# BARPETA DISTRICT

## Inventory of Agriculture 2015

ICAR - Agricultural Technology Application Research Institute, Umiam (Barapani)
Ri- Bhoi District, Meghalaya - 793103

# BARPETA DISTRICT

## Inventory of Agriculture

## 2015

ICAR - Agricultural Technology Application Research Institute, Umiam (Barapani)
Ri- Bhoi District, Meghalaya - 793103

**Correct Citation:** **Bhalerao A.K., Kumar B., Singha A. K., Jat P.C., Bordoloi, R., Deka Bidyut C., 2015, Barpeta district inventory of Agriculture, ICAR-Agricultural Technology Application Research Institute, Umiam, Meghalaya, India**

**Published by:**

**The Director,**
**ICAR-Agricultural Technology Application Research Institute, Umiam (Barapani), Meghalaya-793103**
**Email: icarzcu3@gmail.com**
**Website: http://icarzcu3.gov.in**
**Phone no. 0364-2570081**

**Compiled By:**

**Dr. Arup Kumar Deka (Programme Coordinator)**
**Gunadhya Kumar Upamanya SMS (Plant Protection)**
**Haridra Sarma SMS (Agricultural Extension)**
**Dr Dilip Kumar Debchoudhary, Programme Assistant (Animal Science)**
**Pranjit Baruah Programme Assistant (Computer)**

**Edited by:**

**Amol K. Bhalarao, Scientist (AE)**
**Bagish Kumar, Scientist (AE)**
**A. K. Singha, Pr. Scientist (AE)**
**P. C. Jat, Sr. Scientist (Agro)**
**R. Bordoloi, Pr. Scientist (AE)**
**Bidyut C. Deka, Director, ATARI Umiam**

**Contact:**

**Dr. Arup Kumar Deka**
**Krishi Vigyan Kendra, Barpeta**
**Howly- 7813 16 ,Assam**
**Telephone Number: 03666 289292**
**Mobile Number: 91 9435080235**
**Website of KVK: www.kvkbarpeta.com**

**Word Processing:** **Synshai Jana**

**Cover Design:** **Johannes Wahlang**

**Layout and Printing:** **Technical Cell, ICAR-ATARI, Umiam**

# FOREWORD

The ICAR-Agricultural Technology Application Research institute, Zone-III with its headquarters at Umiam, Meghalaya is primarily responsible for monitoring and reviewing of technology assessment, refinement, demonstrations, training programmes and other extension activities conducted by the *Krishi Vigyan Kendras* (KVKs) in North East Region, which comprises of eight states, namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The directorate also serves as feedback mechanism to research and extension systems while maintaining a very close liaison with ICAR headquarters and has made significant progress in research, capacity building and other extension activities which ultimately contributes for the planned growth and development of North Eastern Region of India.

Through this District Agriculture Inventory publication, an attempt has been made to compile and publish information about KVK district and agriculture in district, in a meaningful and comprehensive manner. It will be very useful for all stakeholders of agriculture in district. The inventory encompasses the information regarding geography of district; basic data about agriculture and district population, crops, institutional resources, agriculture relates schemes in district which also covers agriculture, fishery and livestock sector. The district inventory in the form of e-publication will surely increase the digital presence and penetration of KVKs. The inventory will also serve the communication needs of farmers and youth in district as it contains contact numbers and address related information to access various developmental agencies in district.

I congratulate the efforts of staff of KVK for collecting and compiling such a large volume of information in systematic manner. I also acknowledge the efforts of editors and other staff members of this institute for publishing this document on our website.

Umiam
18-03-2016

(Dr. Bidyut C. Deka)
Director,
ICAR-ATARI-Umiam,
Meghalaya-793103

## PREFACE

The synthesized compilation in the form of informative publication is of much value for decision making. The compiled information in this publication will immensely help farmers and other stakeholders of agriculture and allied sector of a district such as line departments, research organizations, planners, policy makers, input providers etc. Through this document, we are trying to provide entire gamut of information related to district and its agriculture setting for the benefit of farming community of the North Eastern Region. The connectivity related issues in the North Eastern region makes the information inaccessible to most of stakeholders. Therefore, the *Krishi Vigyan Kendras* in each district of North East region undertook this cumbersome task to compile the district Agricultural Inventory. This publication provides the latest information about district, agriculture and other essential constituents.

We, the editors of this publication, earnestly thank and acknowledge the contribution of all compilers i.e. Programme coordinator, Subject Matter Specialists and Programme Assistants of KVK Barpeta for taking part in compiling the huge information to shape up Barpeta District Inventory of Agriculture-2015. We also thank all officers of ICAR H.Q. for guiding us time to time and motivating us to complete this publication.

We, the editors, dedicate this publication to the farming community of Barpeta District and we look forward to contribute more for the betterment of farming community in entire North East Region. We also welcome the suggestions for further improvement.

Umiam Editors

18-03-2016

## *From the Desk of Programme Coordinator, KVK Barpeta*

*The Barpeta district of Assam is located in lower Brahmaputra valley at a distance of about 140 km from Guwahati city. The total geographical area of the district is 2677.33 sq. km. The economy of Barpeta district is mainly agrarian. A vast majority of the workforce(75%) is engaged in agriculture. The population of the district is 16.93 lakh with a density of 632/sq. km.*

*To feed the emerging population, intensive agricultural cultivation is the need of the hour. For this, basic information about various line departments, govt. schemes contact addresses etc. are very much important which are not known to most of the farmers. Unless the farming community is well aware of the infrastructures available, the development of agriculture can never be in a desired pace. Whatever information is available that too quite unorganized and even the policy makers or planners have to make lot of efforts to collect the required information.*

*The farmers are nowadays literates and capable of adopting scientific methods of cultivation provided they get sufficient information in hand. Both Central and State governments have launched so many developmental schemes in agriculture sector from time to time. But most of the farmers have not been able to derive the benefit of these programmes only because they are not exposed to this information.*

*In this District Agricultural Inventory, it has been tried to include various govt. departments, research organizations, KVK, NGOs, banks, co-operative societies and many more along with their ongoing schemes and activities. This book is expected to be a ready reference for the farming community in particular and all other stack holders in general. We also admit that this publication requires to be updated from time to time and there may be some more emerging areas to be covered in due course. Efforts will always be there to look into more issues and incorporate these in the coming editions.*

*I, on behalf of KVK, Barpeta sincerely extend my gratefulness to those who have contributed to the preparation and publication of this inventory and hope that this compilation will be a useful one for the farmers, researchers, planners and other stakeholders in developing and uplifting the agricultural scenario of the district to a new height.*

***(****Arup Kumar Deka)*

# TABLE OF CONTENT

# CHAPTER- I. DISTRICT IN GENERAL

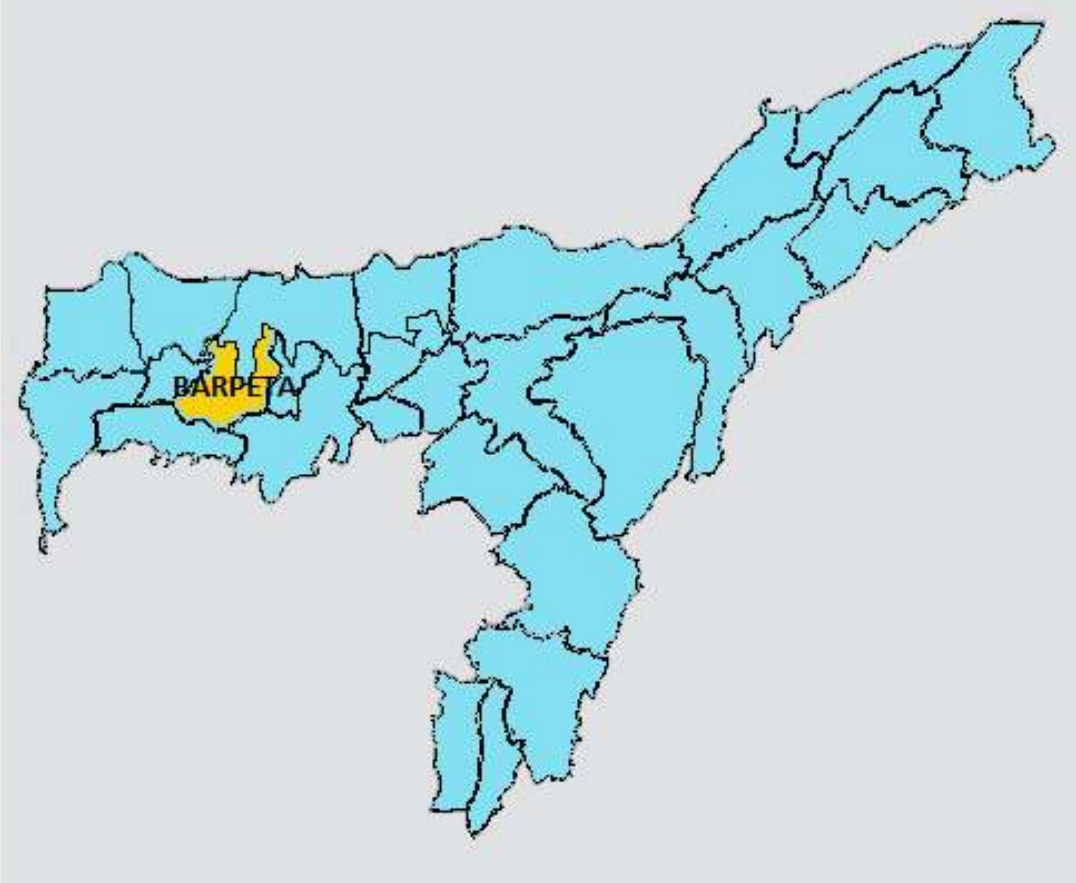



**Fig: Location of Barpeta District**

## CLIMATE

The humid subtropical climate of Barpeta district is characterized by temperature between $33^0$ C during summer and $12^0$C during winter. Periodic dry spells occur during October to March. The area receives an annual rainfall of 1800-2000 mm, with heaviest fall during May to July. The total number of rainy days per year varies from 118 days to 141 days. Maximum amount of precipitation is observed during the month of June, July and August.

**Table1.1: Climate Data for Barpeta**

| Climate data for Barpeta | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Month** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** | **Year** |
| **Record high °C (°F)** | 28.8 (83.8) | 32.2 (90) | 38.4 (101.1) | 39.0 (102.2) | 37.0 (98.6) | 38.3 (100.9) | 36.5 (97.7) | 36.2 (97.2) | 35.8 (96.4) | 34.3 (93.7) | 31.0 (87.8) | 28.1 (82.6) | 39 (102.2) |
| **Average high °C (°F)** | 23.6 (74.5) | 26.2 (79.2) | 30.0 (86) | 31.2 (88.2) | 31.2 (88.2) | 31.7 (89.1) | 31.9 (89.4) | 32.2 (90) | 31.7 (89.1) | 30.3 (86.5) | 27.6 (81.7) | 24.7 (76.5) | 29.36 (84.87) |
| **Average low °C (°F)** | 10.3 (50.5) | 12.0 (53.6) | 15.9 (60.6) | 20.0 (68) | 22.7 (72.9) | 24.9 (76.8) | 25.6 (78.1) | 25.6 (78.1) | 24.7 (76.5) | 21.9 (71.4) | 16.7 (62.1) | 11.8 (53.2) | 19.34 (66.82) |
| **Record low °C (°F)** | −2.7 (27.1) | −0.5 (31.1) | 6.1 (43) | 11.1 (52) | 16.2 (61.2) | 20.4 (68.7) | 21.4 (70.5) | 22.1 (71.8) | 17.7 (63.9) | 10.6 (51.1) | 5.5 (41.9) | −0.7 (30.7) | −2.7 (27.1) |
| **Average rainfall mm (inches)** | 11.9 (0.469) | 18.3 (0.72) | 55.8 (2.197) | 147.9 (5.823) | 244.2 (9.614) | 316.4 (12.457) | 345.4 (13.598) | 264.3 (10.406) | 185.9 (7.319) | 91.2 (3.591) | 18.7 (0.736) | 7.1 (0.28) | 1,717.7 (67.626) |
| **Average rainy** | 1.8 | 2.9 | 5.8 | 13.1 | 17.0 | 19.6 | 22.3 | 18.5 | 15.2 | 7.4 | 2.8 | 1.3 | 127.7 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **days** | | | | | | | | | | | | | |
| **Average relative humidity (%)** | 79 | 65 | 57 | 68 | 75 | 81 | 83 | 82 | 83 | 82 | 82 | 82 | 76.6 |
| **Mean monthly sunshine hours** | 226.3 | 214.7 | 220.1 | 201.0 | 192.2 | 132.0 | 124.0 | 161.2 | 138.0 | 204.6 | 231.0 | 232.5 | 2,277.6 |
| Source: World Meteorological Organization | | | | | | | | | | | | | |

## TOPOGRAPHY

Barpeta district of Assam is located in Lower Brahmaputra valley at a distance of about 140 km towards northwest from the capital city Guwahati. The total geographical area of the district is about 2677.33 sq km **(**Census,2011). It has almost flat topography with gentle slope towards the south. The southern part i.e. close to northern bank of Brahmaputra is low-lying flood plain zone. As per Census Report (2011), the population of Barpeta district is 16.93 lakhs with a density of 632/ sq.km.

## FORESTS

Barpeta district is divided into six agro-ecological situation (AES) viz: Foot Hills old mountain valley, Forest and Foot hills, Flood prone recent riverine alluvial plain, Flood free area, *Beel* situation and Char land situation which covers 107, 158, 426, 269, 9 and 99 nos. of villages, respectively in each AES situation. Out of total 324500 ha, the Per cent coverage of Foot Hills Old mountain valley (AES) is 14% of the total geographical areas, whereas forest and foot hills occupies 14%.

## WATER RESOURCES

The mighty river Brahmaputra and its nine tributaries are flowing through the district, covering a total length of about 1460 km. There tributaries namely Beki, Manah, Pallah, Chaulkhowa, Pahumara and Kaldia are flowing through the district which can be considered as boon for lift irrigation system in agricultural sector of the district. There are 49 numbers of beels covering 1739.25 hectares of water area.

## PORTS : **NA**

## DEMOGRAPHY

The total population of the district is 1693190 (as per 2011 census) of which 8,67,004 are male and 8,26,618 are female. The decadal (2001-2011) growth rate of population stands at 21.40% which is higher than the state's population growth rate (16.93 %). Out of the total population, 1545901 & 147289 represents the rural & urban population respectively. The population density per sq. km. is about 632. The Scheduled Caste & Scheduled Tribe populations (as per 2011 census) of the district are 95320 (5.63 %) and 27,344 (1.61 %), respectively. The gender ratio is 951/1000.

The population structure on the basis of religion comprises of Hindu (29.11%), Muslim (70.74 %), others (0.15 %).(Source: Statistic al Handbook, Assam 2012 & as per 2011 Census)

The total literacy rate of the population in the district stands at 65.03% with a female literacy rate at 59.04 % ; which is lower than the state's average of 73.18 % and 67.27%, respectively. Again, there are marked differences between the rate of literacy in rural (61.33 %) and urban (86.19%) (Source: Statistic al Handbook, Assam 2012 & as per 2011 Census). Further, the family below poverty line (BPL) in the district is estimated at 12,02,000. (Source: Directorate of Food and Civil Supplies, Assam, 2011)

## CULTURE AND EDUCATION

Barpeta district is regarded as a "land of Satra" (Vaishnavite monasteries). There are as many as sixty-nine satras in the district. Besides, there are twenty-five (25) historical monuments and culturally important sacred places in the district. Satra, which is unique institution, is the gift of the *Gurus* to the people of the district. Although in the beginning, these Satra institutions were made for the propagation of Vaishnavite faiths or Krishna culture, but with the passage of time such institutions were gradually transformed into open universities and became all embracing socio-cultural centres covering education, music, dance, sculpture, drama and fine art

.The district is famous for its centres of reputation in learning and culture. There are 14 numbers of Arts, Science and Commerce Colleges and 1 Medical College in the district . A total of 40 Higher secondary , 139 High schools , 264 ME schools and 1682 schools in primary levels are working in the District. All the villages in the district have adequate number of basic educational institutions.

## HEALTH CARE SECTOR

The district has 1 Medical College and 1 government hospital, 7 community health centres, 20 primary health centres and 20 Mini PHC. Two district tuberculosis centre, 1 Leprosy centre , 8 government run dispensary, 264 Sub-centres and 2 Subsidiary Health Centre are also functioning in the district.

## BANKING AND ALLIED SECTORS

UCO Bank is the Lead Bank comprising 6 branches in the entire district. There are 64 numbers of other commercial banks operating in the district. Three District Central Co- operative Credit society and 250 Primary Co-Operative Societies are also providing their services to farming community of the district.

## LOCAL BODIES AND RURAL DEVELOPMENT

The Panchayats are the administrative blocks at grass root level and enjoys full freedom in planning and developing the area under its jurisdiction.The Administrative set up of the district is mentioned below.

a. **Sub-division** :- There are two sub divisions in the District - one is Barpeta Sadar Sub Division and other is outlying Bajali Civil Sub Division.

b. **Revenue Circles**:- There are 9 Nos. of Revenue Circles in the district viz, Barpeta, Baghbar, Sarthebari, Barnagar, Kalgachia, Bajali, Sarupeta, Chenga and Jalah and 1068 revenue villages.

c. **Development Block**:- There are 11 nos. of Development Blocks in the District viz. Barpeta, Chenga, Paka Betbari, Gumafulbari, Sarukhetri, Gobardhana, Rupshi, Chakchaka, Bhawanipur, Mandia and Bajali.

d. **Police Stations**:- There are 7 nos. of Police Stations in the district viz, Barpeta, Sarthebari, Barpeta Road, Sorbhog, Tarabari, Baghbar and Patacharkuchi.

e. **Mouza**:- There are 26 nos. of Mouza in the district viz Barpeta, Betbari, Nagaon, Chenga, Ghilazari Jania, Mandia, Bagribari, Gobardhana, Kharija Bijni, Howly, Titapani, Damka Chaka Bausi, Rupshi, Baghbar, Paka, Sarukhetri, Pub Bajali, Sariha, Uttar Bajali, Chapaguri, Koklabari, Manikpur, Bhabanipur, Hathinapur and Bijni.

f. **Gaon Panchayat**:- There are 149 nos. of Gaon Panchayat in the district.

# CHAPTER- II. AGRICULTURAL SCENARIO OF THE DISTRICT

## CROPS

The geo-climatic condition of the district is conducive for the cultivation of a variety of agricultural crops. However, paddy is the principal crop which is grown in 1.35 lakh ha (2013-14). As per estimate of 2013-14, the coverage of Autumn, winter and summer paddy is reported to be 14.24 %, 50.20 % and 35.50 %, respectively of the total Paddy cultivated area of the district.

In addition to rice, mustard, pulses, wheat and jute are other important field crops either cultivated in commercial scale or for domestic consumption. It may be mentioned that oilseed and pulses occupy 6970 ha and 13758 ha respectively in the district.

The average productivity of the district is reported to be marginally higher as compared to state level productivity. However, the productivity of individual crops is lower than that of national average and far below the potential productivity of crops. The present major agricultural crops with their production and productivity are depicted in the following table:

**Table: Land use pattern of Barpeta District**

| Classification of land | Area (ha) |
|---|---|
| Total geographical area | 264510 |
| Net area sown | 159311 |
| Area sown more than once | 105421 |
| Total cropped area | 264732 |
| Water logged land | 1000 |
| Permanent pasture & other Grazing land | 11932 |
| Land under miscellaneous trees groves not included in net area sown | 3215 |

| | |
|---|---|
| Social forestry | 4 |
| Land under still water | 9100 |
| Cultivable waste land | 1290 |
| Fallow other than current fallow | 1275 |
| Current fallow | 30 |
| Total fallow land | 1305 |

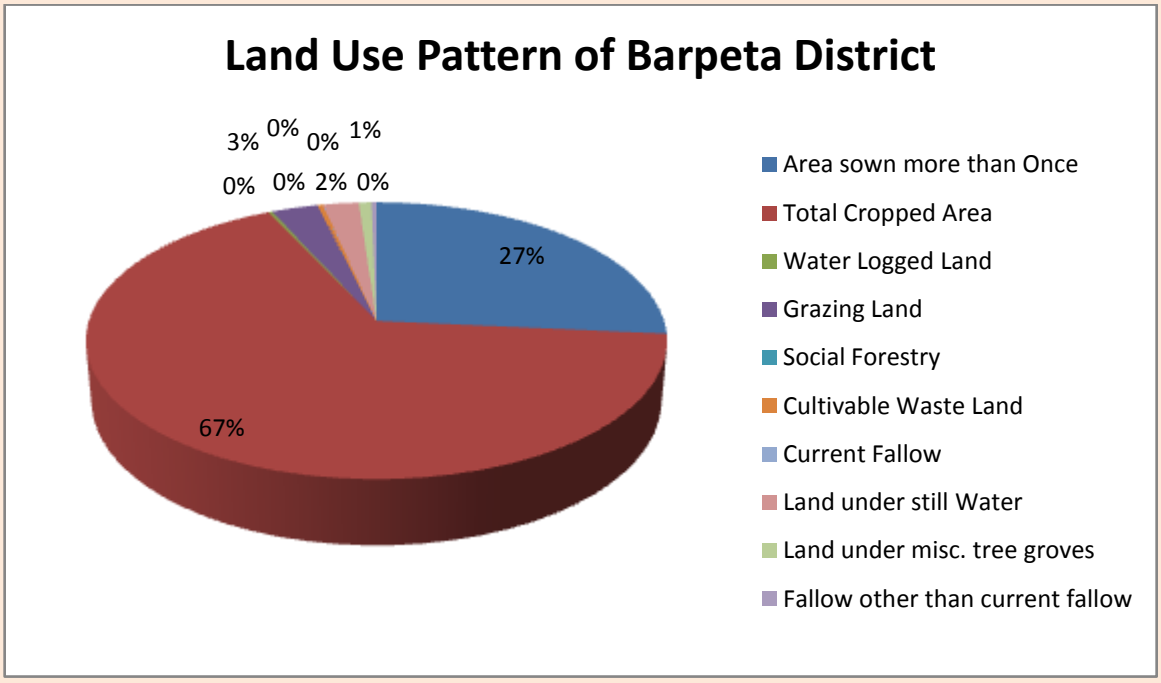



**Table: Area (ha),Production (q) and Yield (q/ha) of major crops for 2013-14**

| Sl. No. | Crop | Net Area sown (ha) | Area sown more than once ( ha) | Total Cropped Area ( ha) | Cropping intensity (%) | Production (q) | Productivity ( q/ ha) |
|---|---|---|---|---|---|---|---|
| 1. | Winter paddy | 67630 | NA | NA | 166 | 123146 | 1849 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2. | Summer paddy | 47877 | NA | NA | | 158072 | 3302 |
| 3. | Autumn paddy | 19191 | NA | NA | | 16796 | 889 |
| 4. | Rape & Mustard | 2819 | NA | NA | | 1768 | 627 |
| 5. | Jute | 5829 | NA | NA | | 50564 | 1561 |
| 6. | Mesta | 169 | NA | NA | | 1356 | 1444 |
| 7. | Cotton | 8 | NA | NA | | 4 | 75 |
| 8. | Pea | 1435 | NA | NA | | 1222 | 852 |
| 9. | Lentil | 4963 | NA | NA | | 2461 | 496 |
| 10. | Castor | 14 | NA | NA | | 9 | 683 |
| 11. | Niger | 1678 | NA | NA | | 849 | 506 |
| 12. | Linseed | 1688 | NA | NA | | 1007 | 596 |
| 13. | Sesamum | 771 | NA | NA | | 554 | 718 |
| 14. | Maize | 67 | NA | NA | | 123 | 1829 |
| 15. | Wheat | 5888 | NA | NA | | 8731 | 1483 |
| 16. | Other Cereals & small Millets | 515 | NA | NA | | 271 | 526 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17. | Black gram | 5333 | NA | NA | | 2732 | 512 |
| 18. | Green gram | 378 | NA | NA | | 197 | 519 |
| 19. | Arahar | 213 | NA | NA | | 180 | 848 |
| 20. | Gram | 83 | NA | NA | | 39 | 464 |
| 21. | Other Pulses | 1353 | NA | NA | | 1292 | 955 |
| 22. | Sugarcane | 364 | NA | NA | | 13457 | 36969 |

**Table: Net Area irrigated by different sources in Barpeta District**

| **Source** | **Area(ha)** |
|---|---|
| Tube wells | 151.5 |
| Other sources | 9.4 |
| **Total area** | **161.3** |

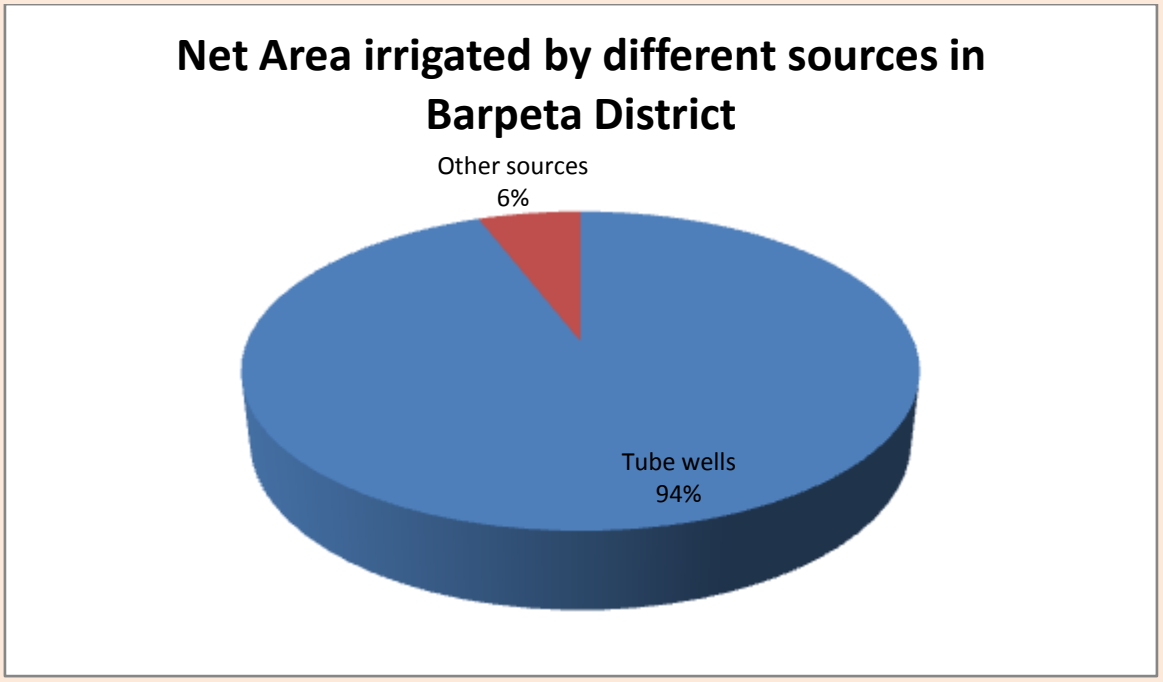


**Table: Area under irrigation for major crops (2009-10)**

| Sl. No. | Crop | Total cropped area(ha) | Irrigated area ( ha) | % of irrigation |
|---|---|---|---|---|
| 1. | Winter paddy | 88500 | 523 | 0.59 |
| 2. | Autumn paddy | 49610 | 543 | 1.09 |
| 3. | Summer paddy | 28350 | 28350 | 100 |

**Table: Area under HYV / hybrids for major crops for 2009-10**

| Sl . no. | Crop | Gross cropped area ( ha) | Area under HYV/hybrids ( ha) | % |
|---|---|---|---|---|
| 1 | Paddy | 172060 | 115887 | 67.4 |

## LIVESTOCK

Livestock sector is the major source of supplementary incomes and nutrition of the rural household in the district. Milk, meat and egg are the livestock products of the district. These products are mainly produced for local markets and mostly in the form of primary produce without any significant value addition. Certain areas undwer Bhawanipur, Gobardhana, Chackchaka, Bajali and mandia development blocks are known for traditional cattle farming, which is the major livestock of the district. Crossbred cattle accounts for 7.74 % of the total cattle population of the district. Again, out of the total poultry population in the ditrict, fowls comprose of 55.53 % and the rest is duck and others. Poultry, duckkery, goatery and piggery in the tribal areas are also major activities for rural households for family food and nutrition. Availability of most livestock products is inadequate inspite of reasonable numbers of livestock mainly because of non-rearing of improved breeds in addition to improper housing coupled with improper sanitation and imbalanced nutrition. The various livestock and poultry population of the district as per departmental census documented during the year 2007 is presented in the following tables

**Table: Estimated livestock and Poultry Population (in nos.) in Barpeta, 2011-12 (Sample Survey)**

| District | Indigenous Cattle | Crossed Breed Cattle | Buffaloes | Goats | Fowls | Ducks |
|---|---|---|---|---|---|---|
| Barpeta | 353887 | 35442 | 22543 | 127663 | 363628 | 134614 |

**Table: Livestock and poultry population ( in nos.) for 2007-08**

| Name of the Block | Cattle | Buffaloes | Sheep | Goats | Horse & Ponies | Pigs | Total Livestock | Fowls | Ducks |
|---|---|---|---|---|---|---|---|---|---|
| Barpeta district | 470456 | 15349 | 30839 | 234130 | 438 | 12256 | 763468 | 1176228 | 532895 |

**Table: Veterinary Facilities in Barpeta , 2011**

| Hospitals | Dispensaries | Sub-Centre Aid /First Centres | Block Vety. Dispensaries | Key Village Centres | *RAIC | R.P. Check post | BCPP Check post | Total |
|---|---|---|---|---|---|---|---|---|
| 1 | 13 | 32 | 6 | 4 | 1 | 0 | 0 | 37 |

**Table: Livestock and Poultry products production for 2009-10**

| S.No. | Name of the Block | Cows milk in litres | Buffalo milk in litres | Poultry | | Sheep and Goat | Others if any Pl. |
|---|---|---|---|---|---|---|---|
| | | | | Eggs in numbers | Broiler in kgs | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | **specify** |
| 1 | Barpeta district | Milk: 8877294litre | | 22687639 | - | Meat: 1373474 kg | - |

## FISHERIES

**Table: Number and area under fisheries in Barpeta , 2011-12**

| SOURCES | No. | AREA (ha) |
|---|---|---|
| Beel Fisheries | 23 | 6299 |
| Pond & tanks | 24057 | 2913 |
| Derelict water bodies/ Swamps | 61 | 1086 |
| Reservoir Fisheries | 0 | 0 |
| Forest Fisheries | 11 | 131 |
| Eco- Hatcheries | 11 | - |

**Table: Production of Fish Seed and Fish in Barpeta, 2011-12**

| Parameters | Production |
|---|---|
| Fish Seed (in Million Nos.) | 1723 |
| Fish (in Tonne) | 15635 |

# CHAPTER- III. CONSTRAINTS IN AGRICULTURAL PRODUCTION

## CROPS

Excessive use of inorganic fertilizers along with improper use of chemical pesticide has not only deteriorated the natural fertility of land and biodiversity of micro organisms but also leads to high production cost in Agriculture. Soil erosion, especially in the bank of mighty river Brahmaputra, is another factor for the loss of agricultural land and low agricultural productivity. Knowledge on water management practices and methods of scientific cultivation of crops is lacking among the farmers. Availability of quality seeds and other planting materials in time to farmers is also a major constraint of agricultural productivity. Lack o proper marketing channels to get maximum profit to the farmers is a limiting factor in this direction. To compete in the international market, technology based small scale agro-industries are to be encouraged.

Occurrence of flood in the harvesting period of Summer Paddy as well as in tillering stage of Winter Paddy are the major bottleneck in low production of Paddy in the district. Moreover, deposition of sand in Paddy fields due to flood makes the soil unsuitable for Paddy cultivation. Pests and diseases are also major bottlenecks in maximizing agricultural production. Development and popularization of suitable IPM strategies need to be given top priority. The major constrains, Strategies and Interventions in Agriculture sector are listed in the following table.

**Table: Constraints, Strategies and Interventions in Agriculture sector**

| Sl. No. | Constraints | Strategies | Interventions |
|---|---|---|---|
| 1 | Low productivity | 1. Adoption of recommended package of practice<br>2. Replacement of traditional variety by adoption of HYV | 1. Mass awareness<br>2. Training<br>3. OFT and Demonstration<br>4. Popularizing seed treatment practices<br>5. Skill up-gradation in handling pesticides & |

| | | | |
|---|---|---|---|
| | | | herbicides<br>6. Farmers field school on IPM<br>7. Policy initiatives |
| 2 | Lack of knowledge about modern agriculture | 1. Knowledge and skill up- gradation of farmers | 2. Mass awareness<br>3. Training<br>4. Exposure visit of farmers<br>5. Conducting demonstration |
| 3 | Low availability of quality seed | 1. Improvement in production and delivery system of seed<br>2. Revival of defunct government seed farm | 1. Entrepreneurship training to selected farmers & unemployed youth<br>2. Training to input including seed dealers<br>3. Seed village programme<br>4. Policy initiative |
| 4 | Dominance of traditional tools and methods | Promoting use of modern tools and phase wise mechanization of farming sector | 1. Demonstration of specific farm machineries in farmers field<br>2. Formation of groups for availing group finances<br>3. Awareness campaign and exposure visit for farmers |
| 5 | Inadequate & improper irrigation | 1. Promoting irrigation through tube wells and lift irrigations<br>2. Encouraging power operated irrigation pump<br>3. Suitable production technology to match | 1. Group mobilization for linking with agriculture policy for STWs & LLPs<br>2. Training and exposure visit on scientific water management<br>3. OFT/ FLD on Irrigation management |

| | | | |
|---|---|---|---|
| | | the limited moisture availability in rainfed agriculture | 4. Extension of power supply (electricity) to the farm sector to connect pump |
| 6 | Occurrence of flood | 1. Development of appropriate technology for increasing preparedness to predict and manage<br>2. Soil conservation programme | 1. Shifting to cultivation to *Ahu* and *Boro* rice from *Sali* rice<br>2. Popularizing HYV *Bao* rice in low-lying flood prone areas<br>3. OFT on short duration Boro rice varieties and flood tolerant varieties<br>4. Identifying and popularizing suitable rice varieties resistant to flash flood and water logging<br>5. Awareness on different soil conservation measures/ projects and facilitate linkages with Soil Conservation Department |
| 7 | Inadequate and unremunerative government procurement system | 1. Market led extension to be developed<br>2. Market regulation | 1. Policy initiative<br>2. Provision of minimum support price |
| 8 | Poor marketing network | 1. Strengthening of marketing support<br>2. Streamlining of marketing channel | 1. Collection of market information of important commodities<br>2. Establishing coordination |

| | | | |
|---|---|---|---|
| | | 3. Promotion of co-operative marketing | between regulated markets & FIGs<br>3. Making market information available at district level and FIACs through computer connectivity and community radio station.<br>4. Developing entrepreneurship for production of packaging materials |
| 9 | Disease and pest infestation | Adoption of IPM for disease and pest management | 1. Training and demonstration on IPM<br>2. OFT and demonstration on IPM<br>3. Encouragement of ITK on pest management. |
| 10 | Lack of storage facilities | 1. Involvement of public sector agencies in building storage and ware house<br>2. Promotion of community go downs<br>3. Popularization of improved traditional storage structures such as duli, gutibhoral, guchibhoral specially for small and | 1. Facilitating linkages of community with public sector agencies and financial institutions<br>2. Awareness camps to popularize the structures<br>3. Demonstration programmes |

| | | | |
|---|---|---|---|
| | | marginal farmers | |
| 11 | Poor condition of road and transport system | Establishing and improving road linkage between farm and market | 1. Policy initiatives |
| 12 | Poor entrepreneurship | Promoting agro entrepreneurship through agri-service centers and setting up of agro based industries | 1. Identification of entrepreneur and training them on technical, managerial and financial aspects<br>2. Encouraging agro service centers to engage trained skilled labours on contract farming and farm operation<br>3. Associate raw materials produced in the locality to different realizable agro industries and identify entrepreneur<br>4. Link entrepreneur to appropriate agencies and financing institutions |
| 13 | Low access to credit facilities | 1. Improve the risk bearing capability of the farmers<br>2. Improve the accessibility of the farmers to bank | 1. Facilitate all existing farmers' organizations regarding prevailing banking procedures and formalities through mass media, kisan loan mela and training<br>2. Organization of block level |

| | | | |
|---|---|---|---|
| | | | interface workshop amongst the representatives of PPS and SHGs and bankers to develop mutual rapport.<br>3. Facilitating Kisan Credit Card |
| 14 | Fragmented land holding | 1. Encouraging group approach in farm operation | 1. Awareness<br>2. Policy initiative on land holding<br>3. Forward and backward linkage |
| 15 | Deteriorating ill soil health | 1. Management of Soil for restoring productivity | 1. Study of ameliorative measures against the problem of iron toxicity<br>2. Refinement of technological package for INM & IPM as per investment capability of different farmers<br>3. Emphasis on nutrient recycling and vermi composting<br>4. Study of micro nutrient requirement for various crops |
| 16 | Improper use of plant protection chemicals | 1. Promote scientific management practices | 1. Training on use of bio control and pesticides of plant origin<br>2. Training to dealers on handling, storage and safe use of pesticides |

| | | | |
|---|---|---|---|
| 17 | Lack of awareness on value addition | 1. Promotion of value addition in selected commodities | 1. Identifying varieties with special qualities and popularizing them<br>2. Formation of FIGs for cultivation and processing of aromatic and non aromatic rice for domestic consumption and export<br>3. Provision of forward and backward linkages |
| 18 | Slow rate of dissemination of technologies | 1. Use of ICT for effective dissemination of technologies to the farmers | 1. Developing KVKs as a knowledge hub related to agriculture through proper use of ICT |

**Table: Constraints, strategies and interventions of horticultural sector**

| Sl. No. | Constraints | Strategies | Interventions |
|---|---|---|---|
| 1 | Low productivity | 1. Overcoming technological gap<br>2. Exploiting different level of productivities in vegetables crops through introduction of HYV varieties | 1. Mass awareness<br>2. OFT on improved varieties and hybrids<br>3. Training<br>4. Exposure visit of farmers<br>5. Conducting demonstration |
| 2 | Lack of quality planting material | 1. Establishment of modern high tech nursery for ensuring multiplication and supply of high quality | 1. Institutional support in terms of knowledge, skill, credit and marketing |

| | | | |
|---|---|---|---|
| | | (disease free tested by indexing), planting material of major horticultural crops including spices<br>2. Mass scale introduction of superior quality variety/ germplasm material of major and well recognized places including center of origin | |
| 3 | Less interest on rejuvenation of home stead farm | 1. Promoting scientific management technique specific to bari centric crops | 1. Awareness & Training |
| 4 | Poor soil health | 1. Encouraging crop-specific soil health management schedule | 1. Organic recycling<br>2. Awareness and training on INM |
| 5 | Inadequate & improper water management | 1. Exploiting ground/ flow water resources for intensive cultivation<br>2. Promoting drip irrigation systems in fruit plantation | 1. Group mobilization for linking with agriculture policy for STWs & LLPs<br>2. Training and exposure visit on scientific water management<br>3. OFT/ FLD on Irrigation management<br>4. Extension of power supply (electricity) to the farm sector to connect |

| | | | |
|---|---|---|---|
| | | | pump |
| 6 | Non-adoption of modern recommended package of practices | 1. Application of frontier technologies like canopy management, high density planting, tissue culture, micro-irrigation, fertigation etc.<br>2. Skill up gradation of farmers through efficient transfer of technology | 1. Technical input of selection of seed/planting material, cultivation practices and pest and disease management.<br>2. Mass awareness<br>3. Training<br>4. Exposure visit of farmers<br>5. Conducting demonstration |
| 7 | Non adherence to recommended plant protection measures | 1. Promote scientific management techniques | 1. Awareness and training |
| 8 | Alleviation of post harvest losses arising from excessive production during peak season | 1. Promoting value addition and processed products<br>2. Reduction of post harvest losses through development of suitable infrastructure (cool chain technology) and processing units<br>3. Developing entrepreneurship for production of packaging materials | 1. Awareness and training<br>2. Establishment of common facilities for cleaning, grading, packing, storing and processing<br>3. Facilitate linkage between producers and processing units |
| 9 | Poor marketing | 1. Strengthening of | 1. Collection of market |

| | | | |
|---|---|---|---|
| | network | marketing support<br>2. Streamlining of marketing channel<br>3. Promotion of co-operative marketing | information of important commodities<br>2. Establishing coordination between regulated markets & FIGs<br>3. Making market information available at GP level through computer connectivity and community radio station. |
| 10 | Poor entrepreneurship | 1. Promoting agro entrepreneurship through agri-service centers and setting up of agro based industries | 1. Identification of entrepreneur and training them on technical, managerial and financial aspects<br>2. Encouraging agro service centers to engage trained skill labours on contract farming and farm operation<br>3. Associate raw materials produced in the locality to different realizable agro industries and identify entrepreneur<br>4. Link entrepreneur to appropriate agencies and financing institutions |

## LIVESTOCK

Construction of building for office premises and industries in the cattle reserves leads to the non availability of fodders. Farmers should be trained in the field of fodder production technology in waste lands. Lack of knowledge of farmers on scientific methods of rearing of cattle and calves also severely affects their economy. Non availability and high cost of improved breeds of cattle, buffaloes, goats, sheep and pigs at cheaper rates affects small and marginal farmers. Availability of chicks and ducklings of improved breeds is a major constraint, affecting duck and poultry production and widespread adoption of these enterprises by the farmers. Non availability of medicines at door step and veterinary doctors at remote villages of the district is also one of the major constraints for poor growth of livestock and poultry enterprise. The following table depicts major constraints strategies and interventions in Animal Husbandry sector.

**Table: Constraints Strategies and Interventions in Animal Husbandry sector**

| Sl. No. | Constraints | Strategies | Interventions |
|---|---|---|---|
| 1 | Low productivity of milk, meat and egg | 1. Breed up-gradation by selective breeding<br>2. Revamping of the existing extension delivery system<br>3. Balanced feeding with specific strategic supplement of deficient minerals | 1. Awareness and training<br>2. Survey to select the superior indigenous animals in terms of yield and reproductive traits by pedigree and progeny performance<br>3. Develop nucleus herd in each circle at phase manner<br>4. Strengthening of existing and additional establishment of bull mother farm as per need<br>5. Conducting massive AI |

| | | | |
|---|---|---|---|
| | | | programme<br>6. Providing micro-credit linkage for the progressive farmers to enable them to shift towards scientific intensive practices as well as to boost up the production |
| 2 | Traditional/ Semi-scientific management system | 1. Up-gradation of existing farming system to scientific production system | 1. OFT on husbandry practices<br>2. Streamlining the housing, breeding, feeding and other management system<br>3. Training of farmers on feed & fodder management, disease management and housing management |
| 3 | Poor body weight gain of non-descript local pigs and goats | 1. Crossing local pigs and goats with identified exotic improved breeds<br>2. Creep feeding (special diet with high protein) | 1. OFT<br>2. Training |
| 3 | Stunted growth and mortality of young ones due to improper management | 3. Emphasis on modern husbandry practices | 3. Training and awareness campaign on<br>❖ Calf barn and herd feeding for calves<br>❖ Creep area, foster mother, herd breeding |

| | | | |
|---|---|---|---|
| | | | for orphaned piglets<br>❖ Brooding cattle and its importance |
| 4 | Inadequate availability of feed and fodder | 1. Development of area-specific mineral mixture to augment productive and reproductive performances of livestock | 1. Awareness and training<br>2. Encouraging FIGs to handle animal feed, medicines and vaccine<br>3. Training on preparation of low cost poultry feed from locally available materials<br>4. Technical skill up-gradation of feed mixing units and input supplier groups<br>5. Preservation of fodder (silage)<br>6. Concentrate feeding with locally available feed ingredients<br>7. Enrichment of low grade roughages with urea treatment |
| 5 | Periodical market inaccessibility due to higher production cost | 1. Government policy initiative | 1. State policies required to make easy accessibility of the different inputs to farmers<br>2. Contract farming can be taken with utmost precaution to protect the farmers' rights |
| 6 | Occurrence of | 1. Strategic treatment | 1. Awareness and training |

| | | | |
|---|---|---|---|
| | diseases | with ecto and endo parasites<br>2. Development of immunization strategy | 2. Vaccination and<br>3. Emphasis on proper nutrition<br>4. Streamlining the housing, breeding, feeding and other management system<br>5. Massive vaccination campaigns in flood prone areas |
| 7 | Unorganized goat rearing practices | 1. Up-gradation of existing farming system to scientific production system<br>2. To make improved breeds available | 1. Selective breeding and introduction of potential breeds<br>2. Training of Paravets, rural youths and farmers<br>3. Large scale implementation of AI programme |
| 8 | Unhygienic meat production | 1. Proper handling of carcass and hygienic marketing<br>2. Upgrading of slaughter house | 1. Awareness and training<br>2. Initiative of local municipal for streamlining slaughter house |

## FISHERIES

Inadequate knowledge of quality fingerling production, high cost of inputs and occurrence of flood are the major constraints of fishery enterprise in the district. SIow growth in internal production of fishes and exploitation by middlemen in marketing has adversely affected fisheries development in the district. Indigenous ornamental fish culture like *Colisa laubosa, Ailacoila sp, Aorichthy aor, Danio aquipillatus and D. devario* etc. has tremendous scope in the region. Large scale pollution of ponds has also affected the enterprises.

**Table: Constraints, Strategies and Interventions of Fishery enterprise**

| Sl. No. | Constraints | Strategies | Interventions |
|---|---|---|---|
| 1 | Low production and productivity in fish culture system | 1. Up gradation of existing composite fish culture systems in the available water bodies<br>2. Enhance technological competence in fish farming<br>3. Adoption of integrated fish farming in existing culture system | 1. Training to fisher folk on specific method and technologies<br>2. Identify fisher folks doing integrated fish farming with some achievements<br>3. Facilitate availability of critical inputs, credit and market<br>4. Organize training in improved technology for progressive fish culture<br>5. Exposure visit to the model farm<br>6. Facilitate forward and backward linkage |
| 2 | Non availability of quality inputs in time including fish seed & feed | 1. Encourage timely availability of improved quality carp fingerlings for proper stock management<br>2. Facilitate/ Create fisheries input centre for fish culture<br>3. Encourage organization of rural youth groups to raise | 1. Identify and register potential fish seed grower & organize training<br>2. Identify fish culture inputs dealer and potential entrepreneur<br>3. Organize youth groups and provide training to raise quality carp seeds<br>4. Motivation to deal with |

| | | | |
|---|---|---|---|
| | | quality carp seeds<br>4. Encourage establishment of mini fish feed plant | fisheries inputs<br>5. Establish forward and backward linkage<br>6. Facilitate credit support |
| 3 | Depletion of wild stock in natural fisheries | 1. Encourage habitat improvement and introduce non-conventional culture facility in open water system<br>2. Conservation of aquatic bio-diversity<br>3. Conservation of natural open water fishery resources<br>4. Effective utilization of the food web of the open water fisheries through introduction of economic detritivore fishes<br>5. Introduction of non-conventional fish culture systems in open waters | 1. Promote in-situ conservation<br>2. Restoration and habitat improvement<br>3. Identify sites for introduction and facilitate availability of alternate species<br>4. Identification of available indigenous organism involving farmers participatory research<br>5. Introduction of dominance fish species through stocking<br>6. Identify the natural open water fishery resources and its potential<br>7. Organize local farmer into user groups<br>8. Select suitable detritivore fishes and facilitate stocking at pre-determined rate<br>9. Training of user groups about conservation and benefit<br>10. Training to fishers on |

| | | | |
|---|---|---|---|
| | | | non-conventional culture systems |
| 4 | Less emphasis on culture of high value fish & non-fish organisms | 1. Promotion of culture of high value fishes like chital, ari, tengra etc.<br>2. Popularization of poly culture of air breathing fishes with carps in ponds<br>3. Promotion of ornamental fisheries of indigenous and exotic fishes<br>4. Encouraging poly culture of shell fishes like giant fresh water prawn along with carps in ponds<br>5. Promotion of fresh water mussel farming for pearl production in pilot scale | 1. Development of breeding and rearing technology of high value fish on commercial basis.<br>2. Identification of potential air breathing fish / ornamental fish/ fresh water prawn / fresh water mussel for commercial farming<br>3. Training on poly culture methods on air breathing fishes/ fresh water prawn/ fresh water mussel<br>4. Identification of potential breeder and grower of air breathing and ornamental fishes<br>5. Training on breeding and seed production of indigenous ornamental fish and prawn<br>6. Identify potential site of pearl culture<br>7. Exposure visit of farmers to CIFA, CIFE<br>8. Provide training to master trainers in ICAR institutes |

| | | | |
|---|---|---|---|
| | | | 9. Identification of potential entrepreneur<br>10. Development of networking programme among experts, traders, exporters<br>11. Facilitate credit linkage for setting up of breeding and seed production unit as well as for poly culture<br>12. Facilitate supply of critical inputs and provide credit and market linkage |
| 5 | Prevalence of diseases and low adoption of preventive measures | 1. Management of water quality<br>2. Establishment of mobile laboratory with clinical facilities for fisheries | 1. Training of farmers on water quality management and fish culture<br>2. Create awareness through mass media about availability of the service<br>3. Motivate farmers to avail the opportunity on cost sharing basis |
| 6 | Alleviation of post harvest losses arising from excessive catches during peak season | 1. Promoting value addition<br>2. Promote cold storage facilities | 1. Identify the area where potentiality exist<br>2. Mass awareness<br>3. Select aspiring rural youth interested in value added fish products and |

| | | | |
|---|---|---|---|
| | | | arrangement of training and exposure visit for them<br>4. Facilitate credit support and develop forward and backward linkage |
| 7 | Lack of marketing facilities | 1. Organize Community marketing groups<br>2. Promote community cold storage<br>3. Provision of cold storage facilities in terminal market | 1. Awareness & Training<br>2. Formation of rural youth group<br>3. Forward and backward linkages<br>4. Policy initiatives |
| 8 | Fragmented land holding | 1. Encouraging formation of community oriented groups | 1. Access the potentiality<br>2. Encouraging group approach in farm operation<br>3. Popularizing Integrated Fish farming<br>4. Identification of SHG<br>5. Organize training for skill up gradation, group dynamics and empowerment<br>6. Policy initiative on land holding |
| 9 | Lack of farmers participatory research | 1. Stock and harvest schedule manipulation in carp poly culture to enhance production<br>2. Standardize carp feed | 1. Identification of village and site for conducting trial<br>2. Select potential farmers and their resources<br>3. Conducting OFT through |

| | | | |
|---|---|---|---|
| | | using available low cost materials | technical assessment and refinement on (a) stock manipulation with pre-fixed harvest schedule (b)Refinement of existing package of practice (c) effectiveness of low cost fish feeds<br>4. Determine the most economic and acceptable *modus operandi* by participatory farmers<br>5. Development of package of practices |
| 10 | Non existence of agro service center/ fish clinics | Promotion of agro clinic/ agro-service centre/ fisheries clinic/ consultancy for farmers on payment basis | 1. Organize awareness campaigns about concept of agro-clinic/agro-service centre/fisheries clinic and consultancy service at panchayat level<br>2. Introduction service charge for field visit and advisory service |

Constraints encounter in Sericulture sector are lack of separate rearing house, lack of adequate plantation, lack of input technological knowledge viz. high yielding silk worm variety, disinfection, improved rearing technology etc. this results in low production of cocoons and generates low income.

**Table: Constraints, Strategies and Interventions of Sericulture sector**

| Sl. No. | Constraints | Strategies | Interventions |
|---|---|---|---|
| 1 | Low production and productivity | 1. Up-gradation of existing system to scientific production system<br>2. Revamping of existing extension system | 1. Awareness and training<br>2. Exposure visits |
| 2 | Lack of knowledge about modern sericultural practices | 1. Knowledge and skill up- gradation of farmers | 1. Mass awareness<br>2. Training<br>3. Exposure visit of farmers<br>4. Conducting demonstration |
| 3 | Absence of reeling units for mulberry and spinning unit for eri | 1. Establishment of centralized multiend reeling and spinning units | 1. Policy support |
| 4 | Unorganized food plant production system | 1. Encourage systematic plantation of food plants<br>2. Encourage plantation of perennial food plants for year-round availability | 1. Awareness and training<br>2. Encourage stationary plantation<br>3. Encourage group approach in sericultural practices |
| 4 | Poor road communication | 1. Establishing and improving road linkage between farm and market | 1. Policy initiatives |
| 5 | Lack of | 1. Strengthening of | 1. Collection of market |

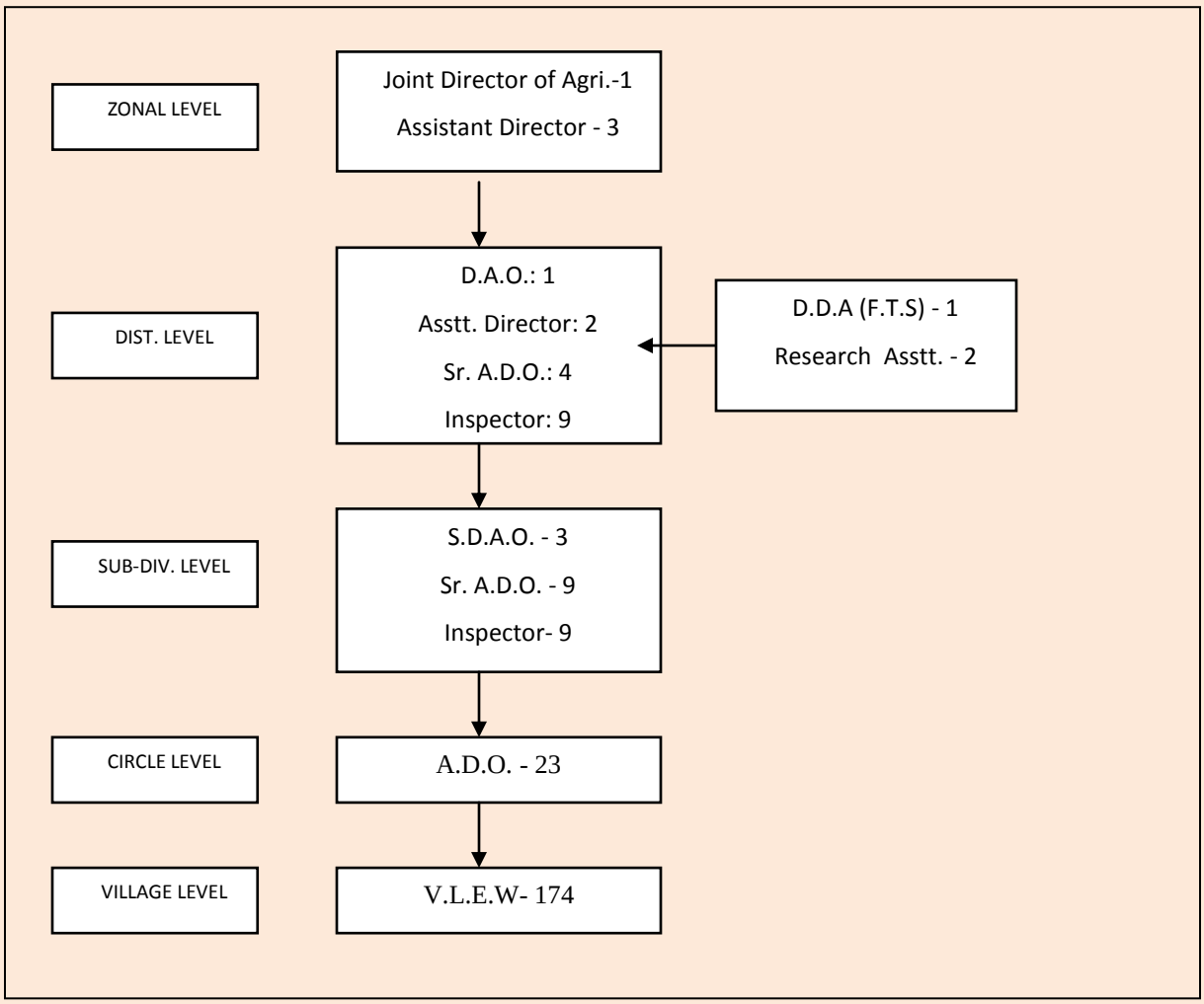
| | | | |
|---|---|---|---|
| | organized marketing network | marketing support<br>2. Streamlining of marketing channel<br>3. Promotion of co-operative marketing | information of important commodities<br>2. Establishing coordination between regulated markets & FIGs<br>3. Establishing forward and backward linkage |
| 6 | Low access to credit facilities | 1. Improve the risk bearing capability of the farmers<br>2. Improve the accessibility of the farmers to bank | 1. Facilitate all existing farmers' organizations regarding prevailing banking procedures and formalities through mass media, kisan loan mela and training<br>2. Organization of block level interface workshop amongst the representatives of PPS and SHGs and bankers to develop mutual rapport.<br>3. Facilitating Kisan Credit Card |
| 7 | Occurrence of diseases | 1. Encourage scientific rearing practices and sanitation | 1. Awareness and training |
| 8 | Value addition | 1. Promotion of value addition in selected commodities | 1. Awareness and traing<br>2. Exposure visits |

# CHAPTER- IV. INSTITUTIONAL SUPPORT FOR AGRICULTURAL DEVELOPMENT OF THE DISTRICT

## CROPS

### 1. Department of agriculture:

The Lower Assam Zone of the Agriculture Department is headed by a Joint Director of Agriculture, who is assisted by three nos. of Assistant Director at the Zonal level. District Agricultural Officer, Barpeta and Deputy Director of Agriculture; Field Trial Station also comes under the administrative control of Joint Director of Agriculture. The District Agriculture Officer, who heads district office, is responsible for overall implementation of agricultural activities in the district. The District Agricultural Officer is assisted by 2 nos. of Assistant Directors, 3 nos. of SDAOs, 13 nos. of Senior ADOs and 23 nos. of ADOs are there at the circle level to assist SDAO. At the grass root level, there are 174 nos. of VLEWs to assist the ADOs. The DDA (FTS), Patbaushi is assisted by 2 nos. of Research Assistant.




## 2. Krishi Vigyan Kendra (KVK):

The Krishi Vigyan Kendras are down-to-earth institutions committed to on farm research, vocational training, transfer of latest technologies, and thus, serving as the light house for overall rural development in the district. The activities of the KVK include technology assessment, refinement and transfer, aiming to bridge the gap between the technology developed at the research institutions and its adoption at the field level by the farmers through demonstration of technology/ products etc. and training of farmers, rural youths and extension personnel.

## 2.1 Vision

Science and technology-led growth leading to enhanced productivity, profitability and sustainability of agriculture

## 2.2 Mission

Farmer-centric growth in agriculture and allied sectors through application of appropriate technologies in specific agro-ecosystem perspective

## 2.3 Mandates of KVK

Technology Assessment and Demonstration for its Application and Capacity Development

## 2.4 Objectives of KVK

- On-farm testing to assess the location specificity of agricultural technologies under various farming systems.
- Frontline demonstrations to establish production potential of technologies on the farmers' fields.
- Capacity development of farmers and extension personnel to update their knowledge and skills on modern agricultural technologies.
- To work as Knowledge and Resource Centre of agricultural technologies for supporting initiatives of public, private and voluntary sector in improving the agricultural economy of the district.
- Provide farm advisories using ICT and other media means on varied subjects of interest to farmers
- In addition, production of quality technological products( seeds, planting material, bio-agent, livestock) and make it available to farmers
- Organize front line activities
- Identify and document selected farm innovations and converge with ongoing schemes and programs within the mandate of KVK

## 2.5 Background of KVK, Barpeta

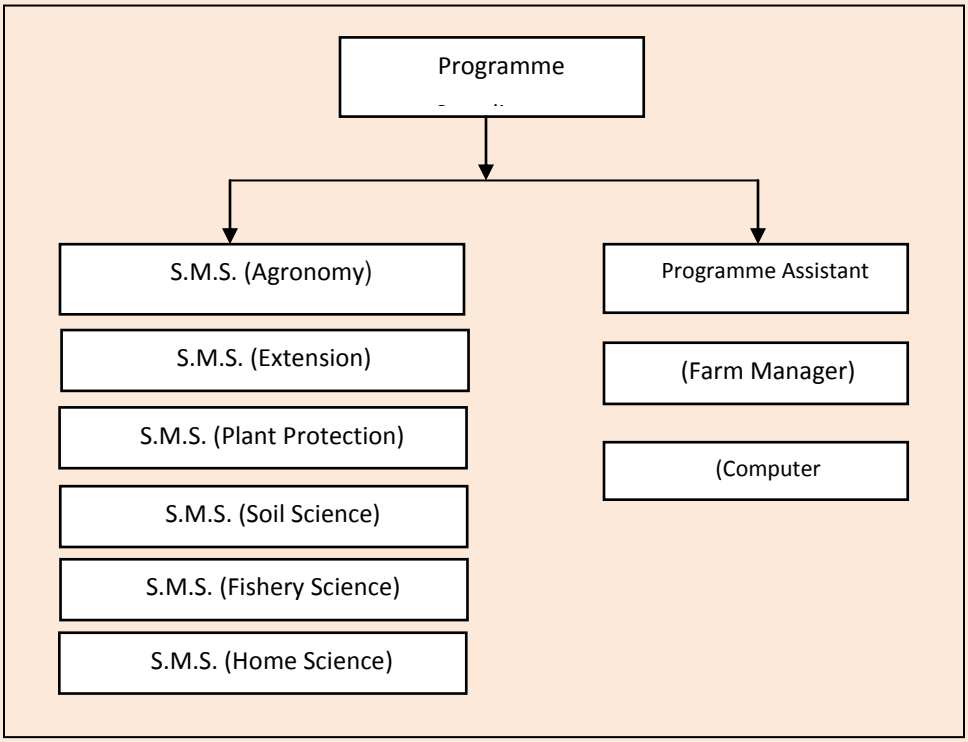
Krishi Vigyan Kendra (KVK) for Barpeta District was established by Assam Agricultural University, with financial assistance from the Indian Council of Agricultural

Research at Howly. The centre started functioning from September 14, 2004. The geographical location of Howly lies around 26o 25' 32.7" N latitude and 90o 58' 13.6" E longitude, at an elevation of 53 m above msl. Howly town is 430 km away from AAU headquarter, Jorhat, and 130 km away from the state capital Guwahati. It is easily accessible by road and is located beside National Highway No. 31, in between Bhabanipur and Barpeta Road towns to the east and west respectively. The town can also be approached by road from the district headquarter Barpeta, 12 km away, which in turn is linked to Guwahati by a metalled road. The nearest rail-head is Barpeta Road, situated only 10 km away from Howly. Lokapriya Gopinath Bordoloi International airport at Guwahati is the nearest airport. In the absence of permanent infrastructure at its site, the KVK office is currently functioning from a rented house at Howly town. The permanent site of the KVK, covering an area of 10 ha, is located 1 km north of the National Highway. The KVK was functioning with only limited staff upto October, 2008. However, the recruitment of scientists staff, Farm Manager and Computer Programmer have been accomplished in November, 2008. Shortly, the KVK would be shifted to its permanent site.

## 2.6 Vision of KVK, Barpeta

1. To portrait KVK Barpeta as a nodal centre of excellence by integrating research – extension – farmer – market linkages for socio-economic development of Barpeta district.
2. To design and develop KVK, Barpeta as a hub of knowledge through use of ICT for different stake-holders of agricultural sector

The staffing pattern of KVK, Barpeta comprises of 1 no. Programme Coordinator, who is Officer-in-charge, assisted by six (6) Subject Matter Specialists and three (3) Programme Assistants. However, one post of Programme Assistant is yet to be filled up.




## 2.5 Thrust area of KVK, Barpeta

- Widespread promotion of recommended technologies of crops, livestock, fishery & sericulture enterprises
- Introduction of suitable high yielding/improved varieties/breeds
- Promoting quality seed/planting material production technology
- Encouraging farm mechanization
- Popularization of tools and implements for drudgery reduction of farm women
- Evaluation, popularization and skill upgradation of IPM and INM technologies for different crops
- Promoting organic farming practices for crop production with Bio-village concept
- Emphasize on the importance of demand driven production of agricultural commodities rather than the present system of supply driven production system.
- Scientific resource management practices

- Exploring and facilitating market linkages
- Integrated farming system approach keeping in view the physical, biological and socioeconomic environments
- Agro-based micro and small-scale women run enterprises
- Promoting farmer to farmer learning by establishing Farmer Field Schools and Farmers Schools for speeding up the process of technology transfer in crop and animal husbandry, fisheries and agro-forestry.
- To create awareness on developing entrepreneurships in fish seed production, carp polyculture, freshwater prawn culture, integrated fish farming, aqua-shops and aqua-labs, feed production, cage culture, pen culture, value addition and processing, fish marketing, pearl and ornamental fish
- Entrepreneurship development among rural youth
- Capacity building of community based groups and organizations for the socio-economic empowerment of the rural people
- Technical back stopping to central and state governments bodies like mass media, Kisan call centers, Agri-clinics and ICT centres in identification and documentation of farming system based innovations, development of better farm plans, system based package of practices
- Ensuring availability of disaster management technologies in view of increased frequency and intensity of disasters such as flood, erosion, drought like situation

## 3. Agricultural Technology Management Agency (ATMA) :

The aims and objectives of the ATMA are as follows:

i. To identify location specific needs of farming community for farming system based agricultural development
ii. To set up priorities for sustainable agricultural development with Farming Systems approach
iii. To draw plans for production based system activities to be undertaken by farmers/ ultimate users
iv. To execute plans through line departments, training institutions, NGOs, farmers' organizations and allied institutions

v. To coordinate efforts being made by various line departments, NGOs, farmers organizations and allied institutions to strengthen research extension- farmers linkages in the district and to promote collaboration and coordination between various State funded technical departments

vi. To facilitate the empowerment of farmers/ producers through assistance for mobilization, organization into associations, cooperatives etc. for their increased participation in planning, marketing, technology dissemination and agro processing etc.

vii. To facilitate market interventions for value addition to farm produce.

The main activities covered under ATMA are (i) Demonstration and (ii) Capacity Building of farmers & Officers within and outside the state. Under ATMA, different Block Resource Centers (BRC) has been commissioned for the district for transfer of technology at block level.

## 4. Lead Bank: UCO Bank

## 5. Other banking institutions:

- State Bank of India
- NABARD
- Union Bank of India
- Punjab National Bank
- Assam Gramin Vikash Bank
- Bank of Boroda
- Apex Bank
- United Bank of India
- HDFC Bank
- AXIS Bank
- ICICI Bank

6. **Farmers clubs and voluntary organizations:** Around 25 nos. of Farmers club are actively working in the district.

7. **Polytechnic colleges and vocational higher secondary schools**: There is no Polytechnic colleges and vocational higher secondary schools in Barpeta district.

8. **List of supporting institutions like Government organizations, NGOs**

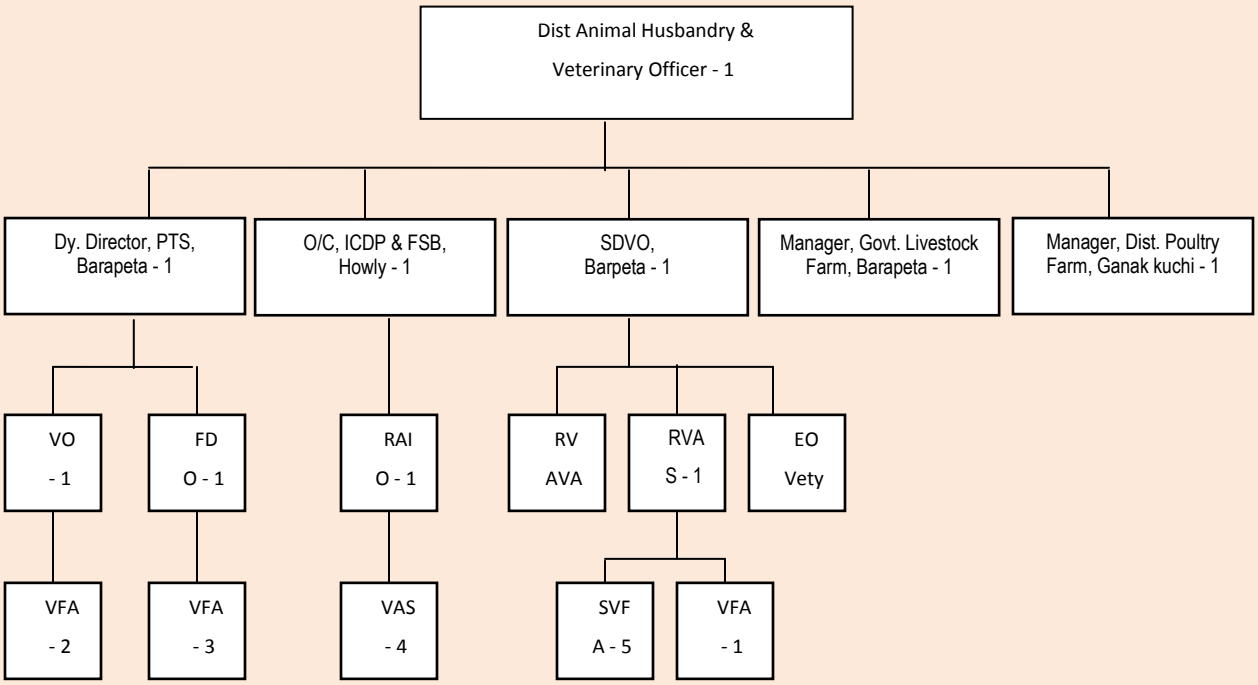
- Anchalik Gram Unnayan Parishad (AGUP)
- Assam Mahila Somata Society (AMSS)
- CHILDLINE, Barpeta
- Maha Milan Devt. Organisation
- Students Welfare Mission
- NEVARD
- Bheraldi Devt. Organisation
- Samannayrakshi Sanskritik Anushthan
- Maa Paran Foundation
- Barpeta District Etim khana
- peoples' Forum for Collective Action (PFCA)
- Ata Bhokuwamari Society Devt. Association

## LIVESTOCK

### 1. Department of Animal Husbandry:

The apex body of Veterinary Department is headed by one District Animal and Veterinary, Officer, who is assisted by 1 no. of Sub-Divisional Level Officer. The Sub-Divisional level officers are assisted by 25 nos. of Veterinary Extension level Officers at the circle level. There are 83 nos. of Village level Field Assistant, who comes directly under different sub-divisional level officer at the village level.

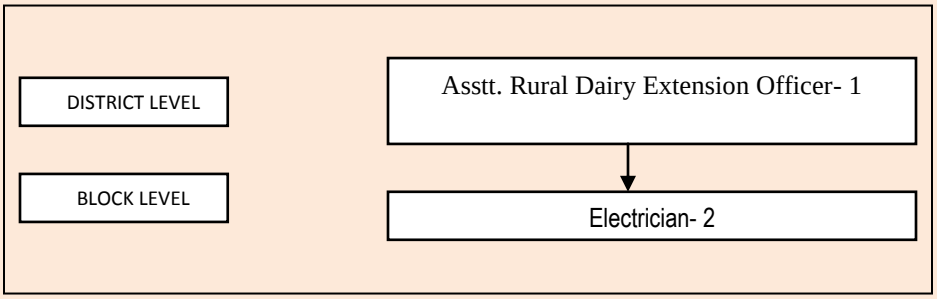
## ORGANISATIONAL SET UP OF A.H. AND VETERINARY DEPARTMENT, BARPETA




N.B.- P.T.S. = Progeny Testing Scheme; I.C.D.P. & F. S.B. = Intensive Cattle Development Project and Frozen Semen Bank; S.D.V.O. = Sub- Divisional Veterinary Officer; V.O. = Veterinary Officer, F.D.O. = Fodder Development Officer; R.A.I.O. = Regional Artificial Insemination Center; V.A.S. = Veterinary Assistant Surgeon; R.V.A.S. = Reserved Veterinary Assistant Surgeon; E.O. Vety. = Extension Officer, Veterinary; S.V.F.A. = Supervisor Veterinary Field Assistant; V.F.A. = Veterinary Field Assistant

## 2. Department of Dairy Development:

The Administrative Set up of Dairy Department is headed by Assistant Rural Dairy Extension Officer, who is guided by two Electricians. There is shortage of staff members in the district.




## 3. Poultry Development Centre:

1. District Veterinary Department, Barpeta
2. RGVN

   Bilor Tari Hati, Na Khanda Par(Near Prasanti Tourist Lodge), Barpeta-781301

   Contact No-9435088398
3. KASA

   Howly-781316

   Contact No-9401413304

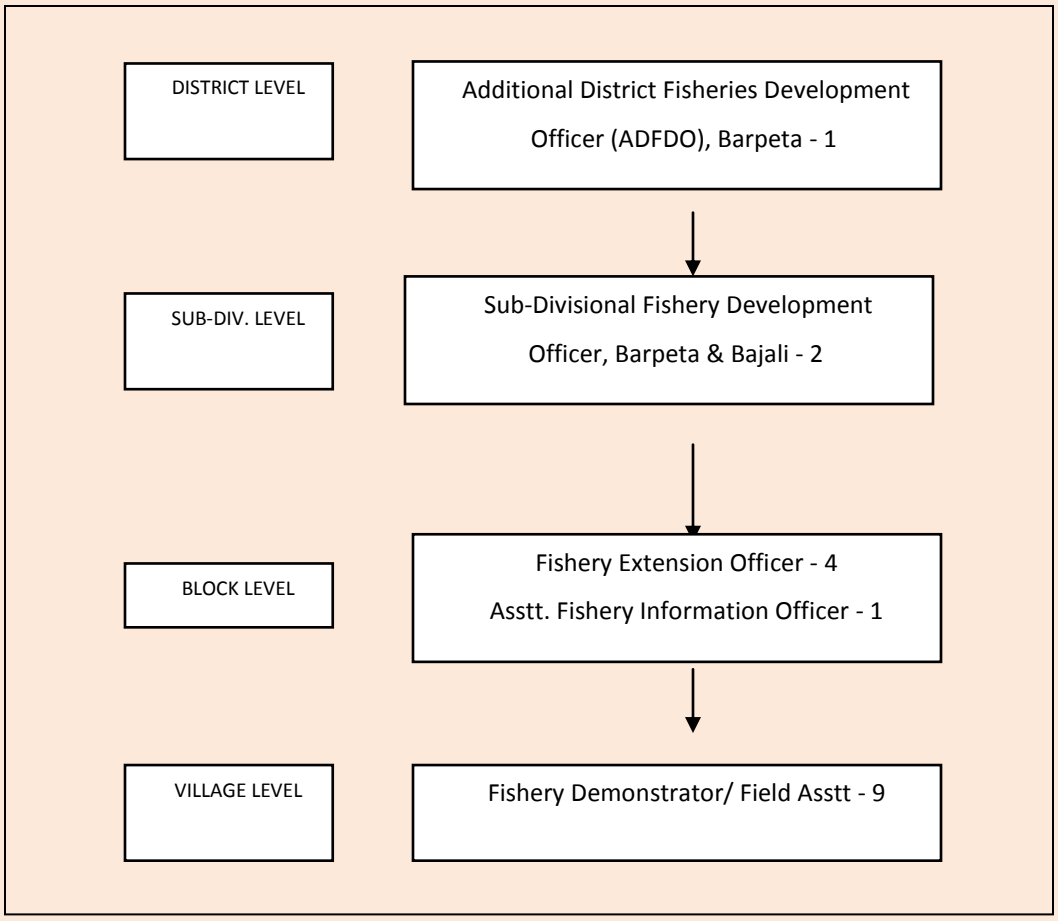
# FISHERIES

## 1. Department of Fisheries:

The overall development of the sector in the state rests on Department of Fisheries, Assam. The Department is primarily responsible for implementation of various development schemes under State as well as Central Schemes including Externally Aided Projects. The Officer- in- Charge of District Fisheries Development Office is Additional District Fisheries Development Officer, who is assisted by two Sub-divisional Fishery Development Officers, 4 Fishery Extension Officers, one Assistant Fishery Information Officer and Nine Fishery Demonstrator at the grass root level. The ADFDO implements all the fisheries schemes other than schemes related to Panchayat

& Rural Development in the district. The Office of the Deputy Director of Fisheries, Lower Assam Zone is situated at Howly which is around 10 km away from district headquarter, Barpeta.

The organizational set up of District Fisheries Development Office is as follows:



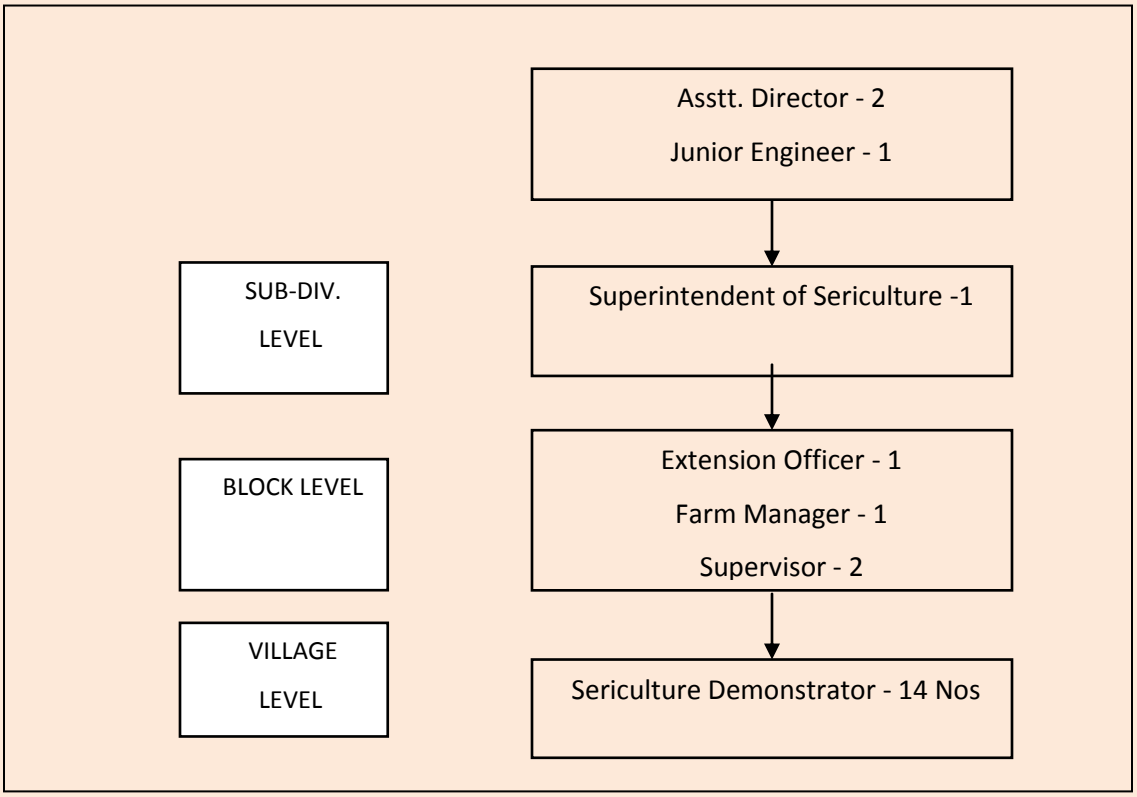

The following government, NGOs, banks and other organizations are actively engaged in fishery

1. District Fishery Development Office, Barpeta
2. Krishi Vigyan Kendra, Howly
3. Fish Farmers' Development Agency, Brpeta
4. State Institute of Rural Development, Barpeta
5. Rastriya Gramin Vikash Nidhi (NGO)
6. Church Auxillary for Social Action, Howly

7. NABARD, Barpeta
8. State Bank of India, Barpeta
9. Union Bank, Barpeta

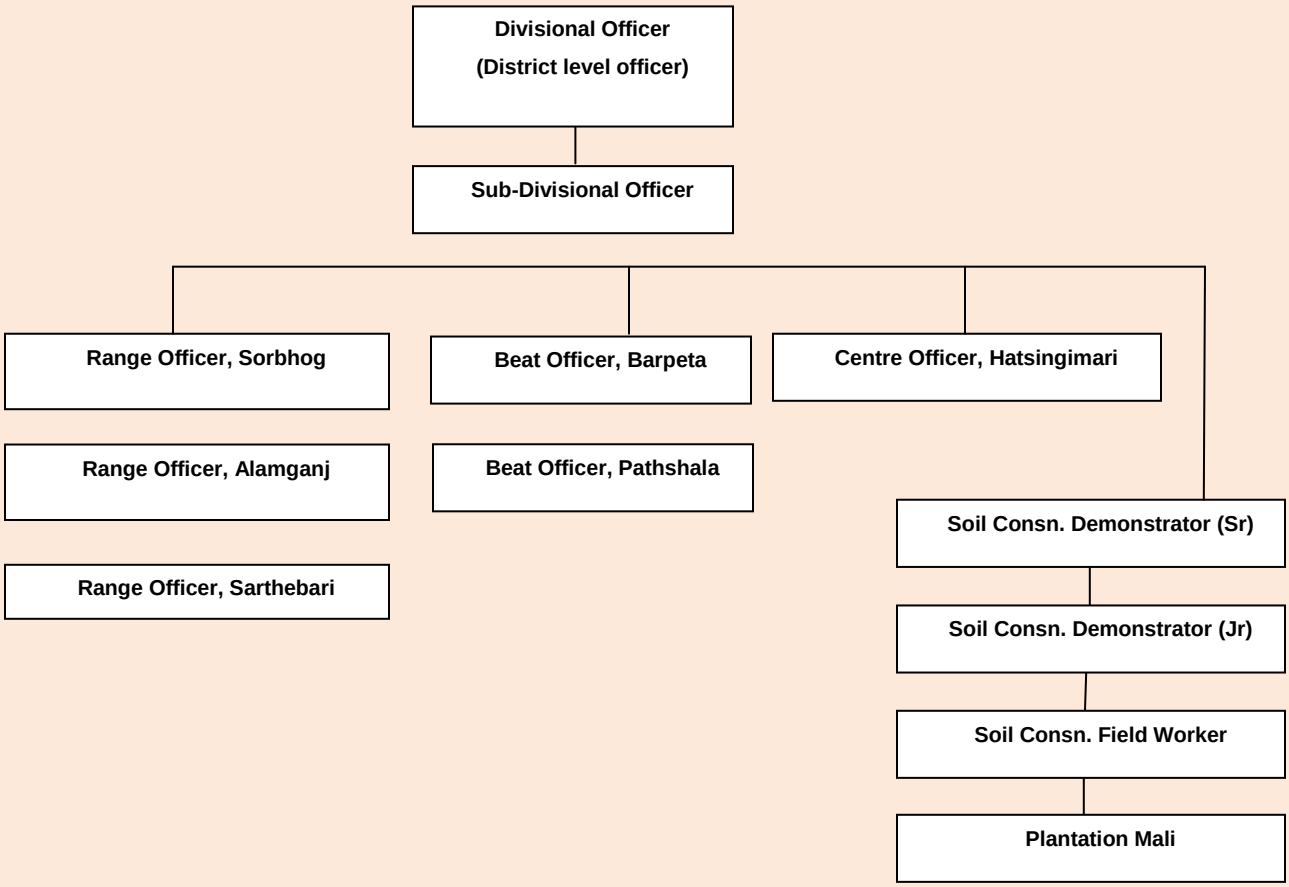
## D. Sericulture Department

One Assistant Director heads the Sericulture Department. Assistant Director, who is assisted by one Superintendent of Sericulture and Extension Officer, one Farm Manager, one Junior Engineer, 2 nos. of Supervisors and 14 nos. of Sericulture Demonstrators. The organizational set up of the department is shown as follows:



## E. Soil Conservation Department

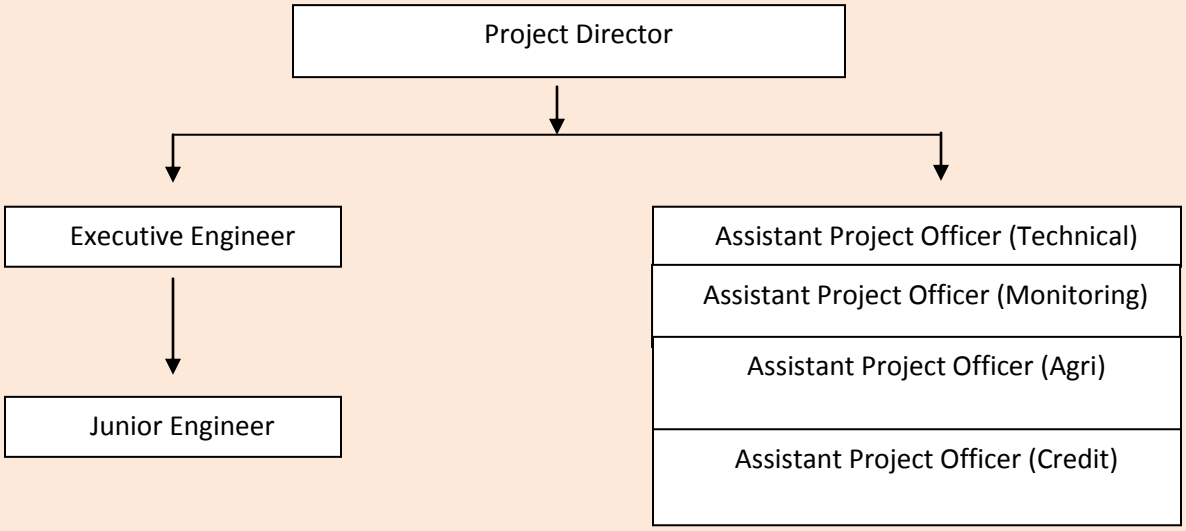
The Barpeta Soil Conservation Division covers jurisdiction of three civil districts *viz*. Barpeta, Bongaigaon and Dhubri districts and is headed by the Divisional Soil Conservation Officer, Barpeta. The hierarchy of the Division is shown as follows:




## F. District Rural Development Agency

The Project Director heads the District Rural Development Agency. In the Engineering section, Project Director is assisted by Executive Engineer (Civil), who looks after engineering aspects of the DRDA. The Executive Engineer is assisted by Junior Engineer in the Development Block level. Similarly, for smooth running of other activities other than technical section, the Project Director is assisted by Assistant Project Officer (Technical), Assistant Project Officer (M), Assistant Project Officer

(Agriculture) and Assistant Project Officer (Credit). In the block level, they are assisted by different Extension Officers in the line of Credit, Agriculture and Credit.



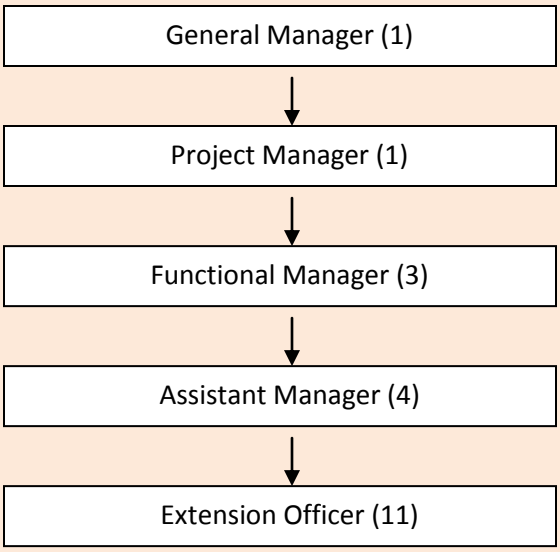

## G. R&D Infrastructure

1. One TRYSEM Centre at Sonkuchi Coloni consisting of 150 seats.
2. Two permanent markets shed at Barpeta town & at Pathsala.
3. Ordinary market shed at different Gaon Panchayats.
4. Five Eco-hatcheries at Bhawanipur, Rupshi and Mandia Development Blocks.

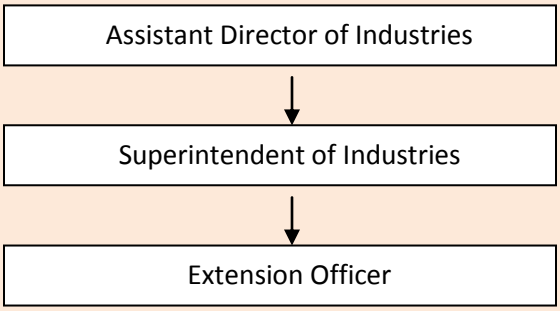
## H. District Industries & Commerce Centre

One General Manager heads the District Industries & Commerce Centre situated at the district head quarter, Barpeta. The General Manager is assisted by one (1) Project Manager, three (3) Functional Managers, four (4) Assistant Managers and eleven (11) Extension Officers in the Barpeta Sub-Division; one (1) Assistant Director of Industries, one (1) Superintendent of Industries and three (3) Extension Officers in the Bajali Sub-Division. The Organizational set up both the Sub-Division as follows:

## For Barpeta Sub Division




## For Bajali Sub-Division



# CHAPTER- V. RESEARCH AND DEVELOPMENT ORGANIZATIONS RELEVANT TO DISTRICT'S AGRICULTURE

## CROPS

### Ramie Research Station (RRS)

In order to promote Research and Developmental activities of World's oldest, longest and strongest natural fibre crop i.e., Ramie in the country as a whole and North Eastern States in particular, the Indian Central Jute Committee in April, 1960 established Ramie Research Station at Village Kamargaon, P.O. Sorbhog, (earlier in Kamrup District) under the Jute Agriculture Research Institute (JARI), Kolkata (WB). In 1966 JARI was taken over by Indian Council of Agriculture Research (ICAR) and in 1990 Jute Agriculture Research Institute (JARI) was renamed as Central Research Institute for Jute and Allied Fibres (CRIJAF). Ramie Research Station is a central government research and development station of Central Research Institute for Jute and Allied Fibre with its headquarter at Barrackpore, Kolkata, W.B. Total area under RRS in 69.02 ha. consisting three farms. It situated about 140 kms from Guwahati Air Port, 40 kms for district head quarter at Barpeta and 50 kms from New Bongaigaon Rly Station.

### Mandates:

- Improvement of Ramie (*Boehmeria nivea* Gaud) for fibre yield and quality.
- Improvement of Ramie (*Boehmeria nivea* Gaud) for biotic and abiotic stresses.
- Development of economically viable and sustainable production technology and cropping systems with ramie.
- Development of post-harvest technology (decortication, degumming and storage) for improving the quality of fibre.

## B. Livestock

The following government, NGOS and the farmers organization are actively

engaged in livestock development in Barpeta district.

1. District Veterinary and Animal Husbandry Department
2. Krishi Vigyan Kendra, Howly
3. Government Livestock Farm, Barapeta
4. District Poultry Farm, Ganakkuchi
5. Fodder Demonstration Farm, Barburijhar
6. Intensive Cattle Development Project and Frozen Semen Collection Centre, Howly
7. Frozen Semen Bull Station, Barapeta
8. National Dairy Development Board
9. Purabi Dairy
10. Dairy Development Board of Assam
11. Rastriya Gramin Vikash Nidhi (NGO)
12. State Institute of Rural Development, Barpeta
13. Church Auxillary for Social Action, Howly
14. NABARD, Barpeta
15. State Bank of India, Barpeta
16. Union Bank, Barpeta
17. More than 18 numbers of Dairy Cooperative Societies the district

## C. Fisheries

The following government, NGOs, banks and other organizations are actively engaged in fishery

10. District Fishery Development Office, Barpeta
11. Krishi Vigyan Kendra, Howly
12. Fish Farmers' Development Agency, Brpeta
13. State Institute of Rural Development, Barpeta

14. Rastriya Gramin Vikash Nidhi (NGO)
15. Church Auxillary for Social Action, Howly
16. NABARD, Barpeta
17. State Bank of India, Barpeta
18. Union Bank, Barpeta

# CHAPTER- VI. PLANS AND SCHEMES FOR PROMOTION OF AGRICULTURE

## CROPS

### 19. Department of Agriculture, Barpeta

**RASHTRIYA KRISHI VIKASH YOJANA(RKVY) :** it is a centrally sponsored scheme implemented with a view to increase production ; popularize new variety , adoption of new production techniques for thrust crop like Paddy , Oilseed , Pulses etc. Equally , farm mechanization is an important factor which goes hand in gloves for successful implementation of RKVY scheme. Farm mechanization includes activities like providing subsidy to small and marginal farmers to procure implements , machines like Power Tiller , Tractor , Electrical pump , sprayers, small implements etc.

**NATIONAL FOOD SECURITY MISSION (NFSM):** it is a centrally sponsored scheme, wherein efforts are directed towards attaining self sufficiency in food grain and pulse crop . At present, thrust crop selected for Barpeta District under NFSM is Rice & Pulse . The scheme is implemented through various interventions like SRI (System of Rice Intensification) method , HRT (Hybrid Rice Technology ), Line Transplanting Demonstration , use of soil ameliorant etc.

**MISSION FOR INTEGRATED DEVELOPMENT OF HORTICULTURE (MIDH) :** This is a centrally sponsored scheme which looks after development of Horticulture sector in Assam. Under this scheme, due weightage is given in Area expansion of native or indigenous fruits like Pineapple, Orange , citrus fruits etc. as well as increase in production of vegetables like onion , garlic etc . Recently emphasis is put on area expansion of onion and production programme of potato , under Chief Minister's Special programme under MIDH . Low cost onion storage unit will be provided to onion growers to store onion in scientific manner .

**NATIONAL AGRICULTURAL EXTENSION PROGRAMME(NAEP) :** Under this programme emphasis is given on bringing mono cropped area under double cropping system with a view to utilize the available cultivable area to its maximum potentiality which is aimed to be achieved through demonstration , trail etc.

**NATIONAL BAMBOO MISSION (NBM) :** It is a centrally sponsored scheme under which effort is made to increase area under Bamboo through plantation of bamboo in Govt. land and Non Govt. land. The scheme is implemented through active participation of Forest department who provide technical assistance.

**NATIONAL MISSION FOR OILSEED & OIL PALM (NMOOP) :** The basic aim of the programme is to increase oil production from mustard , coconut , oil palm , groundnut etc and from other oil producing crop .

**WOMEN EMPOWERMENT AS GENDER RESPONSIVE SCHEME:** This scheme aim to alleviate womenfolk , who actually engaged in crop production from drudgery and physical labour , by providing machinery like winnowing machine , power operated thresher , Maize sheller etc. this scheme also provides opportunity and incentive to women to become financially independent through production of vermicompost , Jam , Jelly , Pickle , Beverage etc.

**ESTABLISHMENT OF SMALL SCALE INDUSTRY (SSI) :** the basic aim of this scheme is to provide PPS, ASG, NGO, SHG etc with processing unit of Rice, Oil , Dal which will help them to become financially independent and increase area under rice , pulse and oilseed . Processing units are provided at 100%
subsidy.

**AGRICULTURAL MARKETING :** It is a State Govt. Sponsored Scheme. The basic aim of this scheme is to help farming community to transport their produce to different market . APMG, SHG, ASG, PPS, NGO are provided with tricycle , 4 wheeler at 50% subsidized rate . Furthermore these organizations are provided with transport subsidy @ Rs. 2.00 per KM per quintal .

## 20. Soil Conservation Department

1. **GULLY CONTROL PROJECT -** Due to faulty management of paddy field by the farmers and due to undulating plato the water (rains or irrigated) flows to small nala or river in the side of field, gullys are formed which is locally called as ulta khanda which reduced land as well as water holding capacity of the soil in order to prevent this the department has taken up this project named Gully Control Project.

2. **RIVER TRAINING PROJECT -** Where some small rivers errod its bank and destroy the cultivators field small spares of boulders and bamboo are provided to tame the concerned river.

3. **LAND DEVELOPMENT PROJECT -** As the land plato used for paddy cultivation is undulating and maximam of cultivators depend upon rain water, the accumulation of this in the filed become necessary for paddy cultivation. In order to prevent this necessary earthen bund are provided according to necessity.

4. **LAND RECLAMATION/WATER DISTRIBUTION PROJECT -** Where there is sources of water which can be distributed to paddy field by creating small channel and where there is excess water to be disposed off safely is done by this project.

5. **PLANTATION OF CASH CROP / PROTECTIVE AFFORESTATION -** Waste land along the river where cultivation can not be taken up were taken up for stabilization of land by planting trees of fast growing species, according to availibity of such lands and brought under afforestation.

6. **NATURE CONSERVATION -** Planting of fruit trees and shed trees are done in school compound/college compound/public places (Park) with necessary fencing which will provide protection from the heat of the Sun rays and provide fruit which in turns provide environment stability.

## 21. National Bank for Agriculture and Rural Development (NABARD) :

## LIVESTOCK

**NPCBB ( NATIONAL PROJECT FOR CATTLE AND BUFFALO BREEDING) -** To popularize crossbreeding programme through Artificial Insemination ( A. I. ) using frozen semen technology, biological needs (feeds and fodder) for production, maintenance, better survival of crossbred, health cover and awareness amongst dairy cattle owners and training were taken up under the scheme. Under the scheme NPCBB (Phase II) construction of Frozen Semen Bull station under Ministry of Agriculture, Govt. of India at Barpeta is almost completed for production of semen of high quality Bull to supply entire North East region

**ASCAD (ASSISTANCE TO STATE FOR CONTROL OF ANIMAL DISEASES) -** Under the scheme free vaccination against HS , FMD, HS+BQ , PPR , Swine fever, Duck Plague, FDRD- F1, FDRD- R2B are done.

**LIVESTOCK INSURANCE SCHEME -** Under the scheme Dairy Cattle and Buffalo are insured with 50% subsidy.

**CENTRAL SECTOR SCHEME:**

(a) Assistance to State for Control of Animal Diseases (ASCAD): To improve the overall animal health scenario vaccination against H.S. & F.M.D., the diseases are known for high mortality and morbidity in affected animal production which has been taken up with necessary logistic support under the scheme.

(b) Renovation and modernization of existing District Diagnostic Laboratory, Barpeta is under progress, which will facilitate for prompting diagnosis of diseases and reduce cost of livestock treatment.

**NATIONAL LIVESTOCK MISSION (NLM):** launched in FY 2014-15 shall ensure quantitative and qualitative improvement in livestock production systems and capacity building of all stakeholders. The Sub-Mission under NLM on Fodder and Feed Development will try to address the problems of scarcity of animal feed resources, in

order to give a push to the livestock sector making it a economically viable enterprise for India, and also to harness its export potential.

The National Livestock Mission (NLM) has been formulated by subsuming and modifying 7 Centrally Sponsored and 7 Central Sector Schemes of Government of India. The Central Sector Schemes are - Central Fodder Development Organizations, Central Sheep Breeding Farm , Central Poultry Development Organizations, Integrated Development of Small Ruminants and Rabbits, Piggery Development , Poultry Venture Capital Fund , Salvaging and rearing of male buffalo calves and name of the Centrally sponsored Schemes are - Centrally Sponsored Fodder and Feed Development Scheme, Conservation of Threatened Breeds of Livestock, Poultry Development, Utilisation of Fallen Animals, Livestock Insurance, Establishment / modernization of Rural Slaughterhouses, including mobile slaughter Plants and Livestock extension and delivery services

## FISHERIES

1. Fish & Fish Seed Farming : **Mukhya Mantrir Matsya Bikash Achoni**
    - Construction of New Pond - Community/SHG ( Amar Pukhuri)
    - Construction of New Ponds - Individual ( Matsyajyoti)
    - Women Empowerment Programme ( Mukhyamantrir Mahila Sambridhi Yojana) Lakhimi
    - Pen Culture in Beels for production of fish and fish fingeling managed by Society/Community/SHG
    - Cage culture in Beels for production of fish and fish fingeling managed by Society/Community/SHG
    - Rennovation and development of Existing domestic/ community pond for fish culture
2. Reclamation of Derelict Water Bodies : Development of Derelict Water Bodies, Swamps and marshy area through society/SHG/Community

3. Tank and Resevoir Fisheries

    - Aquaculture Development in Existing Individual Pond for fish harvest during Lean Period
    - Aquaculture Development in Existing Institutional Pond for fish harvest during Lean Period

4. Fishery Extension Service :

    - One time Assistance to Fisherman during Lean Period ( Mukhya Mantrir Matsya Mintra Asoni)
    - Capacity Building of Women Entrepreneurs for production of Value added Fish Products

5. Marketing and Transport : Construction of New Fish Market
6. Development of FW Aquaculture under FFDA : Construction of New Ponds, Reclamation of Existing Ponds

    - Construction of New Ponds
    - Reclamation of Existing Ponds

7. Fish and Fish Seed Farming (TSP)

    Integrated Fish cum Pig farming in existing pond

8. Fish and Fish Seed Farming (SCSP)

    - Construction of New Pond - Community/SHG ( Mukhyamantrir Amar Pukhuri Asoni)
    - Assistance to Fish Farmer/vendors- Cycle & Hundies
    - Assistance to individual Fish Farmers- Cast Net
    - Assistance to Fishery SHG or Community- Dragnet

## A. Dairy

Milk Village Scheme - A scheme for SC and ST people. Construction of Cow shed and induction of C/B Cows to the selected beneficiary groups are main activity taken up under the scheme.

Other activities like establishment of Bulk Milk Cooling Units, Construction of Milk Collection Centre, Formation of Milk Producer institution and supply of inputs to dairy farmers from time to time are also taken up under stake plan.

- **RKVY -**Activities like formation of Dairy co-operative societies, Induction of C/B Cows training of dairy farmers on management and value addition, Construction of Bulk Milk Pulling Unit, Supply of automatic milk collection and testing units, Establishment of cottage dairy units etc. are taken up under RKVY.

# CHAPTER- VII. FARM MACHINERY SUITABLE TO THE DISTRICT

List of implements and farm machinery prioritized based on the land situation and crops & cropping pattern of the concerned district in 12th Plan EFC may be included.

**Table: Equipments & AV aids**

| Sl. No | Name of the equipment | Specification | Cost (Rs.) | |
|---|---|---|---|---|
| 1. | Seed cleaner (Model PC-2) | Capacity: 2 tons/hour | 3,25,476.00 | |
| 2. | Power tiller (Model VST Shakti-130 DI power tiller) | Power:13hp<br>Speed: 2400 rpm<br>Water cooled diesel engine<br>Displacement: 673.4 C.C.<br>Condenser type: thermo siphon cooling system<br>SFC: 192gm/hp/hour<br>Starting system: handle cracking and type side rotary transmission 6 speed, forward 2 speed, reverse 2 speed.<br>Rotary tilling with 600 mm maximum<br>Tilling depth: 150 mm maximum<br>Tynes: 18 nos with rotary, headlight and other accessories | 1,36,511.00 | |

| | | | | |
|---|---|---|---|---|
| 3. | Rotavator | Power source: 25-35 hp & 35-50 hp tractor<br>Working width: 1000-2000 mm<br>Shape of blade: L shape<br>Orientation of blade in degree: 45-47<br>No of flemge: 6-8<br>No of blades: 30-36<br>Rotor rpm: 210-237<br>Site transmission chain: gear | 95,805.00 | |
| 4. | 8 row self propelled rice transplanter | Paddy Transplanter Yanjishakti 8 row self propeller operated with 170 F Engine model single cylinder air colled Diesel engine.<br>Ratted power K.W. : 2.94<br>Ratted speed RPM : 2600<br>Weight: 305 kg<br>Overall diameter(LWH): 2410X2297X1200 mm | 1,88,198.00 | |
| 5. | Puddler | Power source: 25-35 hp & 35-50 hp tractor<br>Length: 2000 mm<br>Width: 630 mm<br>Height: 680 mm<br>Weight: 80-100 kg<br>Working width: 2000 mm<br>Working depth: 110 mm | 25,896.00 | |
| 6. | Disc Harrow (12 | Power source: 25-35 hp & | 35,256.00 | |

| | | | | |
|---|---|---|---|---|
| | disc) | 35-50 hp tractor<br>Mounted no of disc : 11 disc<br>Diameter of disc: 457-660 mm<br>Weight: 330-490 kg<br>Field capacity: 2.5 ha/day | | |
| 7. | Paddle operated Paddy thresher | Diameter(LWH): 1250X650X630<br>Cylinder size: 400 diameterX600<br>Length loop wire diameter: 4mm<br>No of wire loops: 12<br>Transmission: paddle crank Mechanism with 1:4 gear ratio<br>Weight(kg): 36 output:98.8 kg | 11250.00 | |
| 8. | Spring tyne cultivator | Power source: 25-35 hp tractor<br>No of tynes: 9<br>Type of shovel: reversible<br>No of spring /tyne: 2<br>Under frame clearance: 450-550 mm<br>Capacity: 0.35-0.50 ha/hr | 29744.00 | |
| 9. | Chaff cutter | No of blades: 2<br>Diameter of wheel: not less than 900 mm<br>Chaff length: not less than 16 mm | 15496.00 | |

| | | | | |
|---|---|---|---|---|
| | | Power source: manual 1% | | |
| 10. | Disc plough | Power source: 25-35 hp & 35-50 hp tractor<br>No of disc: 2<br>Disc size: 600-800 mm<br>Length: 1180-2362 mm<br>Width: 889-1194 mm<br>Height: 1092-1118 mm<br>Width of cut/disc: 200-300 mm<br>Adjustable working width: 600-1200 mm<br>Working depth up to 300 mm<br>Weight: 236-376 kg | 27030.00 | |
| 11. | Pump set | Engine: 3hp<br>Fuel: patrol<br>Starting: kerosene running<br>Pump set: discharge not less than 1000 l/m<br>Max. head: not less than 20 M | 17670.00 | |
| 12. | Knapsack sprayer(Brass) | 16 liter capacity brass chemical tank, brass bottom wall and pressure chamber, matel tank | 2100.00 | |
| 13. | Motorize Knapsack sprayer(Agrimate Zoneoh sprayer AMK 26708) | Patrol driven, 2 stroke engine<br>Discharge pressure: 35 kg/cm<br>Tank: 23/25 liter | 22360.00 | |
| 14. | Mono Block | 0.5 hp Mono Block outer | 3744.00 | |

| | | | | |
|---|---|---|---|---|
| | pump set Make CINTU | pump, single | | |
| 15. | Knapsack Power Duster | Knapsack power duster back cushion and padded shoulder strap, discharge pressure not less than 30 kg/square | 7696.00 | |
| 16. | Earth Auger model MTL-51 | Power: 2.0 hp-1.5 kw<br>Displacement: 47.7 $cm^2$<br>Weight without bit: 9.1 kg<br>Bit diameter: 8-10-15-20 cm | 56749.00 | |
| 17. | 2 share M.B. plough | To be fitted with VST Shakti 13 hp power tiller | 11282.00 | |
| 18. | Mechanized brush cutter(Model Sparta 37) | Patrol driven, 2 stroke engine, 1.8 hp, 1.3 KW<br>Displacement: 36.3 $cm^2$<br>Tank: 87 liter<br>Weight: 6.6kg | 28000.00 | |
| 19. | Multi purpose power weeder(Agrimet power weeder model- APW-43) | Engine: 2 stroke, Mitshubishi engine 43CC<br>Tank:1.0 lts<br>Fule: petrol<br>Cut width : 250 mm<br>Cut depth: 90 mm<br>Weight: 14 kg | 42078.00 | |
| 20. | Power Paddy weeder | Patrol operated engine 2,1 hp, 1.6 KW/40.2 CC, weight: 6.8 kg, tank:0.87 ltr | 36254.00 | |
| 21. | Low lift pump | | | |

## Address:

Kaziranga Agro Service

Authorized dealer & C&F for VST Shakti Tillers Tractor Limited

Oleo-Mac & Agrimet Pvt. Ltd. Banglore

Kuladhar Chaliha Path, Jorhat-785001

M/S. BG Traders

S.K. Baruah Road, Rukmini Nagar

Guwahati-781006

9954070600

# CHAPTER- VIII. ANNEXURE

**1. Telephone directory of important agriculture and related departments / offices in Barpeta KVK District**

| Sl. | Name | Phone |
|---|---|---|
| 1. | Soil Conservation Office | 03666 235542 |
| 2. | Dist. Agril. Officer | 03666 252133 |
| 3. | NABARD | 03665 252136 |
| 4. | RRS, Sorbhog | 03666 287432 |
| 5. | Shahadat Hussain, Progressive Farmer | 09954240 860 |
| 6. | Rina Das , Progressive Farmer | 09854701914 |
| 7. | Ananda Neog , LDM, UCO Bank Barpeta | 09435549031 |
| 8. | Nabayan Talukdar , Asstt. Manager , DICC Barpeta | 09954074742 |
| 9. | Bhaskar Manta, AGM, NABARD | 8473017610 |
| 10. | Project Director, DRDA | 9435027583 |
| 11. | ADS, Sericulture | 9435141457 |
| 12. | S K Talukdar | 9085560289 |
| 13. | Mukul Hazarika, D.O., Soil Conservation | 9435017722 |
| 14. | U. N. Barman, D.S.W.O. Barpeta | 9864154101 |
| 15. | Suamnd Ch Sarma, D.F.D.O., Barpeta | 9854026782 |

2. **Contact Persons of Agricultural Department in Barpeta District**

| Sl. | Name | Phone |
|---|---|---|
| 1. | Dist. Agril. Officer | 03666 252133 |

3. **Contact Persons of Animal Husbandry Department in Barpeta District**

| Sl. No | Name | Phone |
|---|---|---|
| 1 | D.V.O. Barpeta | 9435125009 |

4. **Contact Persons of Fishery Department in Barpeta District**

5. Departmental farms:

6. Soil Testing Laboratories :

| Sl. No. | Name | Phone |
|---|---|---|
| | Soil Testing Lab , KVK Barpeta | |

7. AGMARK Grading Laboratories : NA

8. Livestock farms:

| Sl. No. | Name | Phone |
|---|---|---|
| | Soil Testing Lab , KVK Barpeta | |


কৃষি প্রযুক্তি প্রদর্শন


17 02 2014

## Staff information

| Sr. No. | Name of Staff | Designation | Area & Discipline of Work | CORRECT & Valid Contact Number | Email address |
|---|---|---|---|---|---|
| 1. | Dr. Arup Kumar Deka | Programme Coordinator | Plant Pathology | 9435080235 | pckvkbarpeta@gmail.com, akrdeka@yahoo.com |
| 2. | Gunadhya Kumar Upamanya | Subject Matter Specialist | Plant Pathology | 9435109665 | gku_2003@yahoo.com |
| 3. | Ms. Toslima Begum | Subject Matter Specialist | Home Science | 9854214805 | tsbegum@gmail.com |
| 4. | Mr. Anjan Bora | Subject Matter Specialist | Horticulture | 9435127029 | anjan.earth@gmail.com |
| 5. | Ms. Haridra Sarma | Subject Matter Specialist | Agriculture Extension | 9864281832 | hsarma08511@rediffmail.com |
| 6. | Mr. Pinkudhar Barman | Subject Matter Specialist | Agronomy | 9564412951 | Pinkukvk12@rediffmail.com |
| 7. | Ms. Sabina Ahmed | Subject Matter Specialist | Soil Science | 9508971175 | sabina.ahmed86@gmail.com |
| 8. | Mr. Ratul Das | Farm Manager | Plant Breeding & Genetics | 9435181415 | rdaskvk@gmail.com |
| 9. | Dr. Dilip Dev Choudhury | Programme Assistant (Animal Science) | Animal Science | 9954892591 | dkdchoudhury@gmail.com |
| 10. | Mr. Pranjit Baruah | Programme Assistant(Computer) | IT | 9435117695 | Baruah.pranjit@gmail.com |
| 11. | Mr. Prasanta Goswami | Office Superintendent cum Accountant | Superintendent cum Accountant | 9864063414 | Prasanta98@gmail.com |
| 12. | Ms. Saraswati Rawat | Stenographer | | | |
| 13. | Mr. Jitendra Nath Das | Driver | | 8876246718 | |

| | | | | | |
|---|---|---|---|---|---|
| 14. | Mr. Chatradhar Kalita | Driver | | 8822548585 | |
| 15. | Mr. Narayan Chandra Sengupta | Supporting staff | | | |
| 16. | Mr. Tarini Deka | Supporting Staff | | 9864298267 | |


**Group Photo of staff, KVK Barpeta**

***DISCLAIMER:***

*Information in this e-publication is compiled from various secondary sources by subject experts i.e. KVK professionals in district and compiled by editors. The information in this book is meant to supplement the working knowledge of development stakeholders in North Eastern Districts. The e-publication contains information about [district information], the information is not advice, and should not be treated as such. Editors are not responsible for any mistake or lacuna or plagiarism in this e-publication as information is compiled by KVKs from secondary sources. This e-publication is only for academic/developmental purposes, and not for commercial use. The main idea behind this e-publication is creating awareness and sharing information. Although the editors and publisher have made every effort to ensure that the information in this book was correct at publishing time, the editors and publisher do not assume and hereby disclaim any liability to any party for any loss, damage, or disruption caused by errors or omissions, whether such errors or omissions result from negligence, accident, or any other cause. This is pre-publication copy, uploaded to be reviewed by authors and peers.*