

Assam Agriculture' 95

Agriculture Development in Assam

The state of Assam, nestled in the heart of India's north eastern region, covers a territory of 78,438 square kilometers, roughly a fourth of it comprising rugged hills and the rest fertile plains. The state has a gross cropped area of 40 lakh hectares (estimated) of which rice alone covers 26 lakh hectares.



The average size of operational holding in the state is 1.31 hectares, the highest size being 2.04 hectares in hills districts. More than 50 percent of the state's income is derived from agriculture and more than 3/4th of state's population is dependent on agriculture for livelihood. More than 90 percent of the area under agriculture is rainfed. Natural calamities, like draught and floods, occur regularly.

The hills areas of Assam consisting of the two hills districts, namely the Karbi Anglong and the North Cachar Hills have only 34 percent and 15 percent valley land out of the district geographical areas respectively. Jhumming of shifting cultivation is still in vogue in high altitude areas and is practically the sole source of living of the local tribal people.

The Department of Agriculture is implementing a number of schemes and providing incentives to the farmers, particularly small and marginal farmers. The state has indeed made significant stride in the agricultural sector and is marching ahead towards self-sufficiency especially in rice and oil seeds production.

Rice Production

- ◆ Winter rice is the most important rice crop in the state occupying about 70 percent of the total annual rice followed by Autumn rice occupying 25 percent and Summer rice occupying 5 percent of the total rice area.



- ◆ The total rice production in the state has recorded a highest production of 33.61 lakh tones in an area of 25.63 lakh hectares showing a productivity level of 1331 kg. Per hectare during 1993-94 against the production of 32.99 lakh tones in an area of 25.59 lakh hectares with production of 1308 kg. per hectare during 1992-93. It is estimated to achieve a production of 37.22 lakh tones during 1994-95.



- ◆ To attain self-reliance in rice production, cultivation of Summer rice received more attention since last three years to avoid flood. The production of 2.19 lakh tones was achieved in an area of 1.28 hectares during 1993-94 with a productivity record of 1708 kg. per hectare. It is estimated to achieve a production of 3.47 lakh tones during 1994-95.



- ◆ Another cereal crop gaining popularity is the wheat crop. The area under this crop has extended to 79 thousand hectares during 1993-94 from a meager 5 thousand hectares during 1965-66. Achieved production of 1.00 lakh tonne during 1993-94 and it is anticipated to achieve 1.31 lakh tones during 1994-95.

- ◆ The production of 35.41 lakh tones of food grains during 1993-94 have shown a growth of 2.55 percent over the production of 34.53 lakh tones achieved during 1992-93.

- ◆ Pulse production in the state is far below than the requirement. However, to narrow the gap, steps have been taken in increase area under Arhar during Kharif, taking up Rajmah cultivation during Rabi season and growing of Summer Pre-Kharif pulse like Black and Green Gram.

- ◆ Among Oil seeds crops, Rape and Mustard are cultivated in 92 percent of the total oil seed area. The production of 1.67 lakh tones oil seeds have been achieved during 1993-94 and expected to achieve 2.93 lakh tones in an area of 4.34 lakh hectares in 1994-95. To bridge the gap, oil seeds production sector, existing potentiality of groundnut & sunflower cultivation have duly being explored by the department with better production.
- ◆ Jute is the major crop grown and the state produced 6.76 lakh bales in an area of 76 thousand hectares during 1993-94 and anticipated to produce 11.00 lakh bales during 1994-95. Ramie cultivation the strongest natural vegetative fibre, has the great potentiality in the state and the department has initiated special thrust to extend cultivation of this crop.
- ◆ A record level of production of more than 11 lakh tones of Fruit crops during 1992-93 and 1993-94 ushered a new era in fruit production of the state.
- ◆ The production of vegetables reached 19.50 lakh tones during 1993-94 against the state's requirement of around 19.15 lakh tones. The state is marginally surplus in vegetable production.
- ◆ Spices production got priority and showed increasing tend of production from 1.43 lakh tones in 1991-92 to 1.63 lakh tones in 1992-93. The production may further increase to the level of 1.75 lakh tones during 1993-94 and 1994-95.
- ◆ The state's present requirements of seeds of different crops are around 48,000 qtls. Paddy, 64,000 qtls. Wheat, 4,200 qtls jute, 7,000 qtls. oil seeds and 15,800 qtls. Pulses. Assam Seeds Corporation Ltd. Is vested with the responsibility to produce and procure seeds to meet the state's demand. However, the state has been able to curtail its expenditure for import of input of certified seeds to the tune of 48,000 qtls. in case of rice while 6,200 qtls. in case of oil seeds.
- ◆ Fertilizer consumption rose up 12.13 kg./ha during 1993-94 which is the highest record so far achieved in the state. In fertilizer consumption we have been able to enhance the total consumption level from 16,799 MT (nutrients) during 1986-87 to 43,172 MT during 1993-94 by increasing consumption rate from 5 kg./ha to 12.13 kg/ha in spite of state's typical agro-climatic situation along with perennial natural calamity.
- ◆ Integrated Pest Management system is newly introduced minimize indiscriminate use of pesticides to avoid adverse changes in biological equilibrium.

Spectacular Achievements

- ◆ Special thrust on Rainfed Agriculture through National Water Shed Development Project for rainfed areas and taken up 109 nos. projects at a total cost of Rs. 28 crores within 8th plan period. Efforts are afoot to bring 1.06 lakh hectares of cultivate waste and mono-crop areas under ever green cover benefiting 75,598 nos. of farm families.
- ◆ In a bid to involve every farming family of the state towards adoption of scientific method of agricultural production vis-à-vis economic upliftment in totality through farming system approach, a large nos. of Field Management Committees, known as Pathar Parichalana Samittees (PPS) have been organized throughout the state and as many as 20,115 nos. of PPS have been registered and these PPS have been already scheduled in new concept of extension management.

- ◆ Implemented novel schemes of TSP and SCCP for the development of ST and SC farmers and spreading of agricultural technology. More than 2.50 lakh tribal and 1.75 lakh SC farmers have derived benefited during last three years.
- ◆ Subsidy upto Rs. 30,000/- to purchase Tractor Rs. 12,000/- for Power Tiller, Rs. 10,000/- for sprinkler irrigation equipments and Rs. 3,000/- for Power Pump is another novel efforts undertaken by the present Government for the development of Agril. Mechanization.
- ◆ An attractive scheme of Community irrigation Project received appreciation from farmers. During last four years 593 nos. such schemes were completed. Installed 7079 nos. STW and distributed 3570 nos. pump sets and benefited 30,300 families covering an area of 18,800 hectares.
- ◆ The Assam Agricultural University have identified /developed new high yielding varieties of paddy, pulse, oil seeds etc.

“Luit” and “Kapilee” are the two short duration varieties (100-105 days) of paddy evolved for Autumn, pre and post flood situations Besides that, paddy varieties like “Lachit”, “Chilarai”, “Kushal”, “Bahadur” Green Gram varieties like AAU-34, AAU-39, SG-1 oil seeds crops like Rape & Mustard M-27 and TS-29 identified/ developed by AAU are widely accepted by the cultivators. Two promising glutinous rice varieties namely “Bhogali” and “Rongali” evolved at AAU have given double the yield of traditional glutinous varieties.

In vegetables, Brinjal varieties “JC-1” and “JC-2” are very promising and recommended.

Varietal Characters of New Rice Varieties

Ranjit, Bahadur, Kushal

Duration	:	150-155 days
Time of sowing	:	Mid June
Time of Planting	:	Mid July
Spacing	:	Row to Row – 20 cm. Plan to Plant – 20 cm.
Age of Seedling	:	30 days
Average Yield	:	6-7 tonnes/ ha

Lachit, Chilarai

Duration	:	120-125 days
Time of Sowing	:	10-15 March
Time of Planting	:	10-15 April
Average Yield	:	4 tonnes/ ha

Luit, Kapilee

Duration	:	95-100 days
Time of sowing	:	End of February – as pre flood First fortnight of September – as post flood
Age of Seedling	:	20-25 days
Average Yield	:	4 tonnes /ha.

Aghoni Bora, Rongile Bora

Duration	:	155-160 days
Time of Sowing	:	Mid June
Time of transplanting	:	Mid July
Average Yield	:	6-7 tonnes /ha

Some Basic Statistics of Assam

1. Geographical area	78,438,00 hect.
2. Population (1991 census)	22,414,322
a) Male	11,657,989
b) Female	10,756,333
c) Density of Population per Sq. km.	286
3. Total Cropped area	39.00 lakh hect. (1992-93)
4. Net cropped Area	27.20 lakh lakh hect. (1992-93)
5. Anticipated total cropped area to sown	40.12 lakh hect. (1995-96)
6. Area sown more than once	12.92 lakh hect. (1995-96)
7. Gross area under (lakh hect.)	

	1993-94	1994-95
Rice	26.52	26.45
Wheat	1.00	1.00
Pulses	1.60	1.78
Jute & Mesta	0.82	1.02
Oil Seed	3.29	4.34

8. Horticulture crops (including vegetables)	5.07 lakh hect (estimated)
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9. Cropping intensity 145%

10. Productivity (Kg/ha)	1992-93	1993-94
a) Total Rice	1308	1331
b) Oil Seeds	506	507
c) Pulses	475	521
d) Wheat	1066	1277
e) Jute	2011	1508

11. Total No. of Districts	23
12. Total No. of Civil Sub Division	43
13. Total No. of Agril. Sub Division	54
14. Total No. of Development Block	217
15. Total No. of Anchalik Panchayat	196
16. Total No. of Inhabited Village	21995
17. Total No. of Uninhabited Village	1106
18. Total No. of Goan Panchayat	2486

The Broad Strategy for Agricultural Development

- ◆ Attaining self-sufficiency in food is the ultimate objective. Target is to attain foodgrain production level of 45 lakh tones by the end of the Eighth Plan.
- ◆ Increase in crop intensity by converting single cropping into double cropping and introduction of short duration variety.
- ◆ Extension of area under Rabi crops in flood free season, specially early Ahu, Boro rice, Oil seeds and pulses.
- ◆ Greater stress on high value crops like horticulture and vegetable crops.
- ◆ Opening of fertilizers retail outlets to ensure fertilisers at the door steps of the farmers and to organize mobile sale.
- ◆ Proper implementation of the seed production plan to ensure self sufficiency in certified seeds.
- ◆ Development of short duration high yielding varieties of paddy seeds.
- ◆ Better water shed management.
- ◆ Control of insect, pest and diseases. Integrated Pest Management.
- ◆ Strengthening of marketing, storage and processing facilities.
- ◆ Increasing credit flow to the farmers.
- ◆ Gearing up of extension machinery through group approach based on farming system base.
- ◆ Generation to self employment in agriculture sector.
- ◆ Exploration of ground water to support Rabi Production programme along with tapping of surface resource.