



Natural Resource Management through Community based Extension approach

J.Tulasiram, Associate Professor, UAS Raichur, Karnataka

&

Mr. Nagesh, university of Agricultural sciences, Raichur, Karnataka

Abstract: *The community based NRM approach combines conservation objectives with the generation of economic benefits for rural communities. Community based NRM is based particularly on advocacy by nongovernmental organizations working with local groups and communities, on the one hand, and national and transnational organizations, on the other, to build and extend new versions of environmental and social advocacy that link social justice and environmental management agendas with both direct and indirect benefits observed including a share of revenues, employment, diversification of livelihoods and increased pride and identity. This paper highlights the community extension in Natural Resource Management*

Key words: *Community, Natural resources, Poverty,*

Introduction

Natural resources are the foundation from which rural poor people can overcome poverty. However, planners and implementers of natural resource development projects do not always profit from the lessons learned – either information is lost or it is not easily accessible or changing circumstances may limit its value.

Community-based natural resource management (CBNRM) is a systemic approach to conservation, that allows those closest to the resource, and who bear the costs of conservation, to manage the resource and benefit from its management and use. The community based NRM approach combines conservation objectives with the generation of economic benefits for rural communities. When a local people's quality of life is enhanced, their efforts and commitment to ensure the future well-being of the resource are also enhanced. The three key assumptions

being that: Locals are better placed to conserve natural resources, People will conserve a resource only if benefits exceed the costs of conservation, and People will conserve a resource that is linked directly to their quality of life.

Poverty is still very much a rural problem. One in five of the world's inhabitants – some 1.2 billion people – live in extreme poverty and 75 per cent of these live in rural areas. Their livelihoods depend on natural resources, their capacity to use and manage them effectively, and the institutional environment in which natural resource management strategies are designed and implemented.

The community based NRM approach combines conservation objectives with the generation of economic benefits for rural communities. The three key assumptions being that: locals are better placed to conserve natural resources, people will conserve a resource only if benefits exceed the costs



of conservation, and people will conserve a resource that is linked directly to their quality of life. When a local people's quality of life is enhanced, their efforts and commitment to ensure the future well-being of the resource are also enhanced. Community based natural resource management is also based on the principle of subsidiarity.

Community based NRM is based particularly on advocacy by nongovernmental organizations working with local groups and communities, on the one hand, and national and transnational organizations, on the other, to build and extend new versions of environmental and social advocacy that link social justice and environmental management agendas with both direct and indirect benefits observed including a share of revenues, employment, diversification of livelihoods and increased pride and identity. CBNRM has raised new challenges, as concepts of community, territory, conservation, and indigenous are worked into politically varied plans and programs in disparate sites.

Integrated natural resource management (INRM)

A process of managing natural resources in a systematic way, which includes multiple aspects of natural resource use (biophysical, socio-political, and economic) meet production goals of producers and other direct users (e.g., food security, profitability, risk aversion) as well as goals of the wider community (e.g., poverty alleviation, welfare of future generations, environmental conservation). It focuses on sustainability and at the same time tries to incorporate all possible stakeholders from the planning level itself, reducing possible future conflicts. The conceptual basis of

INRM has evolved in recent years through the convergence of research in diverse areas such as sustainable land use, participatory planning, integrated watershed management, and adaptive management. INRM is being used extensively and been successful in regional and community based natural management.

Natural resources management

Natural resource management refers to the management of natural resources such as land, water, soil, plants and animals, with particular focus on how management affects the quality of life for both present and future generations.

Natural resource management approaches can be categorised according to the kind and right of stakeholders, natural resources:

Private Property Regime

Common Property Regime

Private Property Regime:- Any property owned by a defined individual or corporate entity. Both the benefit and duties to the resources fall to the owner(s). Private land is the most common example.

Common Property Regimes:- It is a private property of a group. The group may vary in size, nature and internal structure e.g. indigenous tribe, neighbours of village. Some examples of common property are community forests and water resources.

To address the pressing issues on natural resources management (NRM), the concept of community-based natural resource management (CBNRM) was introduced. CBNRM is a strategy wherein a certain community is given the responsibility to manage their resources in a sustained way.



Community-Based Natural Resource Management (CBNRM)

“Community-based natural resource management (CBNRM) is a systemic approach to conservation, that allows those closest to the resource, and who bear the costs of conservation, to manage the resource and benefit from its management and use.”

Why People's Participation?

The environment is a living space on which the human community living within that area depends on for its livelihood. When the economic condition of a community deteriorates it leads to over-exploitation and degradation of natural resources which, in turn, further exacerbates poverty. It is thus necessary for people to see the relationship between their poverty and the degraded environment they live in.

Thus, just as human beings and their activities are the cause of environmental destruction, it is only they who can restore to health the ruined environment. Hence there can be no sustainable natural resources management unless it involves the participation of all the inhabitants of the concerned environment / area in an active manner.

Agricultural Extension Approaches

- General agriculture extension approach
- Commodity specialized approach
- Training and visiting approach
- Participatory approach
- Project approach
- Farming system development approach
- Cost sharing approach

- Education institute approach

The three key assumptions being that:

1. Locals are better placed to conserve natural resources,
2. People will conserve a resource only if benefits exceed the costs of conservation, and
3. People will conserve a resource that is linked directly to their quality of life.

Objective of CBNRM: - To manage natural resources in a rational and sustainable way to achieve conservation and community development objectives

Expected results of CBNRM

- Sustainable Natural Resource Management-
- Ownership- the money which is contributed by the community towards a project makes the community members to feel that project as their own.
- Equity- assures the community in equal distribution of the conserved natural resources.
- Improved biodiversity.
- Living together with harmony.

Conditions for “successful” Community-Based Natural Resource Management

- “Homogeneous” communities – ie- The communities should be compelled of members who somecommon objectives, recognised common interests and social cohesion.
- Benefits exceed costs- The local poeple/ the community will undertake



- or continue the activities which give some profits over investment.
- Clearly defined boundaries to resources to be managed
 - Limited uses and users- there must be limit for the use of conserved natural resources, which in case of failure results in conflicts between the community or within the community members.
 - Decentralised decision-making
 - "Simple" administrative structures- the administrative structures should be people's friendly.
 - Long-term engagement with the conservation activities or projects
 - Leadership -"champions" to lead the process- well knowledged and experienced person must lead the community.

Hanumantrao Committee Recommendations

A lesson has been emerged from the experience of the working of DPAP and DDP is that these programmes failed to make the desired impact in areas treated not so much because of the wrong identification or inadequate allocation of funds, but mainly because of poor and ad-hoc planning without any serious regard for watershed approach; almost complete lack of people's participation; and weak coordination between, and lack of integration among works undertaken by different agencies involved in operation.

So, this committee has recommended some points for the implementation of rural development projects in rural areas, those are, and people's participation is must in all rural development activities. There must be proper planning before implementation of any projects in rural

areas. There must be strong co-ordination between the line departments and institutions involved in implementation of the projects.

Stages of CBNRM

A. Strategic level

These includes (1) development of communication strategies and (2) setting up of Platforms, viz., Creation of Natural Resource Management committees, awareness and involvement of stakeholders with possible financial implications and awareness raising and involvement of local authorities

B. Institutional level

1. Conservation organisations are the mentors in this process.

- ✓ Enhance the capacity of local communities (Train community with several training modules)
- ✓ Assist the community in fundraising.

2. Community Based Organisations and local NGOs and civil society.

- ✓ Enhance the capacity of local NGOs and local associations.
- ✓ Enhance their capacities to work with the local community in NRM issues
- ✓ Policy and advocacy for CBNRM process.

3. Government.

- ✓ Give a Mandate to Conservation activities.
- ✓ Monitoring and evaluation of activities.
- ✓ Establish laws and regulations favorable to CBNRM
- ✓ Recognition of CBNRM Zones and transfer of management to local communities.



4. International NGOs, United Nations Organisations and the private sector (particularly traders, Mining and logging Companies)

- ✓ Create platform with the aim of funding the Community owned action plans.
- ✓ Work in synergy
- ✓ Resources Mobilization: Financing or Co-financing of Community Owned Action Plan projects to avoid duplication and encroachment.

C. Operational level

1. Development and implementation of the simplified land use plan.

- ✓ Environmental Education.
- ✓ Identification and planning of NRM actions.
- ✓ Digitalize maps in Geographical Information System.
- ✓ Develop a Monitoring system and participatory evaluation.
- ✓ Implementation of Community Action plan.

2. Other Measures

- ✓ Conduct value chain study (see Value chain presentation).
- ✓ Setting up alternative projects
- ✓ Developing annual work plan
- ✓ Preparation of proposals.

3. Develop a participatory Monitoring and Evaluation system

- ✓ Train the NRM group in monitoring & evaluation.
- ✓ Indicators, database collection, exchanges analysis.

- ✓ Assessments of projects in progress

✓

- ✓ Impacts assessments (challenge).

4. Development of resource maps and land use zoning by NRM groups.

- ✓ Identification and localization on map drawn by the participants, of key resources to which the community has.

Community Based Organizations

These are the local community level groups, which are formed and facilitated by NGOs and other institutions. Some of them are Self Help groups (SHG), Area Groups (AG), Sujala Watershed Sangha and Executive Committees (WS & EC), Village Level Watershed Groups (VLWG), Village Level Federations (VLF), Village Level Committees (VLC).

Community based Organizations in Sujala watershed project

The CBOs formation is facilitated by NGOs and other institutions. The CBOs formed are Self Help groups (SHG), Area Groups (AG), Sujala Watershed Sangha and Executive Committees (WS & EC).

1. Self Help Groups

SHG's mostly comprises of landless and each SHG consists of 20 members. Generally the SHG are women groups, but men SHGs are also present. These are based on the self-help concept where in the groups are encouraged for regular savings and lending the saved amount within the groups as term loans with interest. SHGs also form target groups for training and capacity building regarding Entrepreneur Development



Programme (EDP) and Income Generating Activities (IGA).

Role of SHGs

- Mobilizing savings regularly.
- Lending loans to members for contribution remittance.
- Sending their representative to the Executive committees (EC) of SWS and thereby participating in decision-making.
- Participating in capacity building programmes.
- Participating in common lands development.
- Supply of labour to implement the watershed activities both in private and common land.

2. Area groups (AGs)

Area group defined by common topography based on the drainage pattern. It is a group of landed households which is heterogeneous in nature. Normally AG includes about 40 households covering about 100-150 ha. The membership is irrespective of the size of the land holding. It is represented in the EC by an elected /selected members who is the bridge between AG and the EC.

Role of AGs

- Mobilizing savings regularly.
- Lending loans to members for contribution remittance.
- Sending their representative to the Executive committees (EC) of SWS and thereby participating in decision-making.
- Participating in capacity building programmes.

➤ Participating in common lands development.

➤ Supply of labour to implement the watershed activities both in private and common land.

➤ Involving in operation and maintenance of assets after withdrawal of the project.

3. Sujala Watershed Sangha (SWS) and Executive Committees (EC)

The SWS consists of all the beneficiary households of the project area. Both husband and wife represent their household in the Sangha. The project ensures greater involvement of the community through the participation of both spouses. The SWS-EC predominantly consists of representatives from Area Group (AG) and SHGs. The SWS-EC is a 14 members group of which 5 members represent.

Role of SWS-EC

- Preparation and implementation of SWAP, IGA Sub-plan and other related activity plans.
- Operationalization of environment and social safeguards.
- Management of funds includes making payment to the beneficiaries, keeping books of accounts and getting the accounts audited.
- Contribution mobilization.
- Operation and maintenance of assets after withdrawal of the project.
- Facilitating SHGs and AGs for institutional linkages- linkages with financial institutions and other government departments for finance and convergence.

Some of the methods followed for capacity building in community participation



- ✚ Individual house visits.
- ✚ Informal group meeting
- ✚ Village meetings
- ✚ Grama sabhas
- ✚ Jathas
- ✚ Magic shows
- ✚ Poster distribution
- ✚ Wall painting
- ✚ Conducting PRA exercises
- ✚ Baseline data survey
- ✚ Health camps

Major Constraints in CBNRM

- Community level conflicts.
- Evaluation of action impacts.
- Difficulties to access the sites.
- GIS expertise lacking.
- Locals may be reluctant to challenge government recommendations for fear of losing promised benefits.
- Partners are expecting too much from the activities taken up.

References

- Report of the Technical Committee on Drought prone Areas Programme and Desert Development Programme, April 1994
- IFAD Workshop, Rome, 2004
- Ashley C. and J. Barnes. 1996. Wildlife Use for Economic Gain. The potential for wildlife to contribute to development in Namibia. Research Discussion Paper No. 12. Directorate of Environmental Affairs. Windhoek.
- Brown, C. J. 1991. Socio-ecological survey of parts of east Caprivi-interim

- report. Internal report. Ministry of Wildlife, Conservation and Tourism. Windhoek.
- Brown, C. J. 1996. The Outlook for the Future. In: Namibia Environment. Vol.1. Directorate of Environmental Affairs. Windhoek.
- Odendaal, N. 1995. Community Hunting in the Kunene Region. Project completed as part of the National Diploma in Nature Conservation. Polytechnic of Namibia. Windhoek.
- Rodwell, T. C., J. Tagg and M. Grobler. 1995. Wildlife Resources in the Caprivi, Namibia: The Results of an Aerial Census in 1994 and Comparisons with Past Surveys. Research Discussion Paper No. 9. Directorate of Environmental Affairs. Windhoek.
- Turner, S. 1996. Conservancies in Namibia: a model for successful common property resource management? Social Sciences Division, Multi-disciplinary Research Centre, University of Namibia. Windhoek.
- USAID. 1995. Natural Resource Management Project Namibian Component: 690-0251.73 Living in a Finite Environment, Project Paper Supplement (Amended). United States Agency for International Development. Windhoek.