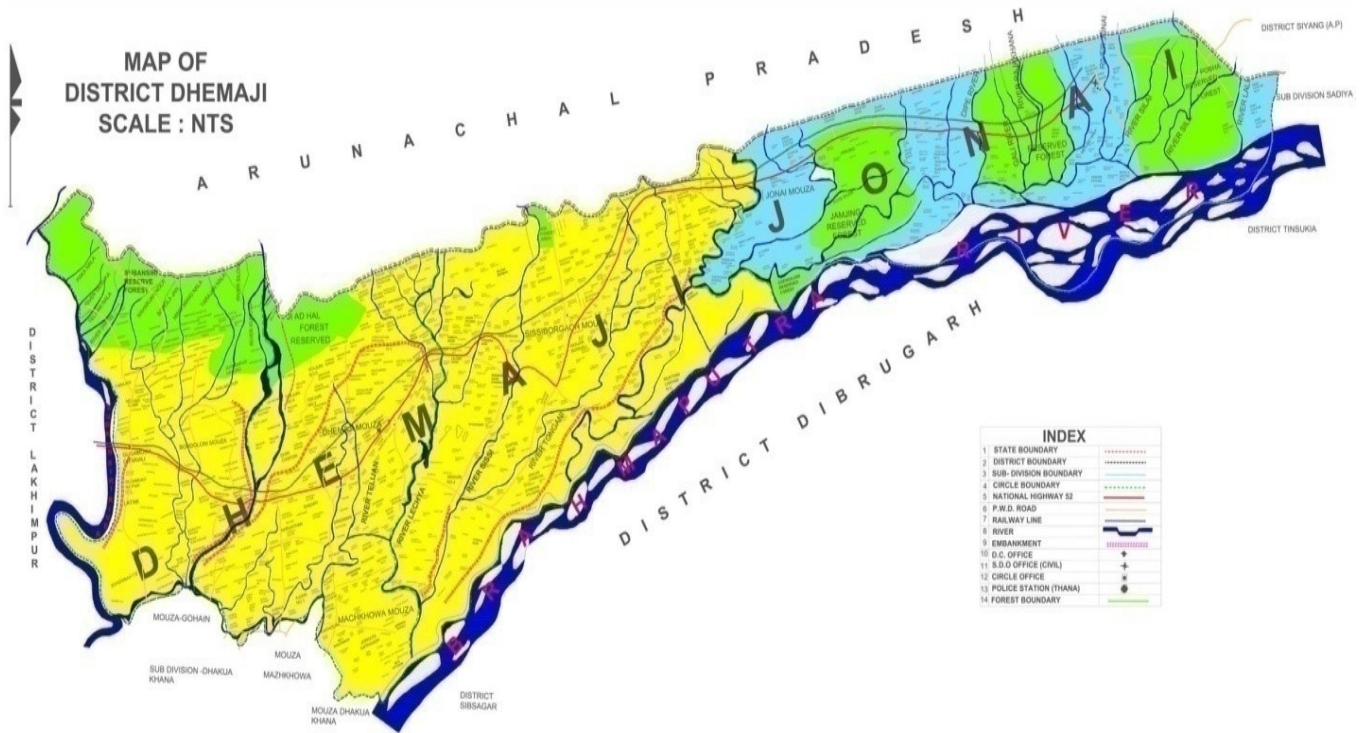


DHEMAJI DISTRICT AT A GLANCE



Krishi Vigyan Kendra, Dhemaji

Assam Agricultural University

Silapathar-787059, Assam

1. Introduction:

The Dhemaji district is the eastern most corner of Assam, on the north bank of river the Brahmaputra. Agro climatically the district falls under North Bank Plain Zone (NBPZ) of Assam. The district is the inhabitant of more than 6.86 lakh populations with 1.24 lakh farm families and out of total 47.44 per cent and 6.44 per cent are ST and SC population respectively.

Agriculture and allied sector is the indispensable sustenance for livelihood of more than 85 per cent of the people residing in Dhemaji district. Paddy is the major crop constituting more than 60 per cent of gross cropped area followed by rapeseed and mustard, black gram, potato and maize. Vegetables and fruits are also cultivated in moderate scale though the diverse and unique agro- climatic condition favours for growing wide range of horticultural crops like vegetables, tuber crops, spices (ginger, turmeric, chili, garlic etc.), plantation crops (coconut, arecanut, betelvine etc.) fruits (banana, Assam lemon, pine apple etc.) and other medicinal and aromatic plants. Piggery, poultry, goat rearing, fishery and sericulture are major agricultural allied activities in the district.

As the district is the inhabitant of different communities with diversified social beliefs, the diversification is also noticeable in agriculture and allied sector. Dominance of traditional cultivation practices, natural cultivation, organic by default, traditional crop calendar, subsistence nature of practice and diversified crop but in small scale adoption are the some important features of agriculture in the district. The diverse topography and agro ecological situation of the region has made it very conducive for cultivation of wide variety of agricultural and horticultural crops. It is significant to note that in the past 10 years many farmers of the district have started making experiments with different crops and technologies towards modern agriculture which might be impact of interventions made by the different agencies of both government and non government sector.

The agriculture and allied sector in the district is merely rainfed. The natural calamities (both flood and draught) are only the hurdles for agricultural activities in spite of hard labour and encouraging engagement of youth class in this sector. The natural calamities such as flash flood, draught spell, unseasonal raining etc are reason for gradual distraction towards field activity Water course originating from hillock of Arunachal Pradesh are streaming through the

district, which was earlier thought as blessing of nature but distressing now a day due to mass deforestation in the hillock.

2. The district profile of Dhemaji

1. Geographical location:

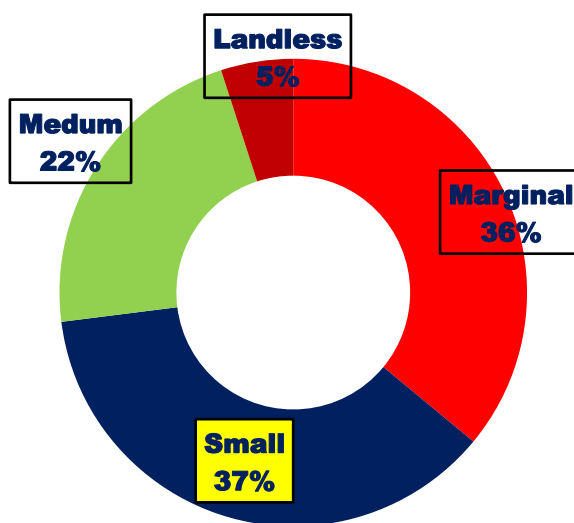
1. GPS Coordinates : $94^{\circ} 12' 18''$ E & $95^{\circ} 41' 32''$ E
 $27^{\circ} 07' 27''$ N & $27^{\circ} 57' 16''$ N
2. Height from MSL : 98.75 m (Av.)
3. Location : The easternmost corner of Assam
4. Boundary : East- Arunachal Pradesh
West- Lakhimpur district and the river Subansiri
North- Arunachal Pradesh
South – The River Brahmaputra
5. Agri- Zone : North Bank Plan Zone of Assam

2. Land Use Pattern

1. Total Geographical area : 3,23,695 ha
2. Total cultivable area : 1,12,170 ha (34.65% of total geo. area)
3. Net cropped area : 97,208ha
4. Gross cropped area : 1,06,634 ha
5. Cultivable fallow land : 12,490 ha
6. Non cultivable waste land : 10,430 ha
7. Forest and grazing : 53,224 ha
8. Sand deposited and silted areas : 22,546 ha
9. Water bodies including water logged area : 44,136 ha
10. Area under irrigation : 7,426 (6.6% of total cultivable area)

11. Cropping intensity : 144%
12. Fertilizer consumption : 1.84ka/ha

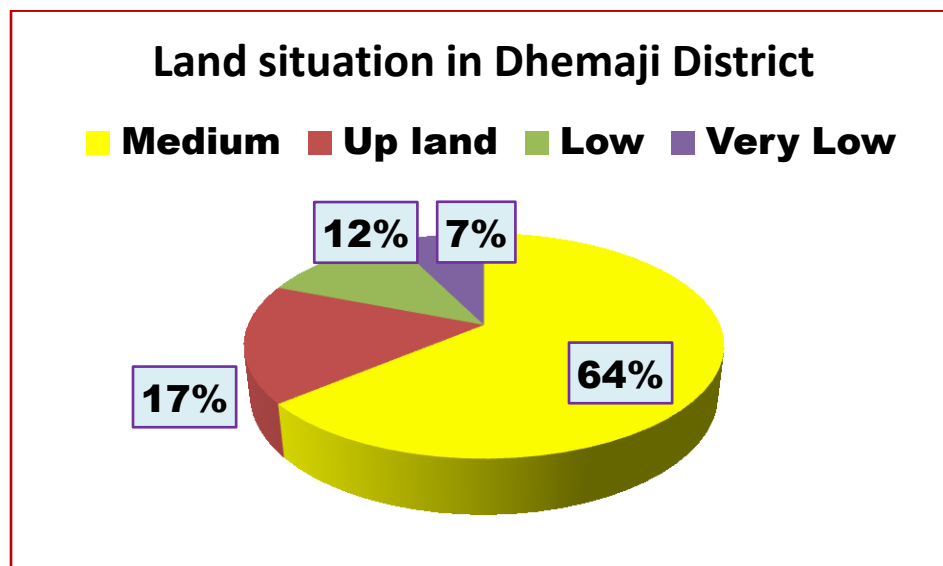
3. Land holding wise farm families



4. Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Clay	Heavy soil with high organic matter, high C: N ratio, high nitrogen content with medium in phosphorus and potassium content. Water and nutrient holding capacities is high.	27,346
2.	Clay loam	Light heavy soils with medium to high organic matter, high C: N ratio, medium to high nitrogen content with medium in phosphorus and potassium content. High water and nutrient holding capacities.	60,997
3.	Alluvial	Medium soils with medium in organic matter, low C: N ratio, medium in nitrogen, phosphorus and potassium content.	13,313
4.	Sandy loam	Light soil with low in organic matter, low in nitrogen, phosphorus and potassium content.	1, 37,552
5.	Sandy	Light soil with low in organic matter, low in nitrogen, phosphorus and potassium content.	62,106

5. Land situation

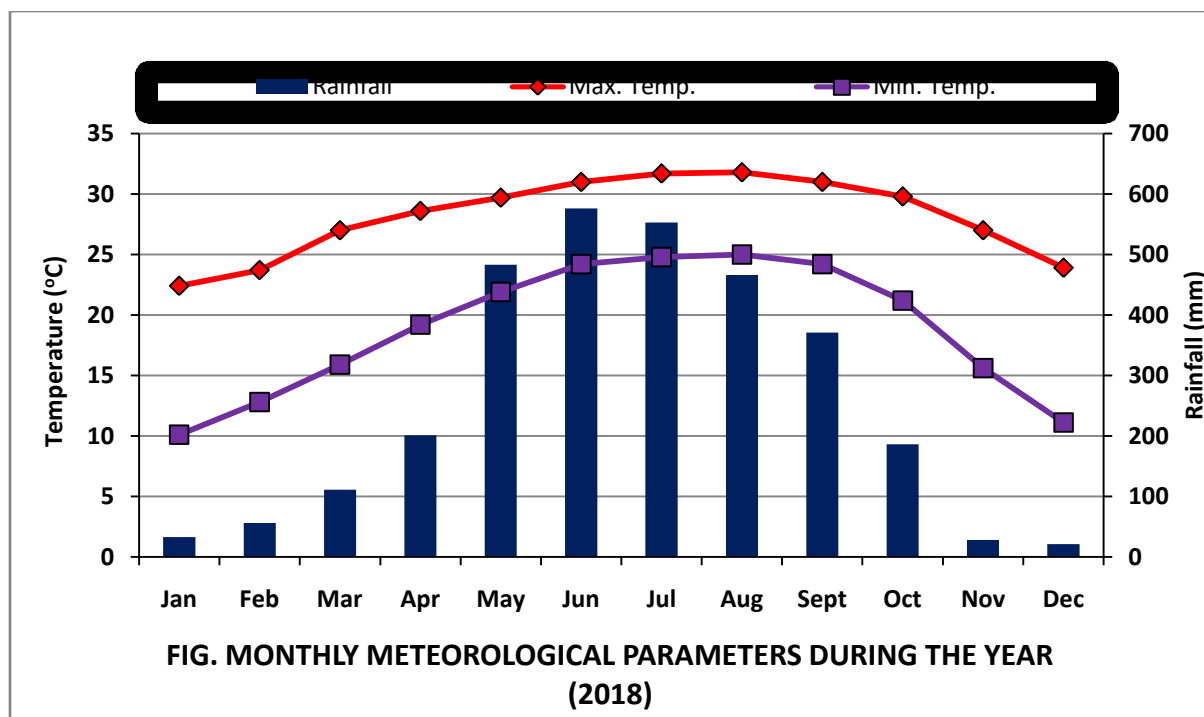


6. Climate and weather:

Temp.	10 ⁰ c (Min.) 37 ⁰ c (Max.)
Rainfall	2600 mm to 3200 mm
Relative humidity	73 % to 90%

7. Average monthly temperature and rainfall during the reporting period

Month	Rainfall (mm)	Temperature ⁰ C		Relative Humidity (%)
		Maximum	Minimum	
January	33	22.4	10.1	88.3
February	56	23.7	12.8	87
March	111	27.0	15.9	85
April	201	28.6	19.2	96.4
May	483	29.7	21.9	96.8
June	576	31.0	24.2	98.5
July	553	31.7	24.8	99.3
August	466	31.8	25.0	84.3
September	371	31.0	24.2	80.3
October	186	29.8	21.2	92.3
November	28	27.0	15.6	76.8
December	21	23.9	11.1	89.7



8. Demographic and Administrative

1.	Total Population	: 6,86,133
2.	Total Male	: 3,51,249
3.	Total Female	: 3,34,884
4.	ST Population	: 325560 (47.45%)
5.	SC Population	: 44225 (6.44%)
6.	Others Population	: 316348 (46.11%)
7.	No. of farm families	: 124138
8.	Literacy rate	: 72.7%
9.	Total Number of Revenue Village	: 1150
10.	No. of Administrative Block	: 5 (Bordalani, Dhemaji, Mashkhowa, Sissiborgaon, Jonai MSTD)
11.	No. of gaon Panchayat	: 65

9. Major farming systems/enterprises (based on the analysis made by the KVK)

1. Rice mono crop
2. Rice-Toria
Rice – Vegetables (Rabi)/Potato
3. Blackgram mono crop; Blackgram – Vegetable
4. Potato –summer vegetable/ sesamum

5. Toria mono crop
6. Agri- piggery/poultry
7. Agri- horti-piggery/poultry
8. Agri-Fishery- piggery/poultry
9. Agri- horti-fishery-piggery/poultry
10. Agri – Horti – Fishery
11. Piggery
12. Sericulture

10. Area, Production and Productivity of major crops cultivated in the district

Sl. No.	Crop	Area (Hectares)	Production (MT)	Average yield (kg/ha)
1	Rice- a) Autumn	11120	2019392	1816
	b) Winter Rice	66240	19441440	2935
	c) Summer Rice	3278	1166968	3560
2	Maize	543	192222	3540
3	Sugarcane	210	945210	45010
4	Mustard	17283	1857922.5	1075
5	Blackgram	1096	93598.4	854
6	Pea	628	56017.6	892
7	Potato	6042	9670221	16005
8	Vegetables- a) Rabi	3039	6245145	20550
	b) Kharif	1825	2295850	12580
9	Ginger	182	228592	12560
10	Turmeric	312	470340	15075
11	Garlic	103	46968	4560

11. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population (in '000)	Production
Cattle		
<i>Indigenous</i>	466323	87129 litres milk
<i>Exotic/ cross breed</i>	826	
Buffalo	14821	63469 litres milk
Goats	117568	119320 (live wt in kg)
Pigs	132427	871296 (live wt in kg)
Poultry		
Fowl	604542	295296 (eggs in '000 numbers)
Duck	224774	

12. Sericulture activities in Dhemaji district

No. of Sericulture Villages		602
Families Engaged (No.)	Eri	10219
	Muga	1150
	Mulberry	4069
Area under Silk Worm Food Plants (in ha)	Eri	400.50
	Muga	670
	Mulberry	305
Yield of Cocoons	Eri (in MT)	35.15
	Muga (Lakh Nos.)	720.00
	Mulberry (in MT)	10.07
Production of Silk Yarn	Eri Raw Silk (in MT)	30.60
	Muga Raw Silk (in MT)	11.57
	Mulberry Raw Silk (in MT)	1.96

13. Agriculture in Dhemaji district

- More than 85% populations depends upon agriculture
- Rice is a major crop followed by toria and black gram
- Piggery, poultry, goat, fisheries and sericulture are major allied vocations
- Agriculture is rainfed, floodprone and organic by default
- *Bao* paddy (Floating rice with red kernel) and *Muga* culture are specialty in Dhemaji district
- Strength: Large work force availability, including youths engaged in agriculture
- Weakness: Prevalence of traditional method and lack of basic infrastructure including irrigation
- Opportunity: Scope for Organic farming, complementary agriculture, livestock & *muga*
- Threat: Recurrent floods during kharif and drought in winter

Strength

- ❖ More than 85% of families engaged in Agriculture

- ❖ Traditional knowledge on paddy cultivation
- ❖ Availability of Tractor and micro irrigation facilities through CMSGUY and RIDF
- ❖ Active participation of Rural Youths in Farming
- ❖ Strength of department of Agriculture, Gove. Of Assam
- ❖ Existence of KVK for technological support

Weakness

- Practice of Traditional cultivation method
- Lack of Infrastructural Facility and Technical intervention
- Least focus on organized marketing
- Small land holding & Poor economic status
- Dependency for quality seed

Opportunity

- Accessible to nearby market of other district and state of Arunachal Pradesh
- Well connected Road connectivity
- Potential area for adoption of HYVs
- Natural existence of diversified land situation for boro and summer paddy cultivation
- Flowing of natural water course across the district

Threats

- Frequent occurrence of flash flood situation
- Dry spell in critical crop stage
- Possible occurrence of Flood
- Shortage of agricultural labour
- Occurrence of disease and pest in epidemic level

Location of the district in the Map of Assam

