

10	Pre Investment Feasibility Study on “Development of Dairy Industry in NER	Genesis Fintec Ltd., Kolkata	2001
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## **EXECUTIVE SUMMARY**

The study of dairy industry in North Eastern region was commissioned by NEDFi with definite objectives. These objectives may be divided into immediate objectives and wider objectives as under

### **IMMEDIATE OBJECTIVES**

- To examine the techno-economic viability of taking up dairy development projects in different locations of the NE Region.
- To provide basic information together with the location specific data on project parameters to prospective Entrepreneurs, Investors, Financial Institutions, Government Agencies etc. regarding business opportunities in the dairy sector in different States of the NE Region.
- To provide above information in such a way that these would form the basis for preparation of DPR by Domestic and International Investors

### **WIDER OBJECTIVES**

- Economic development of the NE Region through generation of direct and indirect employment opportunities in Dairy Sector.
- Facilitating prospective entrepreneurs to invest in the region in following Activities:
  - Dairy Farming
  - Milk Processing Units
  - Other entrepreneurial Units

### **5.1 Overall Summary of Projects for 8 North Eastern States.**

The following table 5.1 gives an overall summary of all the projects that have been envisaged as potentially feasible in the concerned 8 States. The table indicates not only the number & capacity of each type of project, but also the Investment required for setting up those Units.

The projects that have been identified and considered are as follows:

- Commercial dairy farms with 10 cattle
- Commercial dairy farms with 25 cattle
- Rural dairy farms with 2 cattle
- Rural dairy farms with 5 cattle
- Milk processing plants
- Cattle feed compounding plants
- Ice cream plant
- Sweet manufacturing Unit
- Artificial insemination (A.I.) centers

**Overall Summary of Projects for 8 North Eastern States**

Sl. No.	Projects	Arunachal Pradesh		Assam		Manipur		Meghalaya		Mizoram		Nagaland		Sikkim		Tripura		Total		
		No. of Units	Invst. (in crores)	No. of Units	Invst. (in crores)	No. of Units	Invst. (in crores)	No. of Units	Invst. (in crores)	No. of Units	Invst. (in crores)	No. of Units	Invst. (in crores)	No. of Units	Invst. (in crores)	No. of Units	Invst. (in crores)	No. of Units	Invst. (in crores)	
1.	Commercial Dairy Farms																			
	10 Cattle	51	2.20	593	21.70	83	4.25	97	3.64	167	7.06	129	6.41	5	1.84	150	6.00	1275	53.1	
	25 Cattle	-	-	289	24.16	-	-	67	5.76	-	-	23	2.67	-	-	33	3.04	412	35.63	
2.	Rural Dairy Farms																			
	2 Cattle	2354	12.38	53870	198.31	1905	14.08	6160	25.14	2300	13.92	13075	90.21	855	3.28	10918	50.94	91437	408.26	
	5 Cattle	313	3.60	7183	59.01	254	3.97	821	7.17	308	4.05	1742	25.56	114	0.94	485	4.85	11220	109.15	
3.	Milk Processing Plants (with capacity in lpd)	-	-	8 (10,000)	14.19	1 (10,000)	1.76	1 (5,000)	1.20	-	-	-	-	-	-	1 (5,000)	1.21	11	18.36	
4.	Cattle Feed Compounding Plants (with capacity in MT/day)	-	-	4 (8)	1.98	-	-	-	-	-	-	-	-	-	-	-	-	4	1.98	
5.	Ice Cream Plants (with capacity in lpd)	-	-	3 (1,000)	4.07	-	-	-	-	-	-	-	-	-	-	-	-	3	4.07	
6.	A.I Centres	27	0.47	350	6.19	25	0.44	13	0.23	2	0.03	14	0.24	9	0.15	50	0.88	490	8.63	
7.	Sweet Manufacturing Unit (with capacity in lpd)							1 (1250)	0.18			1 (500)	0.08			1 (500)	0.08	3	0.34	
<b>Total funds (in Rs. Crores) required for setting up the proposed units in 8 North Eastern States</b>																			<b>639.52</b>	

○ **State-wise identification of prospective districts and list of viable projects:**

The preceding paragraph 6.1 and its table gave an overall summary position of the identified projects. The following tables give details of different projects identified in various districts of the 8 identified North Eastern States.

**ARUNACHAL PRADESH**

**A. DAIRY FARMS:**

District	COMMERCIAL DAIRY FARM		RURAL DAIRY FARM	
	<i>No. of units of cattle strength 10</i>	<i>No. of units of cattle strength 25</i>	<i>No. of units of cattle strength 2</i>	<i>No. of units of cattle strength 5</i>
Papumpare	17	-	315	42
West Siang	4	-	203	27
West Kameng	-	-	41	5
Dibang Valley	2	-	93	12
Lower Subansiri	5	-	421	56
Changlang	2	-	194	26
Tirap	10	-	680	91
Upper Subansiri	11	-	407	54
<b>Total Number</b>	<b>51</b>		<b>2354</b>	<b>313</b>
<b>Investment required per Project (Rs)</b>	<b>4,32,000</b>	<b>-</b>	<b>52,603</b>	<b>1,15,008</b>
<b>Total Investment required in State (Rs in Crores)</b>	<b>2.20</b>	<b>-</b>	<b>12.38</b>	<b>3.60</b>

**B. MILK PROCESSING PLANTS - Nil**

**C. CATTLE FEED COMPOUNDING PLANT - Nil**

**D. ICE CREAM PLANT - Nil**

**E. SWEET MANUFACTURING UNIT- Nil**

**F. A.I CENTRES:**

Name of District	No. of Centers @ one for every 15,000 cattle
Tawang	1
West Kameng	1
East Kameng	2
Lower Subansiri	2

Name of District	No. of Centers @ one for every 15,000 cattle
West Siang	3
East Siang	7
Dibang Valley	1
Lohit	5
Changlang	3
Papun-pare	1
Upper Siang	1
<b>Total Number</b>	<b>27</b>
<b>Investment required per Center (in Rs lacs)</b>	<b>1.77</b>
<b>Total Investment required in State(in Rs Crores)</b>	<b>0.47</b>

## **ASSAM**

### **A. DAIRY FARMS:**

District	COMMERCIAL DAIRY FARM		RURAL DAIRY FARM	
	<i>No. of units of cattle strength 10</i>	<i>No. of units of cattle strength 25</i>	<i>No. of units of cattle strength 2</i>	<i>No. of units of cattle strength 5</i>
Bongaigaon	9	-	466	62
Barpeta	52	-	4238	565
Kokrajhar	8	-	659	88
Kamrup	63	218	10512	1402
Goalpara	18	-	1362	182
Darrang	18	-	2339	312
Sonitpur	29	8	3456	461
Nagaon	147	-	7802	1040
Karbi Anglong	-	-	-	-
Jorhat	33	9	2076	277
Golaghat	-	-	20	3
Sibsagar	32	-	2132	284
Dibrugarh	21	11	1676	224
Tinsukia	34	8	1757	234
Cachar	26	25	4051	540
North Cachar Hills	-	-	-	-
Karimganj	15	-	1293	172
Hailakandi	12	-	939	125
Dhubri	50	10	4135	551
Lakhimpur	-	-	-	-
Dhemaji	-	-	-	-
Nalbari	13	-	3306	441
Marigaon	13	-	1651	220
<b>Total Number</b>	<b>593</b>	<b>289</b>	<b>53870</b>	<b>7183</b>
<b>Investment required per project (Rs)</b>	<b>3,66,000</b>	<b>8,36,000</b>	<b>36,798</b>	<b>82,161</b>
<b>Total Investment required in State (in Rs Crores)</b>	<b>21.70</b>	<b>24.16</b>	<b>198.31</b>	<b>59.01</b>

**B. MILK PROCESSING PLANTS:**

Demand Zone	District	Location	Major Towns in demand zone	Capacity of Unit	No. of Units	
<b>A</b>	Dhubri	On NH31 between Dhubri and Kokrajhar	Bilasipara			
			Chapar			
			Dhubri			
			Gauripur			
			Mankachar			
			Others			
	Kokrajhar		Kokrajhar			
				<b>10,000</b>	<b>1</b>	
<b>B</b>	Bongaigaon	On NH31 between Sorbhog & Bongaigaon	Bongaigaon			
			Bongaigaon Rlwy			
			Barpeta			
			Barpeta Road			
			Howli			
					<b>10,000</b>	<b>1</b>
<b>C</b>	Kamrup	One plant on NH37- G'hty to Morigaon route closer to milk pockets in Morigaon	Guwahati			
			North Guwahati			
			Rangia			
			Goalpara			
				Others		
	Darrang	One plant of 10000 lpd on NH 37 – G'hty to Loch route close to milk pockets in northern part of Kamrup.	Kharupatia			
			Teliamura			
Udaipur						
Others						
Nalbari		Nalbari				
				<b>10,000</b>	<b>2</b>	

## B. MILK PROCESSING PLANTS (Contd.):

Demand Zone	District	Location	Major Towns in demand zone	Capacity of Unit	No. of Units	
<b>D</b>	Sonitpur	On NH52 in the vicinity of Tezpur	Dhekiajuli			
			Biswanath Chariali			
			Rangapara			
			Tezpur			
	Nagaon			Lanka		
				Lumding		
				Lumding Rly		
				Nagaon		
				<b>10,000</b>	<b>1</b>	
<b>E</b>	Jorhat	On NH37 between Jorhat & Sibsagar	Jorhat			
			Mariani			
	Golaghat		Golaghat			
			Others			
	Sibsagar		Sibsagar			
			Sonari			
				<b>10,000</b>	<b>1</b>	
<b>F</b>	Dibrugarh	On NH 37 on way from Dibrugarh to Tinsukia.	Dibrugarh			
			Duliajan Town			
			Naharkatiya			
			Namrup			
	Tinsukia			Digboi		
				Digboi Oil Town		
				Doom Dooma		
				Makum		
				Margherita		
			Tinsukia			
				<b>10,000</b>	<b>1</b>	
<b>G</b>	Cachar	Near Silchar on NH53 between Silchar & Karimganj	Silchar			
			Karimganj			
	Hailakandi		Others			
			Hailakandi			
				<b>10,000</b>	<b>1</b>	
<b>Investment required per Project (in Rs lacs)</b>					<b>177.46</b>	
<b>Total Investment required in State for 8 Projects (in Rs Crores)</b>					<b>14.19</b>	

## C. CATTLE FEED COMPOUNDING PLANT :

Project Location	Targeted market	Capacity	No. of Units	Investment Required
Kamrup	Goalpara, Nalbari, Barpeta, Bongaigaon, Darrang, Kamrup, Marigaon	8 MT / day OR 1 MT / hour	3	148.89
Jorhat	Golaghat, Sibsagar, Jorhat, Dibrugarh, Tinsukia.	8 MT / day OR 1 MT / hour	1	49.63
<b>Total Investment required in State for 4 Plants (in Rs Crores)</b>				<b>1.98</b>

**D. ICE CREAM PLANT :**

Project Location	Targeted Urban Market	Capacity (in lpd)	No. of Units
Guwahati	Dhubri, Kokrajhar, Bongaigaon, Barpeta, Kamrup, Goalpara, Darrang, Nalbari (As well as Meghalaya)	1,000	1
Jorhat	Sonitpur, Nagaon, Jorhat, Golaghat, Sibsagar, Dibrugarh, Tinsukia (As well as Nagaland)	1,000	1
Silchar	Cachar, Hailakandi, Karimganj (As well as Manipur, Mizoram & Tripura)	1,000	1
<b>Investment Required per Unit (in Rs lacs)</b>			<b>135.81</b>
<b>Total Investment required in State for 3 Units (in Rs Crores)</b>			<b>4.07</b>

**E. SWEET MANUFACTURING UNIT- Nil****F. A.I CENTRES :**

DISTRICT	No. of Centers @ one for every 25,000 cattle	
GOALPARA	11	
KOKRAJHAR	14	
DHUBRI	17	
BONGAIGAON	12	
BORPETA	21	
NALBARI	14	
KAMRUP	13	
MARIGAON	14	
NA-GAON	25	
DARANG	19	
SONITPUR	19	
GOLAGHAT	13	
JORHAT	20	
SIBSAGAR	13	
DHEMAJI	14	
LAKHIMPUR	19	
DIBRUGARH	12	
TINSUKIA	19	
KARBI ANGLONG	15	
N.C. HILLS	3	
CACHAR	21	
HAILAKANDI	9	
KARIMGANJ	15	
<b>TOTAL</b>	<b>350</b>	
<b>Investment required per Center (in Rs lacs)</b>		<b>1.77</b>
<b>Total Investment required in State (in Rs Crores)</b>		<b>6.19</b>

## **MANIPUR**

### **A. DAIRY FARMS :**

Demand Zone	District	COMMERCIAL DAIRY FARM		RURAL DAIRY FARM	
		<i>No. of units of cattle strength 10</i>	<i>No. of units of cattle strength 25</i>	<i>No. of units of cattle strength 2</i>	<i>No. of units of cattle strength 5</i>
A	Imphal West, Imphal East, Thoubal, Bishnupur	81	-	1139	152
B	Senapati	-	-	10	1
C	Tamenglong	-	-	65	9
D	Churachandpur	-	-	540	72
E	Chandal	2	-	151	20
F	Ukhrul	-	-	-	-
	<b>Total</b>	<b>83</b>	<b>-</b>	<b>1905</b>	<b>254</b>
Investment required per project (in Rs)		5,13,000	-	73,916	1,56,415
Total Investment required in State (in Rs. Crores)		4.25	-	14.08	3.97

### **B. MILK PROCESSING PLANTS :**

District	Location	Major Towns in demand zone	Capacity of Unit	No. of Units
Demand Zone A	Imphal West, around Imphal city	Imphal		
		Lilong	10,000	1
		Thongkhong		
		Bishnupur		
		Moirang		
		Nambol		
Investment required per Unit (in Rs lacs)				176.14
Total Investment required in State (in Rs Crores)				1.76

**C. CATTLE FEED COMPOUNDING PLANT – Nil**

**D. ICE CREAM PLANT - Nil**

**E. SWEET MANUFACTURING UNIT - Nil**



**F. A.I CENTRES :**

Districts	No. of Centers @ one for every 25,000 cattle
Imphal	7
Senapati	6
Bishnupur	2
Tamenlong	1
Churachandpur	1
Ukhrul	2
Thoubal	4
Chandel	2
<b>State Total</b>	<b>25</b>
Investment required per Center (in Rs lacs)	1.77
<b>Total Investment required in State (in Rs Crores)</b>	<b>0.44</b>

**MEGHALAYA**

**A. DAIRY FARMS :**

District	COMMERCIAL DAIRY FARM		RURAL DAIRY FARM	
	No. of units of cattle strength 10	No. of units of cattle strength 25	No. of units of cattle strength 2	No. of units of cattle strength 5
East Khasi Hills	51	19	1513	202
West Garo Hills	17	-	1067	142
East Garo Hills	10	-	491	65
West Khasi Hills	-	-	1321	176
Jaintia Hills	15	-	1305	174
Ri-bhoi	-	48	-	-
South Garo Hills	4	-	463	62
<b>Total</b>	<b>97</b>	<b>67</b>	<b>6160</b>	<b>821</b>
Investment required per project (in Rs)	3,76,000	8,61,000	40,820	87,442
<b>Total Investment (in Rs Crores)</b>	<b>3.64</b>	<b>5.76</b>	<b>25.14</b>	<b>7.17</b>

**B. MILK PROCESSING PLANTS :**

Demand zone	District Identified for the Plant	Location	Major Towns in demand zone	Capacity of Unit	No. of Units
<b>A</b>	<b>East Khasi Hills</b>	In or around Shillong of <b>East Khasi Hills</b> district on the <b>G.S. Road route of National Highway-40</b> connecting Nongpoh ( <b>Ri-Bhoi</b> ) with Shillong ( <b>East Khasi Hills</b> ).	Cherapunjee, Madanrting, Mawlai, Nongmynsong, Nongthymmai, Pynthorumkhrah, Shillong and Shillong Cantt. etc	<b>5,000</b>	<b>1</b>
Investment required per Unit (in Rs lacs)					120.83
<b>Total Investment required in State (in Rs Crores)</b>					<b>1.20</b>

**C. CATTLE FEED COMPOUNDING PLANT - Nil**

**D. ICE CREAM PLANT - Nil**

**E. SWEET MANUFACTURING PLANT :**

Location	Targeted Markets	No. of Units with capacity of 1,250 lpd (250) kg sweets/day)Unit
Any location beside NH-40 and between Barapani Industrial Area and Khanapara in Ri-Bhoi district of Meghalaya	Shillong, Guwahati	1
<b>Investment required per Unit (in Rs lacs)</b>		<b>18.85</b>
<b>Total Investment required in State (in Rs Crores )</b>		<b>0.18</b>

**F. A.I CENTRES :**

DISTRICT	No. of Centers @ one for every 15,000 cattle
East Khasi Hills	1
Ri-Bhoi	1
West Khasi Hills	2
Jaintia Hills	2
East Garo Hills	2
West Garo Hills	4
South Garo Hills	1
<b>Total</b>	<b>13</b>
<b>Investment required per Center (in Rs lacs)</b>	
	<b>1.77</b>
<b>Total Investment required in State (in Rs Crores)</b>	
	<b>0.23</b>

**MIZORAM**

**A. DAIRY FARMS :**

District	COMMERCIAL DAIRY FARM	RURAL DAIRY FARM	
	<i>No. of units of cattle strength 10</i>	<i>No. of units of cattle strength 2</i>	<i>No. of units of cattle strength 5</i>
Aizwal	93	811	108
Lunglei	26	409	55
Champhai	13	234	31
Kolasib	13	143	19
Serchip	10	127	17
Saiha	9	200	27
Mamit	3	140	19
Lawngtlai	-	236	32
<b>Total</b>	<b>167</b>	<b>2300</b>	<b>308</b>
<b>Investment required per project (in Rs)</b>	<b>4,23,000</b>	<b>60,534</b>	<b>1,31,590</b>
<b>Total Investment required in State (in Rs Crores)</b>	<b>7.06</b>	<b>13.92</b>	<b>4.05</b>

- B. MILK PROCESSING PLANTS - Nil  
 C. CATTLE FEED COMPOUNDING PLANT - Nil  
 D. ICE CREAM PLANT - Nil  
 E. SWEET MANUFACTURING UNIT - Nil  
 F. A.I CENTRES :

DISTRICT	No. of Centers @ one for every 10,000 cattle
Aizwal, Kolasib, Mamit, Serchhip & Chamhai	1
Saiha and Lawngtlai	1
<b>Total</b>	<b>2</b>
Investment required per Center (in Rs lacs)	1.77
Total Investment required in State (in Rs Crores)	0.03

## **NAGALAND**

- A. DAIRY FARMS :

District	COMMERCIAL DAIRY FARM		RURAL DAIRY FARM	
	No. of units of cattle strength 10	No. of units of cattle strength 25	No. of units of cattle strength 2	No. of units of cattle strength 5
Dimapur	9	23	1788	238
Kohima	51	-	2347	313
Wokha	6	-	287	38
Mokokchung	18	-	1608	214
Tuensang	22	-	3753	500
Zunheboto	8	-	614	82
Mon	10	-	1932	258
Phek	5	-	746	99
<b>Total</b>	<b>129</b>	<b>23</b>	<b>13,075</b>	<b>1,742</b>
Investment required per project (in Rs)	4,97,000	11,63,000	68,992	1,46,726
Total Investment required in State (in Rs Crores)	6.41	2.67	90.21	25.56

- B. MILK PROCESSING PLANTS - Nil  
 C. CATTLE FEED COMPOUNDING PLANT - Nil  
 D. ICE CREAM PLANT - Nil  
 E. SWEET MANUFACTURING UNIT :

Location	Targeted Markets	No. of Units with capacity of 500 lpd (100 kg sweets/day)
Any location beside NH-36 and in or around Dimapur township	Dimapur	1
<b>Investment required per unit (in Rs lacs)</b>		<b>8.59</b>
<b>Total Investment required in State (in Rs Crores)</b>		<b>0.08</b>

**F. A.I CENTRES:**

<b>DISTRICT</b>	<b>No. of Centers @ one for every 10,000 cattle</b>
Kohima	3
Dimapur	5
Mon	1
Wokha	1
Phek	1
Zunheboto	1
Makokchung	1
Tuensang	1
<b>Total</b>	<b>14</b>
<b>Investment required per Center (in Rs lacs)</b>	<b>1.77</b>
<b>Total Investment required in State (in Rs Crores)</b>	<b>0.24</b>

## 5.2.7 SIKKIM

### A. DAIRY FARMS :

District	COMMERCIAL DAIRY FARM	RURAL DAIRY FARM	
	<i>No. of units of cattle strength 10</i>	<i>No. of units of cattle strength 2</i>	<i>No. of units of cattle strength 5</i>
East	4	106	14
South	1	403	54
North	-	51	7
West	-	295	39
<b>Total</b>	<b>5</b>	<b>855</b>	<b>114</b>
Investment required per Project (in Rs)	367,000	38,304	82,721
Total Investment required in State (in Rs Crores)	0.18	3.28	0.94

### B. MILK PROCESSING PLANTS - Nil

### C. CATTLE FEED COMPOUNDING PLANT - Nil

### D. ICE CREAM PLANT - Nil

### E. SWEET MANUFACTURING UNIT- Nil

### F. A.I CENTRES :

Name of District	<i>No. of Centers @ one for every 15,000 cattle</i>
East	3
West	3
North	1
South	2
<b>Total</b>	<b>9</b>
Investment required per Center (in Rs lacs)	1.75
Total Investment required in State (in Rs Crores)	0.15

## 5.2.8 TRIPURA

**A. DAIRY FARMS:**

District	COMMERCIAL DAIRY FARM		RURAL DAIRY FARM	
	<i>No. of units of cattle strength 10</i>	<i>No. of units of cattle strength 25</i>	<i>No. of units of cattle strength 2</i>	<i>No. of units of cattle strength 5</i>
West Tripura	96	33	5472	243
North Tripura	27	-	2059	91
South Tripura	17	-	1975	88
Dhalai	10	-	1412	63
<b>Total</b>	<b>150</b>	<b>33</b>	<b>10918</b>	<b>485</b>
Investment required per project (in Rs)	4,00,000	9,20,000	46,655	99,968
Total Investment required in State (in Rs lacs)	6.00	3.04	50.94	4.85

**B. MILK PROCESSING PLANTS:**

District	Location	Major Towns in demand zone	Capacity of Unit	No. of Units
South District	On NH42 between Udaipur & Belonia	Udaipur	5,000	1
		Belonia		
		Sabroon		
		Risyamukh		
		Barpathari		
		Mathabari		
Investment required per Unit (in Rs lacs)				121.22
Total Investment required in State (in Rs Crores)				1.21

**C. CATTLE FEED COMPOUNDING PLANT - Nil**

**D. ICE CREAM PLANT - Nil**

**E. SWEET MANUFACTURING UNIT:**

Location	Targeted Markets	No. of Units with capacity of 500 lpd

		(100 kg sweets/day)
Agartala	Agartala	1
Investment required per unit (in Rs lacs)		8.35
Total Investment required in State (in Rs Crores)		0.08

**F. A.I CENTRES:**

DISTRICT	No. of Centers @ one for every 15,000 cattle
West	26
South	11
Dhalai	5
North	8
<b>TOTAL</b>	<b>50</b>
Investment required per Center (in Rs lacs)	
	1.77
Total Investment required in State (in Rs Crores)	
	0.88



