Hectare

Sources: Directorate of Economics and Statistics, Department of Agriculture and Cooperation, 2009-10

Fruits & Vegetables

Production - 2010-11 - in 000 MT				
Product	West Bengal	India	% Share	Rank
Fruits				
Pineapple	304	1,415	21%	1 st
Litchi	85	497	17%	2 nd
Papaya	324	4,196	8%	4 th
Guava	179	2,462	7%	5 th
Mango	620	15,188	4%	8 th
Vegetables				
Potato	13,391	42,339	32%	2 nd
Cauliflower	1,777	6,745	26%	1 st
Cabbage	2,088	7,949	26%	1 st
Brinjal	2,871	11,896	24%	1 st
Tomato	1,064	16,526	6%	3 rd
Green Pea	129	3,517	4%	7 th
Sweet Potato	236	1047	22.54	2 nd
Banana	1,010	29,780	3%	8 th

Sources: National Horticulture Data Base, 2010-11

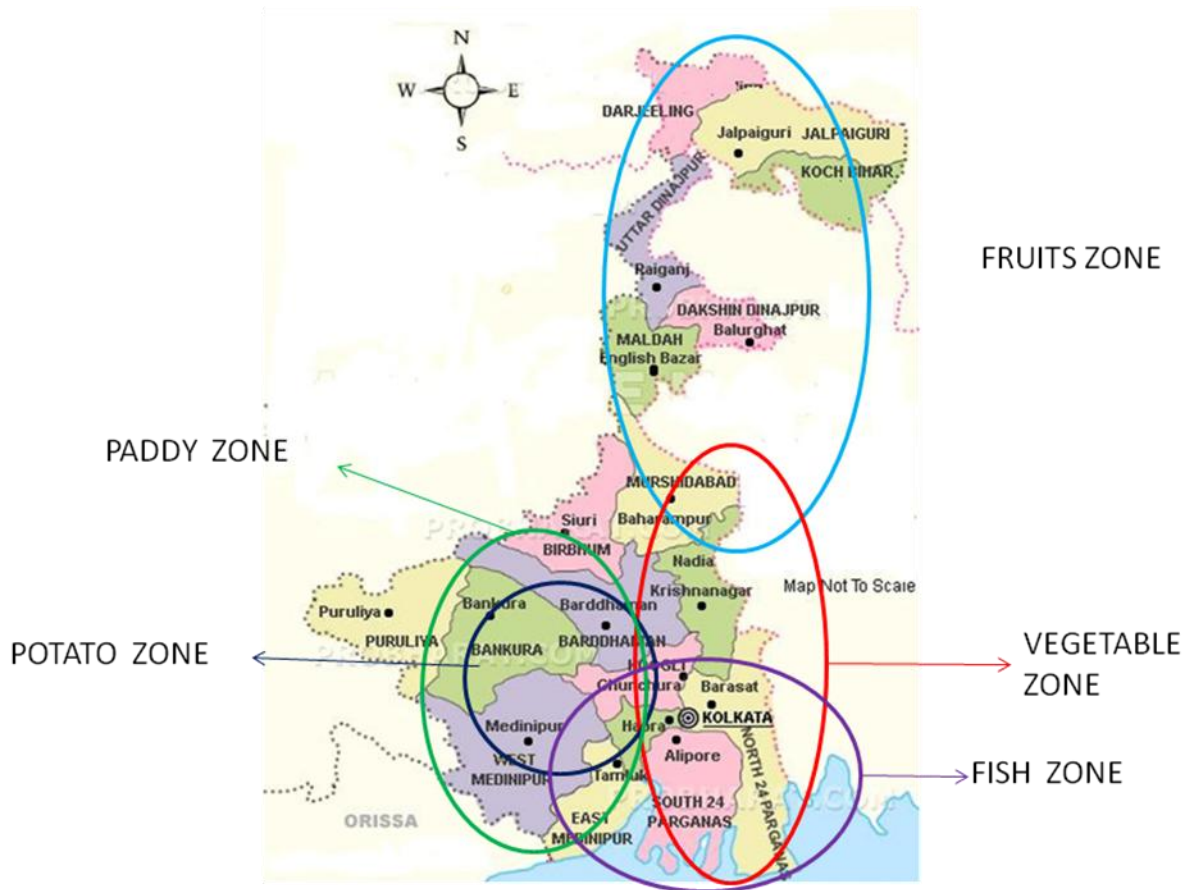
Milk, Eggs & Meat

Production - 2009-10 - in 000 T				
Product	West Bengal	India	% Share	Rank
Milk	4300	1,12,540	4%	12 th
Egg (Lakh)	32307	5,98,436	5%	6 th
Meat	348	4,017	9%	5 th

Production - 2009-10 - in 000 T				
Product	West Bengal	India	% Share	Rank
Total Fish	1,505	7,852	19%	1 st
Inland	1,326	4,862	27%	1 st
Marine	179	2,989	6%	6 th

Sources: Agricultural Statistics At a Glance, 2011

Concentration of different produces in the state is as follows:



Districts of the state have been divided under following zones:

North: Darjeeling, Jalpaiguri, Coochbehar, Uttar Dinajpur, Dakshin Dinajpur and Malda

South: Murshidabad, Nadia, Hooghly, Howrah, North 24 Parganas, South 24 Parganas

West: Birbhum, Bardwan, Bankura, Purulia, Purba Medinipur, Paschim Medinipur

Top five districts in terms of total production of each produce have been analysed and it has been observed that on an average more than 60% of total production is concentrated within top five districts.

District-Wise Ranking- Fruits production					
Fruits	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
Mango	Malda	Murshidabad	24-Pgs(N)	Nadia	Hooghly
	196.00	135.00	81.59	57.52	39.00
Banana	Nadia	24-Pgs(N)	Hooghly	Murshidabad	Jalpaiguri
	394.90	136.96	101.75	57.52	54.09
Pineapple	Darjeeling	Uttar Dinajpore	Jalpaiguri	24-Pgs.(S)	Coochbehar
	131.90	80.93	57.66	10.54	10.17
Papaya	24-Pgs(N)	Jalpaiguri	24-Pgs.(S)	Murshidabad	Nadia
	67.12	31.03	28.22	27.54	26.89
Guava	24-Pgs.(S)	Birbhum	Midnapore(W)	24-Pgs(N)	Nadia
	35.63	17.62	14.91	13.75	12.535
Jackfruit	Jalpaiguri	Coochbehar	Murshidabad	24-Pgs(N)	Nadia
	38.98	29.95	20.40	18.10	17.40
Litchi	Murshidabad	Malda	Nadia	24-Pgs(N)	24-Pgs.(S)
	33.26	9.40	9.30	6.97	5.55
Mandarin Orange	Darjeeling	Jalpaiguri	--	-	-
	36.53	0.48	-	-	-
Other Citrus	24-Pgs(N)	Midnapore(E)	Midnapore(W)	Jalpaiguri	Bankura
	10.44	8.15	5.92	5.64	3.77
Sapota	24-Pgs.(S)	Midnapore(E)	Midnapore(W)	Malda	Jalpaiguri
	12.94	9.55	2.81	2.80	2.53

Department of Food processing Industries & Horticulture, 2010-11

District wise ranking of agricultural production:

District-Wise Ranking						
Agricultural Crops	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Total State
Paddy	Burdwan	Medinipur(W)	Murshidabad	Medinipur(E)	Bankura	
Production (T)	3076880	2634769	1560614	1557184	1507377	21510910
% of state Pro.	14.30%	12.25%	7.25%	7.24%	7.01%	
Wheat	Murshidabad	Malda	Nadia	Uttar Dinajpur	Birbhum	
Production (T)	284634	129445	94862	92623	89202	846657
% of state Pro.	33.62%	15.29%	11.20%	10.94%	10.54%	
Maize	Uttar Dinajpur	CoochBehar	Darjeeling	Jalpaiguri	Malda	

District-Wise Ranking						
Agricultural Crops	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Total State
Production (T)	193795	62574	39606	23700	19949	385219
% of state Pro.	50.31%	16.24%	10.28%	6.15%	5.18%	
Pulses	Murshidabad	Nadia	Malda	Birbhum	S- 24	
Production (T)	36905	32380	23785	14071	10339	150434
% of state Pro.	24.53%	21.52%	15.81%	9.35%	6.87%	
Til(Sesamum)	Medinipur(W)	Nadia	Hooghly	Murshidabad	Burdwan	
Production (T)	44487	21764	21704	16888	13119	153119
% of state Pro.	29.05%	14.21%	14.17%	11.03%	8.57%	
Rapeseed & Mustard	Murshidabad	Nadia	N 24	Uttar Dinajpur	Malda	
Production (T)	111039	69633	52327	41419	38375	442950
% of state Pro.	25.07%	15.72%	11.81%	9.35%	8.66%	
Linseed	Nadia	Uttar Dinajpur	Jalpaiguri	Cooch Behar	Purulia	
Production (T)	394	274	235	219	82	1391
% of state Pro.	28.32%	19.70%	16.89%	15.74%	5.90%	
Groundnut	Medinipur(W)	Medinipur(E)	Hooghly	Nadia	Howrah	
Production (T)	38535	25174	17876	11178	6911	113018
% of state Pro.	34.10%	22.27%	15.82%	9.89%	6.11%	
Sunflower	S 24	N 24	Nadia	Bankura	Medinipur(W)	
Production (T)	7709	1849	1538	727	529	13184
% of state Pro.	58.47%	14.02%	11.67%	5.51%	4.01%	
Sugarcane	Murshidabad	Malda	Medinipur(W)	Nadia	Burdwan	
Production (T)	335123	212799	134367	87159	86488	1000808
% of state Pro.	33.49%	21.26%	13.43%	8.71%	8.64%	
Potato	Hooghly	Medinipur(W)	Burdwan	Bankura	Jalpaiguri	
Production (T)	3434459	2448136	2268242	1350135	904993	13838129
% of state Pro.	24.82%	17.69%	16.39%	9.76%	6.54%	

Sources: Evaluation Wing, Directorate of Agriculture, GoWB, 2009-10

District wise ranking of vegetables production:

District-Wise Ranking					
Vegetables	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
Tomato	Coochbehar	Jalpaiguri	Nadia	24-Pgs(N)	Purulia
	149.11	131.90	102.55	84.03	77.69
Cabbage	Murshidabad	Nadia	24-Pgs.(S)	Bankura	Midnapore(W)
	311.30	203.54	180.85	157.50	150.39
Cauliflower	Murshidabad	Nadia	Bankura	Coochbehar	24-Pgs(N)
	293.10	203.91	147.57	136.78	121.48

District-Wise Ranking					
Vegetables	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
Peas	Jalpaiguri	Nadia	Darjeeling	24-Pgs(N)	24-Pgs.(S)
	29.36	25.26	12.59	10.84	7.47
Brinjal	Murshidabad	Nadia	Malda	Bankura	Jalpaiguri
	304.82	268.32	210.55	200.16	186.32
Onion	Hooghly	Midnapore(W)	Nadia	Murshidabad	Burdwan
	57.21	44.41	37.89	29.71	16.95
Lady's Finger	Nadia	24-Pgs.(S)	Jalpaiguri	Bankura	Burdwan
	115.60	83.47	70.12	66.12	61.23
Beans	24-Pgs.(S)	24-Pgs(N)	Nadia	Hooghly	Murshidabad
	7.17	5.53	3.71	3.47	3.05
Cucurbits	Burdwan	Bankura	24-Pgs.(S)	Coochbehar	Hooghly
	159.30	158.85	158.40	158.25	141.52
Radish	Darjeeling	Jalpaiguri	Coochbehar	Uttar Dinajpore	Dakshin Dinajpore
	14.43	38.36	31.72	21.49	29.11
Watermelon	Midnapore(W)	Coochbehar	Murshidabad	Nadia	24-Pgs.(S)
	42.01	33.31	21.27	16.82	16.28
Sweet Potato	24-Pgs.(S)	Birbhum	Dakshin Dinajpore	Murshidabad	Nadia
	49.62	19.55	18.75	15.30	15.05
Elephant's Foot Yam	24-Pgs(N)	Nadia	Burdwan	Murshidabad	Midnapore(W)
	33.95	20.40	19.05	18.65	18.12
Aurum	Coochbehar	Nadia	Burdwan	Murshidabad	24-Pgs(N)
	68.68	27.99	27.38	26.91	24.94

Department of Food processing Industries & Horticulture, 2010-11

District wise ranking of livestock products:

	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Total in WB
Bovine milk (Cow+ Buffalo)	Burdwan	Murshidabad	Hooghly	North 24 parganas	Nadia	
In 000' Tonnes	562.27	536.74	461.55	443.88	363.96	4332.29
% of production to state	13	12	11	10	8.5	
Meat production	Kolkata	North 24 parganas	Burdwan	South 24 parganas	Murshidabad	
In M.T.	101670.19	54465.05	43384.97	40866.5	38085.61	577193.53
% of production to state	17.61%	9.44%	7.52%	7.08%	6.60%	
Fish (In Tonnes)						
Inland Fish	S-24 Pargns	N-24 Pagsn	Purba	Burdwan	Murshid/	

	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Total in WB
			Midnapr		Bankura/ Nadia	
	220000	180000	129000	110000	100000	1451800
Inland Prawn	N- 24 Pgs	Purba Medinapr	S-24 Pgs	Hooghly	Howrah	
In Tonnes	47700	17000	12943	160	150	78200
Marine including Prawn	Purba Mdinp	S-24 Pgs	-	-	-	-
In Tonnes	143000	57000	-	-	-	-
Egg production:	Murshidabad	South 24 parganas	Burdwan	Paschim Medinipur	North 24 parganas	
Fowl in Lakh	4280	3396.88	2330.03	2195.91	2175.64	28575.35
Duck	Burdwan	Murshida bad	South 24 parganas	Hooghly	Birbhum	
in Lakh	1911.82	1640.46	1098.17	1080.6	1039.11	11435.27
Annual production 2011-12(Fowl+Duck)	Murshidabad	South 24 parganas	Burdwan	Birbhum	North 24 parganas	
In Lakh	5920.46	4495.05	4241.85	3200.83	3079.57	40010.62
% of production to state	15	11	11	8	8	

Animal Resources Development Department, GoWB, 2010-11, Department of Fisheries, 2009-10

In the last five years 2007-12 around 6667 food processing units have been registered under MSME. Following is the district wise break up

Food Processing Industry Scenario in the state:

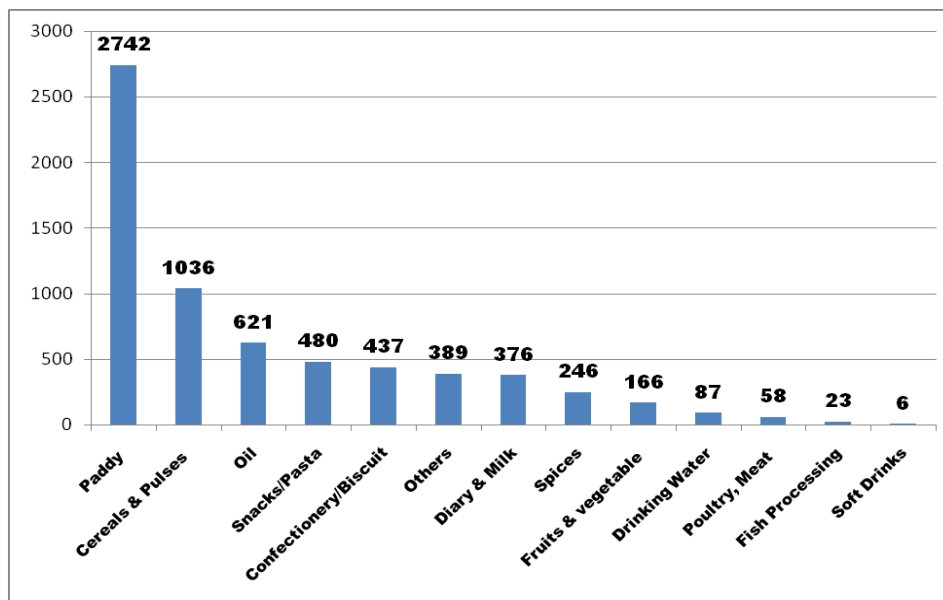
Sector / District	Birbhum	Dakshin Dinajpur	Jalpaiguri	Murshidabad	Paschim Medinipur	Purba Medinipore	Bankura	South 24 Pgs	Uttar Dinajpur	Coochbehar	Hoochly	Howrah	Darjeeling	Nadia	Burdwan	Purulia	North 24 Pgs	Kolkata	Malda
Cereals & Pulses Processing	27	21	32	61	87	34	78	13	19	13	48	19	15	35	35	49	43	398	9
Confectionery/Biscuit	10	7	29	9	23	24	4	49	6	14	26	21	8	21	29	17	56	54	30
Diary & Milk	10	14	19	19	16	25	22	33	4	16	36	15	23	22	15	15	31	34	7
Fish Processing	0	0	1	0	0	3	0	4	0	0	0	0	0	0	1	0	1	13	0
Fruits & vegetable processing	1	12	10	4	6	3	1	14	1	2	11	6	6	6	6	2	25	31	19
Edible Oil	19	32	6	87	62	27	28	16	34	7	36	27	3	71	33	11	63	38	21
Others	4	11	70	24	17	35	4	34	7	6	3	4	25	31	12	1	57	32	12
Packaged Drinking Water	1	4	16	5	4	2	0	9	1	3	3	5	3	8	2	0	6	10	5
Paddy Processing	105	222	256	106	380	318	152	40	164	226	128	28	22	104	196	114	108	2	71
Poultry, Meat Processing	1	0	2	1	0	0	0	0	0	38	1	0	13	0	0	1	0	1	0
Snacks/Pasta	18	12	26	22	13	132	3	32	5	7	46	30	19	13	9	4	25	63	1
Soft Drinks	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2	0
Spices	4	4	21	9	12	17	10	21	3	4	17	4	1	8	15	9	39	43	5

Total (6667)	200	341	488	347	620	621	302	265	244	336	355	159	138	319	354	223	454	721	180
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Sources: DICs of concerned district

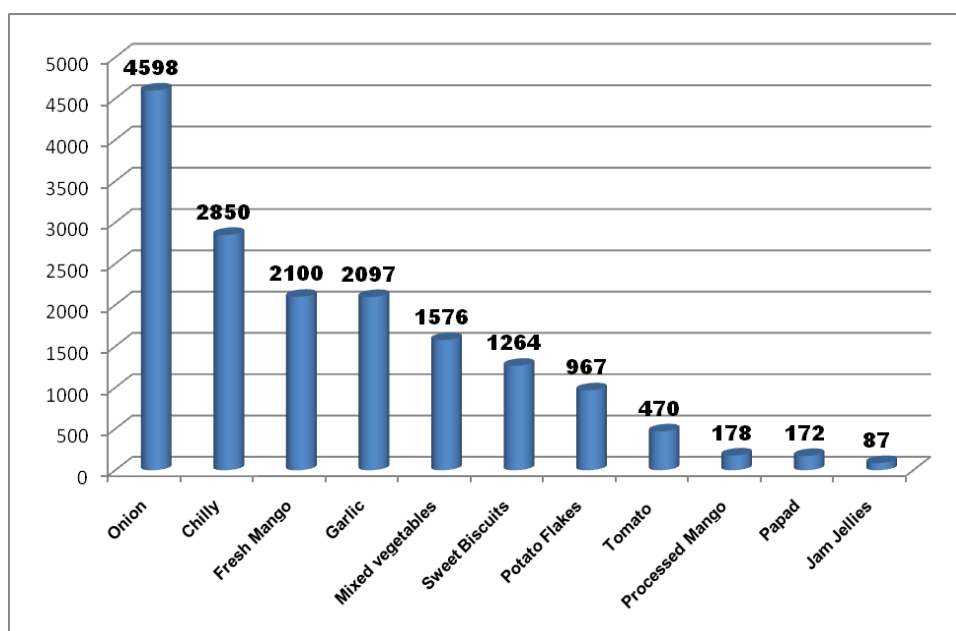
Export Scenario

Export of different processed food items from the ports of west Bengal during 2010-11 was as follows (figures are in MT):



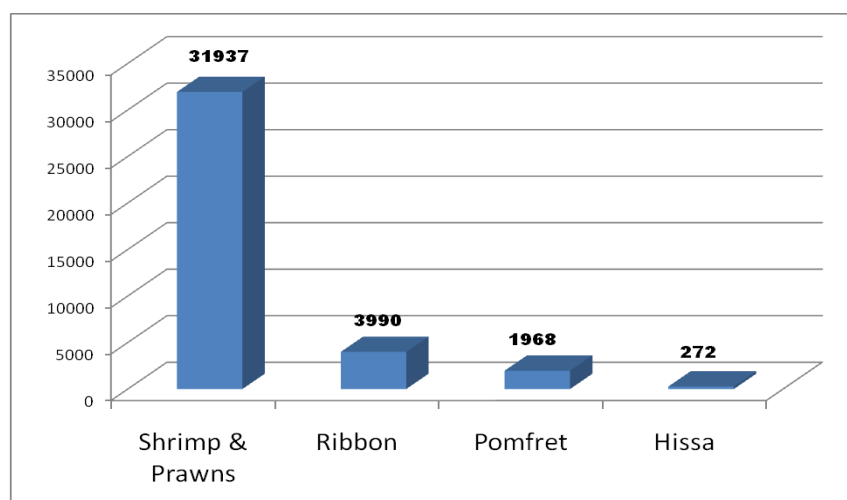
Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata

Export of fresh fruits & vegetables items from the ports of west Bengal during 2010-11 was as follows (figures are in MT):



Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata

Export of fish items from the ports of west Bengal during 2010-11 was as follows (figures are in MT):



Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata

Trend in employment

For last five years (2007-12), It has been observed that around 54,460 people are dependent on the sector for their livelihoods.

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	1546	21	1428	8	822	105	1157	23	894	40	5847	197
Confectionery/Biscuit	740	19	846	10	172	8	442	1	333	4	2533	42
Diary & Milk	220	5	114	4	174	45	140	1	178	31	826	86
Fish Processing	599	91	1224	104	464	81	545	57	673	30	3505	363
Fruits & vegetable processing	763	28	349	25	408	59	320	45	326	43	2166	200
Edible Oil	806	24	396	10	487	5	346	37	464	21	2499	97
Others	447	37	667	27	435	50	289	30	696	108	2534	252
Packaged Drinking Water	49	0	43	0	83	0	113	0	152	8	440	8
Paddy Processing	3205	196	1673	79	1228	277	2550	40	3800	243	12456	835
Poultry, Meat Processing	226	49	356	51	411	258	482	24	358	26	1833	408
Snacks/Pasta	1365	69	571	25	617	344	404	224	612	419	3569	1081
Soft Drinks	2154	149	1569	105	1998	981	2662	146	2044	207	10427	1588
Spices	180	11	157	10	81	15	81	0	118	14	617	50
Total	12300	699	9393	458	7380	2228	9531	628	10648	1194	49252	5207

Sources: DICs

Analysing the existing scenario, investment opportunities in different district has been considered as follows:

Investment opportunities:

Coochbehar:

The district is connected to the rest of the state by road (NH31) and railway system

Today the much talked about commercial airport at Cooch Behar, which was re-opened 3 years ago, does not have any scheduled or unscheduled airport. Only sometimes a helicopter service operates from this airport.

The district is not widely known for any major Horticulture. The bountiful tomato produce in Haldibari can be processed at Haldibari itself. In bumper crop years, much of the produce rots. The bulk of the produce is usually exported out of the state to Delhi area or exported to Pakistan through the Wagah border as fresh produce. The outlet can be through New Jalpaiguri which is closer to Haldibari than District HQ at Cooch Behar. The tomato processing facility can be the nucleus for setting up a major Fruit and Vegetable Processing manufacturing unit. And this unit can be developed in PPP mode. The required land for this unit can be found in the Block Seed Farm in Haldibari, with an original area of 25 acres owned by the state Government. Some of this land was later transferred to Agriculture Marketing Department.

Darjeeling:

The Cinchona plantation areas, primarily in Munpoo and Mansong are probably the largest land area available with the Department. And this land can be commercially exploited by the Department immediately, although there have been some encroachments on the land.

Once the area is developed into a major cultivation area for fruits and flowers, the required infrastructure for pre-processing and processing the produce can be developed with private sector partnership. There are examples from the past to bear this out.

The Kalimpong area has a tradition of growing orchid plants where many farmers grow orchid plants in green houses entirely for exports through Delhi.

Jalpaiguri:

The district is dominated by traders especially around Jalpaiguri town and, while the traders have funds, they are reluctant to venture into the unknown manufacturing area, which they perceive will fetch much lower margin than trading or real estate business. The entire Siliguri Jalpaiguri region suffers due to this fear. Consequently, the land prices in the entire area are high.

Today the district is connected to the rest of the state by road (NH31, NH31C and NH 31D) and a railway system, with decent connectivity to Kolkata, the state capital.

It also has easy access to Bagdogra Airport in neighboring Darjeeling district.

However in spite of existing manufacturing infrastructure in terms of two WBIIDC Growth Centers at Dabgram and Rani Nagar there is hardly any major industrial unit in the district. The talked about second phases or extension of these two Growth Centers never came about. The only notable

exception is the Dabur fruit and vegetable processing unit in Dabgram. This unit started well, then fell in hard times and now is limping back to life. Dooars area is largely located in this district and tea is grown here extensively. The district also has the largest pig population in the state.

In the district, a large number of SME units can be set up at different locations, preferably in the near vicinity of Jalpaiguri town which falls under the Siliguri Jalpaiguri Development area (SJDA). These can be for pre-processing tomato, papaya and peas for "table" usage, and processing the same and selling the same. In case of green peas, they can be dried, frozen and packaged. Jack fruit pre-processing and packaging for market sale etc.

Incidentally, papaya juice is now popular as a health drink in the large metro cities of India.

Oil can be extracted from linseed and sold for further processing.

There is a big opportunity for slaughtering and processing of pigs. If hygienically reared and processed, they can serve the growing demand of pork and ham in the country. These also have good export possibilities for the meat, processed and even by-products.

Land given to yule Agro Industries Ltd for scientific cultivation of pineapple has now been returned back to the State Government. The department can make a proper plan for optimum utilization of the land to boost up the food processing industry in the district.

Malda:

- The district has strong raw material base in Mango, Litchi, Muskalai, Sugarcane, Makhana. Among all the varieties Ashini, Fazli are famous as processable varieties.
- Hence an automated mango processing unit can be set up in the district supported by aseptic packaging facilities.
- Moreover unit operating in Malda and doing marketing in North Bengal and North Eastern states has a transportation cost advantage of Rs.15/- per crate compare to that of a unit in Kolkata.
- In the small and micro scale numbers of mechanized unit can be set up for production of mango paper, bari from pulses (Kalai), Makhana,
- A 75 acre of land, just opposite to Malda Growth Center has been transferred to Reliance Industries 4 years back. This land still lying unused. Attention may be paid for better utilization of the land.

Uttar Dinajpur:

- The district ranked 2nd in terms of production of Maize. Maize is one of the major processable cereals. A significant concentration is found in Darjeeling, North Dinajpur, Jalpaiguri, Coochbehar. Hence a new Maize processing unit can be set up in the district.
- Tulaipanji and Gobindo bhog have got the statutory clearance for export from Ministry of Commerce, Gol. Hence processing and packaging unit for these particular varieties can be set up.

Dakshin Dinajpur:

- The district has no significant strength in terms of production of processable items other than paddy.
- It holds rank 4th in sweet potato and 5th in radish which have very limited scope for processing.
- However micro and small units, based on regular demand (like bakery, rice processing, oil processing, puffed rice) of the local people can be set up in the district.

Hooghly:

- ✓ Raw materials as in potato, onion, groundnut and sesame are found in good and large quantity. The district also marks 1st in terms of production of potato and onion, 2nd and 3rd in terms groundnut and sesame respectively in the state. The district is 7th in terms of Sweet water Fish and production of Milk is also high. Each product can find enough room for investment in this district.
- ✓ Potato: Proposed manufacturing units for Value added products such as
 - Potato Powder- Large scale units
 - Potato flour which has a good market in parts of India and abroad too- Large Scale units.
 - Potato based snacks- Small scale units & SME
- ✓ Onion: Proposed one Manufacturing units for Value added products such as
 - Dehydrated onion powder- Medium scale units
 - Onion paste- Medium scale units
- ✓ Groundnut: Proposed two manufacturing units for Groundnut which is very rich in protein and also called “poor man’s nut” attracts processing units for various value added products such as
 - Groundnut bars,
 - Groundnut isolates,
 - Groundnut based yoghurt,
 - Groundnut butter ,
 - Groundnut cheese,
 - Tofu etc will attract high investments in the district
- ✓ Sesame : Proposed two manufacturing units for Value added product such as:
 - Sesame oil
 - Sesame paste (Tahini)
- ✓ Chilling plant-
 - Existing 7 BMC in various blocks with a total capacity of 14 TLPD.
 - To meet requirement of fresh Milk 3-4 Chilling plants to be installed
- ✓ Sweet Water Fish processing Unit: (Specially Genetically Improved Farmed Telapia) – One processing unit. Primarily popular for fish fillet which has a good market share and has ready investors.
- ✓ Other:

- A mini food park is suggested in the area of Sugandha of Chinsurah.
 - Sugandha is located in the junction point of NH-2 and Old GT Road.
 - Along the Old G.T.Road concentration of urban population is noticed
 - NH-2 connectivity will help to access other markets beyond the state boundary

Howrah:

- The district has a poor raw material base but biggest strength is its strategic location.
- A stand alone fruit processing unit can be set up in the district. A DPR on this project has already been prepared in this line by the Department of food Processing Industries & Horticulture.
- 2-3 mushroom processing centres supported with proper laboratory and raw material base can be considered. It has been observed that intake of mushroom is prevalent in urban area compare to rural area. Moreover the huge need of hotel and restaurants of Kolkata can be catered by this unit.
- The district is also ideal for setting up of modern meat processing units, which needs to be approved under APEDA to facilitate export of meat from the state. These units can source the raw material (Raw meat) from up-coming modern slaughter house in Tangra under Kolkata Municipal Corporation.
- Cold storage for sweet water fish preservation.

Murshidabad:

- The district is largest producer of Lychee, Sugarcane, Rape seed & Mustard, Cabbage, Cauliflower and Brinjal, second largest producer of Mango, Milk 3rd largest producer of Jackfruits.
- The only approved Mega Food Park in the state under MoFPI is coming up in the district and the park is expected to be operational within next two years.
- Hence there are ample opportunities for semi processing units who would supply their output to the anchor units in the Mega Food Park. Hence units can be set up for sorting, grading of vegetables.
- The district is one of the major suppliers of the Goat for slaughter purpose as the district is highest in number of Goat population in the state. Moreover Bangladesh has a huge demand for bovine meat which can be targeted as presently numbers of live bovine are transported to Bangladesh through board areas in the district. Hence it may be ideal place for setting up of a modern slaughter house for both bovine and goat.
- It is also observed that a large number of bakeries in unorganized sector are prevalent in every corner of the district. These bakery units can be encouraged to modernize their plants and machineries so that the district can come up as bakery hub of the state.
- A goat milk processing center in small scale can also be set up for more value addition to the total goat milk production to the tune of 16.76 thousand MT.

Nadia:

- 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.

North 24 Parganas:

- The district is very near to Kolkata, hence all the facilities including market of Kolkata can be explored by a Modern Abattoir, specially for Poultry birds.
- The biggest advantage is the connectivity of the district with Kolkata air port & Kolkata sea port which may capitalize for export business.
- A state of the art pickle manufacturing unit can be set up in the district which can sources raw materials from Nadia, Murshidabad and Malda and market its product in greater Kolkata area and other places of the state.
- Besides small scale units can come up in the sub sector of Papad manufacturing
- Cold storage for Sea fish preservation
- Cold storage for sweet water fish preservation

South 24 Parganas:

- The district is very close to Kolkata. Hence marketing of products would not be a problem.
- A large scale Sunflower oil processing units can be set up in the district.
- A big guava processing unit with state of the art machineries can be set up to manufacture Puree, Pulp, Jam and Jelly.
- Scheme need to be designed to introduce mechanization in processing of molaso (date). It has high demand in the domestic market.
- Cold storage for Sea fish preservation
- Cold storage for sweet water fish preservation
- Similarly automation is needed in manufacturing of Karanda. Around 15 such manufacturing units are found in Atghora of South 24 Parganas.

Bankura:

- A Mini Food Park can be proposed in the district. The park may be designed to accommodate oil, milk and rice processing units.
- Oil seed available in other adjacent districts like Birbhum, Medinipur can be sources for the units in the Mini Food Park.
- A Potato cold storage of capacity of 1.5 lakh Mt can be set up.
- Birbhum:
- This is one of the districts where raw material base like fruits and vegetables are not enough strong to create any cost advantage for manufacturing units. However units in micro and small scale can be set up to meet the local demand.
- This district can be developed for rearing of animals like Bengal Black Goat, Cattle which in turn may help to attract related industries in the district.
- Only exception is paddy processing where rice millers can source paddy from adjacent district Burdwan.
- Moreover tradition Til Khaja and Morraba can be promoted through proper branding as the items produced from the district has accessibility to other districts of West Bengal.

Burdwan:

- A Rice Bio Park can be set up where rice husk can be utilized for power generation. A report has been prepared in this regard.
- Numbers of milk chilling plant can be set up in the district to tap the milk produce in the district.
- Cold storage for sweet water fish preservation.
- 2 Cold Storages for Potatoes with an average capacity of 1.5 Lakh MT.
- A shift from the Non Processable to Processable forms of Potato.
- There is an existing slaughter house at Durgapur, this can be modernized under the scheme for Modernization of Abattoir.
- Onion Storage house: Balagarh Model can be replicated
- Chilling plants of capacity 10-20 TLPD can be set up here.

East Medinapur:

- A fish park is suggested to set up the district.
- Cold storage for Sea fish preservation
- The fish park like Chakgaria may house 10-15 fish processing unit.
- A high end cashew processing unit can be set up targeting premier customer of the nation.

West Medinapur:

- A ground nut processing unit can be set up in the district.
- The district is suitable for setting up of Rice brain oil manufacturing unit.
- 4-5 onion storage with capacity of at least 5-6 MT can be promoted.

Purulia:

- One honey processing plants can be set up in the district.

Rice: West Bengal holds top rank in rice production. This is because of highest area under rice cultivation. The table below will give an idea about area, production and productivity of rice in leading states of India.

States	Area	% to all India	Production	% to all India	Yield
West Bengal	5.63	13.43	14.34	16.10	2547
Punjab	2.80	6.68	11.24	12.61	4010
Andhra Pradesh	3.44	8.21	10.54	11.83	3062
Tamil Nadu	1.85	4.40	5.67	6.36	3070
Haryana	1.21	2.87	3.63	4.07	3008
Kerala	0.23	0.56	0.60	0.67	2557

Area - Million Hectares, Production - Million Tonnes, Yield - Kg./Hectare

Sources: Directorate of Economics and Statistics, Department of Agriculture and Cooperation. 2009-10

West Bengal also produces following agricultural produce in significant quantum