

National Agricultural Research Institutes

Mirza Hasanuzzaman

Lecturer, Dept. of Agronomy

Sher-e-Bangla Agricultural University

BARI (Bangladesh Agricultural Research Institute)

BARI (Bangladesh Agricultural Research Institute) is the largest multi-crop research institute conducting research on a large number of crops. This institute also carries out research on non-commodity areas, such as soil and crop management, disease and insect management, irrigation and water management, development of farm machinery, improvement of cropping and farming system management, post-harvest handling and processing, and socio-economics studies related to production, marketing, and consumption.

Head office

Joydebpur, Gazipur-1701, Bangladesh

Objectives/Mandate of BARI

The mandates of the Institute are as follows:

- Undertake research to ensure a stable and productive agriculture through scientific management of land, water.
- Development of new varieties of various agricultural products and development of appropriate technology and pest management methods;
- Provide farmers with information necessary for carrying out their farming business efficiently and profitably;
- Set up research centers, sub-stations, project areas and farms in different regions on various problems of agriculture;
- Carry out demonstration, tests or trial of new varieties of crops and their management practices;
- Publish annual reports, agricultural manuals, monographs, bulletins and other literatures related to crop research and activities of the Institute;
- Train research and extension officers in the improved technology of crop production;
- Provide post-graduate research facilities;
- Organize seminars, symposia and workshops on selected problems which may offer specialists from different research institutes and stations opportunity to exchange ideas and be acquainted with the recent advancements in agriculture;

Research Programme Areas

a. Variety Improvement of Field Crops

1. Wheat, 2. Maize, 3. Milletes, 4. Barley, 5. Oilcrops, 6. Pulses

b. Variety Improvement of Horticultural Crops

1. Tuber Crops, 2. Fruits, 3. Vegetables, 4. Palms and Nuts, 5. Betal Leaf, 6. Spices, 7. Floriculture

c. Crop Husbandry

1. Crop Husbandry of Field Crops, 2. Crop Husbandry of Horticultural Crops

d. Soil-Plant Nutrient Management and Fertilizer recommendation

e. Disease Management

1. Fungal Diseases, 2. Bacterial Diseases, 3. Viral Diseases, 4. Nematode Diseases

f. Pests Management

1. Invertebrate Pests Management, 2. Vertebrate Pests Management

g. Irrigation and Water Management

h. Farm Machinery and Post Harvest Process Engineering

i. Postharvest Technology

j. Hill Farming

k. Farming System Research and On-Farm Verification of Advanced Technologies

l. Maintenance and Preservation of Genetic Resources

m. Socio-economic Studies on Production, Utilization and Marketing

Research Stations

Research wing of this institute consisting of 6 crop research centres, 6 regional research stations and 24 research stations and sub-stations, 9 farming system research and development sites (FSRD), 72 multi location testing sites (MLT) located at different agro-ecological zones of the country.

Regional Research Centre of BARI

1. ARC - Rajshahi
2. Agricultural Research Center, Jointapur, Sylhet
3. Agricultural Research Center, Lac Research, Kalyanpur, Chapainawabganj
4. Agricultural Research Center, Pahartoli, Chittagong
5. ARC-Rajbari, Dinajpur
6. ARC-Shympur, Rajshahi

Regional Agricultural Research Station of BARI

1. RARS-Chittagong
2. RARS, Hathazari
3. RARS-Jamalpur

4. RARS-Jessore
5. RARS-Moulvibazar
6. RARS-Pabna

Others important Research Centers of BARI

1. Breeding and seed production Center, Debiganj, Panchagarh
2. Hill Agricultural Research Center, Khagrachhari, Chittagong Hill Tracts
3. Hill Area Agricultural Research Center, Ramgor, Khagrachhari, Chittagong H. T.
4. Pulse Research Center, Ishurdi, Pabna
5. Spices Research Center, Shibganj, Bogra
6. Tuber Crops Research Center, Joydebpur, Gazipur
7. Wheat Research Centre, Noshiapur, Dinajpur

Bangladesh Rice Research Institute (BRRI)

BRRI is a major component of the National Agricultural Research System (NARS) of Bangladesh, dealing with research and development in relation to rice production, the staple food for our people.

Head office

Joydebpur, Gazipur-1701, Bangladesh

Objectives/Mandate of the BRRI

- Conduct research on all aspects of rice improvement and production;
- Establish research centers and substations in different regions of Bangladesh for conducting research on different problems of rice;
- Establish project areas for demonstration of new varieties of rice developed by the institute and training of farmers for the cultivation of these varieties of rice;
- Train agricultural extension personnel and progressive farmers on modern techniques of rice production;
- Publish annual reports, monographs, bulletins and such other documents relating to research activities of the institute;
- Advise the Government on rice related policy issues

Program Area

Program Area	Component Divisions
Varietal Development	Plant Breeding
	Biotechnology
	Genetic Resources and Seed
	Grain Quality and Nutrition
Crop-Soil-Water Management	Agronomy
	Soil Science
	Irrigation and Water Management
	Plant Physiology
Pest Management	Entomology
	Plant Pathology
Rice Farming Systems	Rice Farming Systems
Farm Mechanization	Farm Machinery and Post Harvest Technology
	Workshop and Maintenance
Socioeconomic and Policy	Agricultural economics
	Agricultural Statistics
	Farm management
Technology Transfer	Adaptive Research
	Training

Research Stations

BIRRI has ten experimental stations including its head quarter at Gazipur. Other experimental stations (9) named as BIRRI Regional Stations are located at Comilla, Hobiganj, Feni, Bariasal, Faridpur, Rajshahi, Rangpur, Satkhira and Kusthia districts.

Bangladesh Jute Research Institute (BJRI)

Bangladesh Jute Research Institute (BJRI) was established in 1951 in order to do research to improve jute crops and allied fibres like kenaf, mesta etc.

Head office:

Manik Mia Avenue, Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh.

Mandate/Objectives of BJRI

- To promote agricultural, technological and economic research on jute and allied fibers and their manufactures and dissemination of results thereof.

- To organize production, testing and supply of improved jute seeds and multiplication, procurement & their distribution to recognized organization, selected growers and such other agencies as may be approved by the Board.
- To set up research centers, sub-station, pilot projects and farms in different regions of the country for carrying out research on different problems of jute and allied fiber crops, jute products and allied materials.
- To establish project areas for demonstration of new varieties of jute developed by the institute and to train the farmers for cultivation of these varieties of jute.
- To publish annual reports, monographs, bulletins and other literatures relating to jute research and the activities of the institute.
- To organize training of officers & progressive farmers on modern improvement method of cultivation of jute allied fiber crops and also to train technical hands for utilization of technological findings: and

Areas of Research

Presently, the institute is active in the following areas:

1. Agricultural Research on Jute and Allied Fibers
2. Technological Research on Jute and Allied Fibers
3. Economics and Marketing Research
4. Jute and Textile Products Development Centre

Agricultural Research on JAF crops

BJRI has a wing carrying out agricultural research on Jute & Allied Fibre (JAF) crops. The main achievements in this field are:

1. Varietal Improvement Programme: BJRI has developed and released 27 High Yielding Varieties of Jute & Allied Fibre crops (Kenaf and Mesta), for the various Agro-Ecological Zones in country.

2. Collection of Germplasm: BJRI has developed a large collection of more than 5000 accessions of Jute & Allied Fibre Germplasm from home and abroad.

3. Crop and Soil Management: A package of improved jute production technologies has been released for the farmers.

4. Pest Management: Effective botanicals for seed-dressing and plant-protection chemicals were developed from locally available plants like neem, garlic, jute seed and such others.

5. Improvement of Fibre Quality: Improved retting (Ribbon-Retting) techniques were devised to ensure the production of high-quality fiber.

6. Jute Farming Systems: 20 improved cropping patterns were identified throughout the country; in 18 of them jute has already been incorporated.

7. Seed Production: An improved Late Seed Production Technology proved very effective and widely acceptable to the farmers.

8. Technology Transfer: Nowadays, more Tossa Jute is cultivated: the ratio White Jute vs. Tossa Jute has changed from 65:35 to 35:65.

9. The Impact of Agricultural Research on Jute: Jute is constantly pushed to marginal land, yet the yield per acre has increased due to the effective research on jute.

Research stations and sites

The Central Research Station is located at Manikgonj. Four (4) regional stations are located at Faridpur, Rangpur, Kishoregonj and Chandina. The two sub-stations are located at Monirampur (Jessore) and Tarabo (Narayangonj). Besides these stations, BJRI maintains four Farming System Research Sites and, eight subvention centres in jute growing areas.

Bangladesh Sugarcane Research Institute (BSRI)

Bangladesh Sugarcane Research Institute (BSRI) is one of the oldest research institutes of Bangladesh conducting research on sugarcane – the raw material sugar, gur and cane juice.

Head office:

Ishurdi – 6620, Pabna, Bangladesh

Objectives/Mandate of BSRI

The objectives of the Institute is:

- Development of crops/plants for the production of Sugar, Gur and Syrup.
- To conduct research on sugarcane based farming systems and to identify its economic advantages.
- Development of improved production technology of sugarcane
- Dissemination of varieties and technologies to the farming community
- To publish a journal and reports to disseminate research results and recommendations of the institute.
- To educate and train up sugarcane farming community.

Research divisions

Research wings of BSRI consist of eight research divisions, one quarantine station and two regional stations.

Bangladesh Institute of Nuclear Agriculture (BINA)

BINA conducts research adopting nuclear techniques for the purpose of ensuring a stable and productive agriculture.

Head Office

Bangladesh Agricultural University, Mymensingh-2200, Bangladesh.

Functions of BINA

The functions of the Institute are to-

- undertake research adopting nuclear techniques for the purpose of ensuring a stable and productive agriculture
- undertake agronomic and soil-plant studies;
- publish agricultural manuals, monographs, bulletins and other literature relating to crop research;
- train research and extension officers in the improved technology of crop production;
- provide post-graduate research facilities;
- organize seminars, symposia and workshops on selected problems relating to agriculture and agricultural research and technology;

Soil Resources Development Institute (SRDI)

SRDI is a government Institute aimed to perform inventory soil and land resources and to investigate soil-related problems for agricultural research and development

Head Office

Farmgate, Dhaka-1215, Bangladesh

Functions of SRDI

The functions of the Soil Resource Development Institute are as follows:

- Soil surveys to evaluate irrigation command areas and cropping potentials;
- Chemical analysis of soil, water and plant samples to verify and clarify the field observation;
- Analysis of chemical and organic fertilizers to ensure the quality of fertilizers;
- Physical and mineralogical and microbial analysis of soils of the country;
- Preparation of various maps and reports on the above-mentioned surveys for publication;

- Training of agricultural extension and research workers of various levels on proper utilization of soil survey information.
- Provide assistance in regular monitoring of soil fertility and land productivity activities throughout the country;
- Investigate soil fertility degradation problem, nutrient related problems of crops, soil moisture stress and constraints in crop production etc.

Objectives/ Mandate of SRDI

The mandates of the Institute are as follows:

- Inventories and survey of soil and land resources.
- Interpretation and analysis of soil and land resource data
- Advice and service related to soil.
- Farmers' service.
- Analysis of soil, water, plant, fertilizer and heavy metal including Arsenic.
- Quality control of soil analytical services done by laboratories of GO/NGOs.

Bangladesh Forest Research Institute (BFRI)

BFRI is the only institute to conduct forest management and forest products utilization research. BFRI conducts research to develop management practices to increase productivity of national forests.

Head Office

Chittagong, Bangladesh

Objectives of BFRI

- Optimise productivity in hill, plain, village and coastal forests through the application of technological input to alleviate the poverty.
- Provide research backup to forestry and agro-forestry in waste and marginal land for optimum and sustainable utilization.
- Rational utilization of forest produces through the application of technological input.
- Help in conservation of biodiversity and environmental balance in national and rural forests.
- Increase liaison with regional and global organizations and networks.

Field Stations

BFRI has 22 Research Stations and Sub-Stations under five Field Divisions covering different forest types spread over eight dendro-ecological regions of the country.

Bangladesh Tea Research Institute (BTRI)

Bangladesh Tea Research Institute (BTRI) is an autonomous organisation under the Bangladesh Tea Board (BTB).

Head Office

Srimangal, Sylhet, Bangladesh

Objectives of BTRI

- to solve various problems of growing and manufacturing tea
- to establish the industry on sound scientific footing
- to develop new varieties of tea
- to develop improved production technologies on tea

Research Divisions:

There are **three** major research departments which encompass **six** research disciplines in BTRI. These are –

1. Department of Chemistry comprising a) Soil Chemistry and b) Biochemistry Divisions;
2. Department of Crop Production consisting of the a) Botany and b) Agronomy Divisions
3. Department of Pest Management consisting of the a) Entomology and b) Plant Pathology Divisions.

Achievements

The notable achievements of BTRI include –

- development of **15** high yielding, quality clones namely- BT1, BT2, BT3, BT4, BT5, BT6, BT7, BT8, BT9, BT10, BT11, BT12, BT13, BT14 and BT15;
- standardizing pruning cycles and per unit population for higher productivity;
- improved tea processing techniques; and
- introduction of an Integrated Pest Management scheme to protect tea plants from the pests and diseases.

Bangladesh Livestock Research Institute (BLRI)

Bangladesh Livestock Research Institute (BLRI) contributes research on livestock which includes animal and poultry.

Head Office

Savar, Dhaka, Bangladesh

Objectives

- to identify the basic problems affecting livestock and poultry;
- to solve these problems through multi and inter-disciplinary and inter-institutional research;
- to develop techniques and knowledge for livestock and poultry production to help food and nutrition security for the increasing population, poverty alleviation, employment creation and environment pollution control;
- to train scientists in the appropriate fields of research;
- to strengthen research-extension- NGO linkage and quick dissemination of the developed and introduced techniques.

Bangladesh Fisheries Research Institute (FRI)

Head Office

Mymensingh, Bangladesh

Objectives of FRI

- To carry out basic and adaptive research for development and optimum utilization of all living aquatic resources and coordinate fisheries research activities in Bangladesh;
- To develop techniques for maximizing productions and better management of living aquatic resources;
- To identify new production opportunities;
- To develop skilled research manpower through training;
- To transfer the technologies to users; and
- To advise the Government in all matters relating to research and management of living aquatic resources.