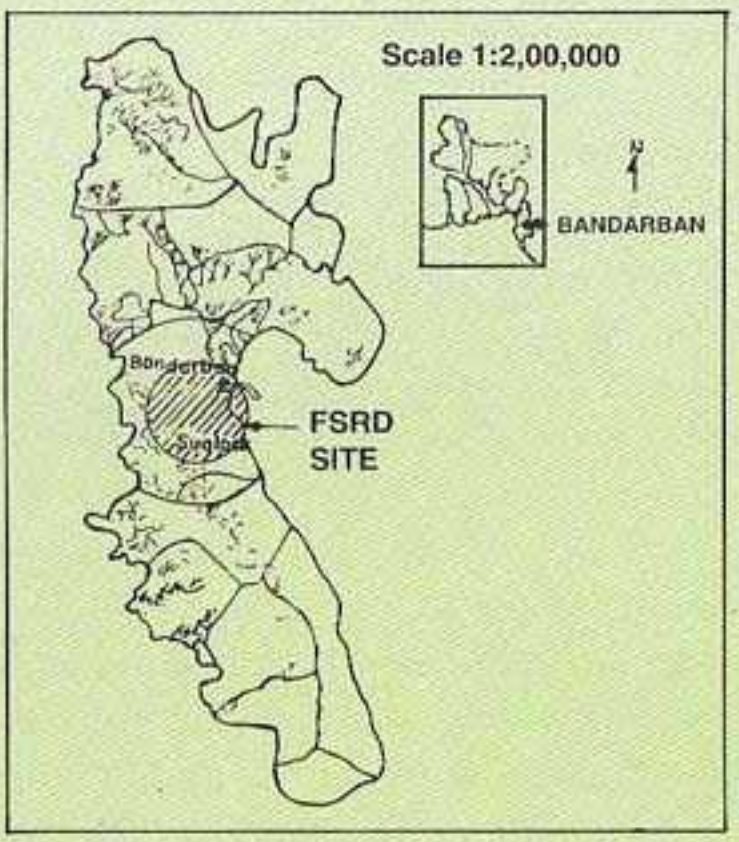
FARMING SYSTEM RESEARCH AND DEVELOPMENT PROGRAMME

SITE DESCRIPTION AND IMPLEMENTATION PROCEDURE

BANDARBAN SITE



GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
BANGLADESH FOREST RESEARCH INSTITUTE
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SITE DESCRIPTION

The Farming System Research and Development (FSRD) site in Bandarban lies between 21° 55' and 22° 22' N Latitude 92°08' and 92° 19' E Longitude. It is located at Sualok and Bandarban Sadar Union and situated at 7-10 km west of Bandarban Sadar Thana/District Headquarter.

The FSRD site is represented by rugged and undulating terrain with moderately high to low hills and narrow valley. Soil texture varies from sandy loam to sandy clay loam. Soil pH ranges from 5.0 to 6.0. The yearly average maximum temperature is 35.9°C and minimum 16° C, and yearly total average rainfall for 1984-93 was 2718 mm. Prolonged drought, steepness and erosion hazards are the limiting factors for cultivation of agroforestry crops.

The site is inhabitated by about 5000 people living mainly in 14 paras or villages. Several tribes *viz.* Marma, Murong, Tonchongya, Bom, Chakma, etc. including non-tribal people are the inhabitants of the area. Percentage of educated people is low. Utilization of labour by gender in various farming activities are defined very clearly among the tribes. Although the farmers have a positive attitude in adopting improved technologies, they are habituated with traditional means of land cultivation system. The marketing system in the site is not developed. In general, the economic condition of the hill farmers is largely at subsistence level.

Cultivation of forest and fruit trees (teak, gamar, mango, jackfruit, banana, etc.) and jhum practice (mixed cropping with rice, maize, sesame, chilli, marfa, etc.) in the hill slopes as well as cultivation of rice (rainfed aman and aus) and vegetables like cucumber, brinjal, bean (barbati), watermelon, tobacco, gourd, potato, etc. in the valley are common. Rearing of cattle, poultry and pigs is often found in the site. Although seasonal ditches/ponds are sometimes available, improved fish culture activities are lacking.

Prior to initiate Research and Development (R & D) interventions, a Participatory Rural Appraisal (PRA) was conducted by a multidisciplinary team for describing and analyzing the situation, problems and opportunities of the hill farmers. Through analysis of data and repeated discussions with farmer groups, a set of hypotheses emerged which eventually served as a take-off point for the R & D activities.

HIGHLIGHTS OF ON-GOING FSRD ACTIVITIES

Considering the bio-physical and socio-economic conditions, programmes on both generation and dissemination of technology have been undertaken. With broad coverage of improved agroforestry systems, livestock rearing and fish culture techniques are currently in operation under farmers' management condition.

Research activities

- Studies on Differentiated Slope Agroforestry (DSA) method.
- Developing techniques of soil conservation and soil management practices in the slope land condition.
- Devising multistoried home garden.
- Studies on socio-economic impact of agroforestry interventions.
- Assessment and improvement of women's role with respect to agroforestry activities.

Development activities

- Demonstration of Sloping Agriculture/Agroforestry Land Technology (SALT).
- Introduction of improved agroforestry management practices.

- Use of pre-rooted and pre-rhizomed branch cutting technique for bamboo cultivation.
- Popularization of the technique for preservative treatment of bamboo, sungrass, wood, etc.
- Beef fattening programme.
- Introduction of improved chicken / broiler / duck rearing.
- Introduction of improved fish culture techniques using small water reservoir/ponds.
- Introduction of auger hole technique of plantation.

LINKAGE

The implementation process of the FSRD programmes is supported by strong linkage of researchers-extension workers-farmers. For this purpose, a Site Working Group (SWG) consisting of researchers, extension workers of the Department of Agriculture (DAE), Forest Department (FD), Department of Livestock (DLS), Department of Fisheries (DOF), one NGO and two farmer representatives have been formed. Beside, linkages have also been established with BADC, NGOs and private organizations during implementation process of FSRD programme.

TECHNOLOGY TRANSFER

Several technologies developed by Bangladesh Forest Research Institute (BFRI), Bangladesh Agriculture Research Institute (BARI), Bangladesh Livestock Research Institute (BLRI) and Fisheries Research Institute (FRI) have been brought under implementation at the FSRD site of Bandarban. Training to the farmers, on-farm trials, demonstration, field days, etc. are the important technology transfer mechanisms.

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