

While the human life is depends on natural resources, they are also depend on humans for their sustainability. In nature there are ways and means, which ensure a balance between the various natural resources. However, advancement of human activities and excessive use of natural resources. Natural resources are basically land, water, air, minerals etc. Their use / exploitation has far exceeded their natural replenishment rates. Industrialization and various other developmental processes have added to the problem by enhancing pollution and global temperature and today the very future of mother earth is at stake. The most important resources affected are water, land and air. While planned development of resources brings in prosperity, the indiscriminate exploitation of nature leads to destruction of environment and degradation of resources.

In India, an estimated area of 146.82 million hectare suffers from various kinds of land degradation due to water and wind erosion and other complex problems like alkalinity/salinity, water logging, soil acidity. In addition to erosion, salinity and alkalinity, our soils are losing soil carbon and micronutrients due to irrational and unbalanced fertilizer use. This must be addressed urgently since nearly two-thirds of our farmlands are in some way either degraded or sick. Droughts and floods are also a common feature in many parts of the country. A large part of the country depends on rains for agriculture. Due to heavy deforestation and denudation of soils, the rainwater received does not percolate much in many areas for replenishing the aquifers and is lost in runoff. There is also over exploitation of available ground water for agricultural and other uses. Management of natural resources is one of the most critical aspects in the economic development of any country. In Indian conditions, it assumes more importance, because the limited natural resources have to be judiciously used to feed the ever-increasing population.

NABARD and Natural Resource Management

NABARD being apex institution directly and indirectly has been facilitating processes to address the above challenges. NABARD's policy on NRM envisages "enhancing livelihoods and quality of life of the rural community through improved resource conditions". The policy indicates that NABARD would direct its NRM interventions towards achieving structural impact on the NRM sector for livelihood enhancement, poverty reduction and ecological sustainability.

NABARD has done pioneering and innovative work in NRM sector through its various programs like Watershed development, WADI program under Tribal Development Fund, Rural Habitat Programs, Environment Promotional Assistance, Rural Innovation Fund and Farm Innovation and Promotion Fund (FIPF) etc. NABARD has also experimented with Farmers Club (FCs), Joint Liability Groups(JLGs), Self help Groups (SHGs) as means of peoples' participation in development. Through these interventions, NABARD has been able to prove the success of the experiment and successful models have emerged. The larger replication on a wider scale requires more partners and public and private investments. While NABARD would take up the policy advocacy and capacity building needs, it looks towards the financial institutions to come forth for financing the NRM based livelihood interventions and towards the technical institutions for appropriate technology.

To give focused attention and facilitate NRM activities on a larger scale, NABARD has set up a Natural Resource Management Center (NRMC) at Kolkata. NRMC is visioned as a brand institution of NABARD and an institution of excellence, which will facilitate the thematic leadership role of NABARD in NRM sector.

Objectives and Functions

The overall objective of NRMC is to facilitate improvement in livelihoods of rural poor through sustainable management of natural resources. For achieving this, the center would undertake following initiatives.

- Identify appropriate technologies available and ready for transfer.
- Awareness creation among and capacity building of communities and other stake holders about the need and utility of appropriate technologies.
- Identification and documentation of successful models.
- Facilitate replication of successful models in NRM and transfer of technologies.
- Facilitate NRM based livelihoods integrating technology and credit.
- Promote CDM technologies and facilitate C- credit earning.
- Take up/ facilitate special studies, meets, workshops, Action research/ research in NRM.
- Networking with academic institutions, research organizations, policy making institutions, technical institutions, financial institutions, livelihood promoting institutions.
- Adopt a multi sectoral and multi disciplinary approach.

- Policy feed back and advocacy.
- Publish relevant literature for various stakeholders.
- Maintain comprehensive database on resources, technologies and approaches in NRM.
- Establish and maintain information and knowledge systems(IKM) for various stake holders.
- Serve as NRM development technology clearing house.

Focus Areas of NRMC

The centre's core functional areas would relate to land, water and biotic resources including forestry. The agricultural production subsystems and renewable energy will also be the focus along with national priorities / global concerns / eastern & north eastern regional concerns like,

- Food Security concerns.
- Sustainable agricultural growth @ 4% p.a.
- Climate change (proofing, adaptation, mitigation).
- Disaster Management (Special focus on flood control in Eastern Region).
- Energy Security – Need for renewable energy (Bio-fuel, solar, wind).
- Evolution / dissemination of NRM based livelihood approaches.
- Financial Products development suited to NRM Sector
- Other related areas (e.g. delivery models, gender issues).

Activities of NRMC

1. Workshops and Meets

- Celebration of Earth day
- Workshop on Opportunities in Green Finance on the occasion of World Environment Day.
- Seminar on Community based NRM to mark NABARD's foundation day.
- Meet on post Aila livelihood NRM based promotion.
- Meet with KVKs, research organizations.
- Consultative Meet on Impact of Climate Change On Agriculture and Farmers' Adaptation.
- Training programmes on new Jute retting technology.

2. **Networking with National Afforestation and Eco-development Board, NIRJAFT, WWF, NAIP etc.**

3. Action research on the way- Alternate Livelihoods for the Fringe villages of Ayodhya Hills, River embankment strengthening in Sundarban areas with Vetiver plantation.

4. Publications- NABARD's Initiatives in NRM, Wadi in Bengali, Innovative Jute Retting in English, Bangle and Hindi, Opportunities in Green Finance, Community Based NRM.

5. Exposure Visits- Chemical free villages, rain water harvesting, watershed , wadi etc.

Contact Us:

If you have any new technology related to NRM- water saving, efficient land use, energy efficient, recycling, reuse etc., which is ready for transferring, if you need information on any specific technology on NRM, want to collaborate with us on NRM issues, have ideas for action research, how to combat climate change, what kind of adaptations farmers need to adopt, how to prepare farmers etc., contact us at,

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