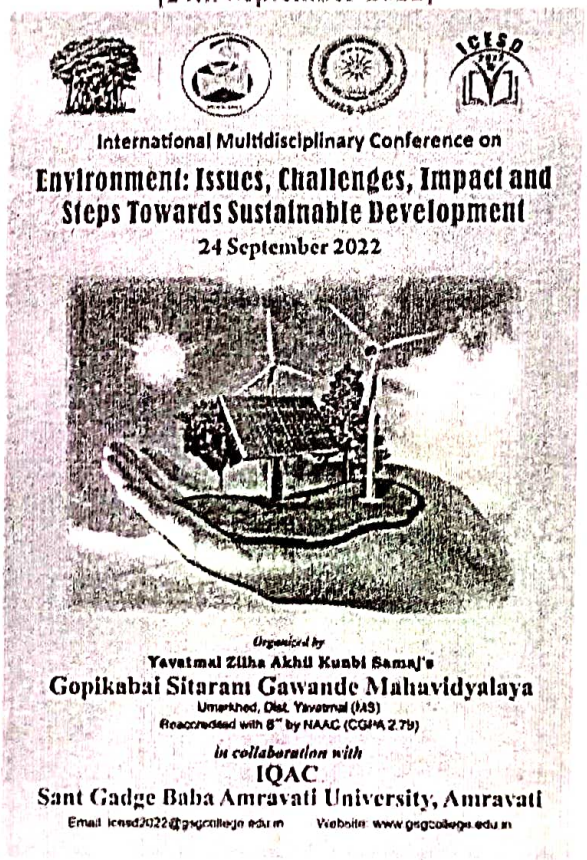
VB

VIDYABHARATI INTERNATIONAL INTERDISCIPLINARY RESEARCH JOURNAL

Special Issue

International Multidisciplinary Conference on
Environment: Issues, Challenges, Impact & Steps Towards Sustainable Development
[24th September 2022]



Preliminary
About Journal
Contents
Part 1
Part 2
Part 3
Part 4
Part 5

Marathi Section
Contents
Marathi Part 1
Marathi Part 2
Marathi Part 3
Marathi Part 4

141	V. M. Gawande	ENVIRONMENTAL EDUCATION AND THEIR STRATEGIES FOR DEVELOPMENT	632
142	K. D.Bompilwar[1] and A. U. Chavhan[2]	ECOFEMINISM IN THE SELECTED NOVELS OF ARUNDHATI ROY AND ANITA NAIR	636
143	P. S. Jawade	AN ECO-FEMINIST PERSPECTIVE & CHIPKO MOVEMENT	641
144	V. B. Chandajkar	NATURAL RESOURCE MANAGEMENTS	645
145	P. V.Deshmukh[1] and R.B.Borse[2]	ENVIRONMENTAL IMPACT AND AWARENESS	649
146	S.B. Patil	POLLUTION : SOURCES, EFFECTS & CONTROL	653
147	J. S. Waghmare	SYNTHESIS, ANTIMICROBIAL STUDY OF MANGANESE (II) COMPLEX	657
148	S. B. Waghmare[1]and J. S. Waghmare[2]	SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL STUDY OF MANGANESE (II) COMPLEX	662

NATURAL RESOURCE MANAGEMENTS

V. B. Chandajkar
Political Sci. M.S.Gote College Washim
vikaschandajkar@gmail.com

Introduction

Natural resource management (NRM) is the management of natural resources such as land, water, soil, plants and animals, with a particular focus on how management affects the quality of life for both present and future generationsNatural resource management deals with managing the way in which people and natural landscapes interact. It brings together natural heritage management, land use planning, water management, bio-diversity conservation, and the future sustainability of industries like agriculture, mining, tourism, fisheries and forestry. It recognizes that people and their livelihoods rely on the health and productivity of our landscapes, and their actions as stewards of the land play a critical role in maintaining this health and productivity.

Natural resource management specifically focuses on a scientific and technical understanding of resources and ecology and the life-supporting capacity of those resources. Environmental management is similar to natural resource management. In academic contexts, the sociology of natural resources is closely related to, but distinct from, natural resource management.

Natural resource management issues are inherently complex and contentious. First, they involve the ecological cycles, hydrological cycles, climate, animals, plants and geography, etc. All these are dynamic and inter-related. A change in one of them may have far reaching and/or long term impacts which may even be irreversible. Second, in addition to the complexity of the natural systems, managers also have to consider various stakeholders and their interests, policies, politics, geographical boundaries and economic implications. It is impossible to fully satisfy all aspects at the same time. Therefore, between the scientific complexity and the diverse stakeholders, natural resource management is typically contentious.

After the United Nations Conference for the Environment and Development (UNCED) held in Rio de Janeiro in 1992, most nations subscribed to new principles for the integrated management of land, water, and forests. Although program names vary from nation to nation, all express similar aims.

The various approaches applied to natural resource management include:

Top-down (command and control)

Community-based natural resource management

Adaptive management

Precautionary approach

Integrated natural resource management

Ecosystem management

Community-based natural resource management Edit

The community-based natural resource management (CBNRM) 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. Regional and community based natural resource management is also based on the principle of subsidiarity. The United Nations advocates CBNRM in the Convention on Biodiversity and the Convention to Combat Desertification. Unless clearly defined, decentralised NRM can result in an

ambiguous socio-legal environment with local communities racing to exploit natural resources while they can, such as the forest communities in central Kalimantan

A problem of CBNRM is the difficulty of reconciling and harmonizing the objectives of socioeconomic development, biodiversity protection and sustainable resource utilization.[The concept and conflicting interests of CBNRM, show how the motives behind the participation are differentiated as either people-centred (active or participatory results that are truly empowering) or planner-centred (nominal and results in passive recipients). Understanding power relations is crucial to the success of community based NRM. Locals may be reluctant to challenge government recommendations for fear of losing promised benefits.

CBNRM 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. Ecological and societal successes and failures of CBNRM projects have been documented. CBNRM has raised new challenges, as concepts of community, territory, conservation, and indigenous are worked into politically varied plans and programs in disparate sites. Warner and Jones address strategies for effectively managing conflict in CBNRM.

The capacity of Indigenous communities to conserve natural resources has been acknowledged by the Australian Government with the Caring for Country Program. Caring for our Country is an Australian Government initiative jointly administered by the Australian Government Department of Agriculture, Fisheries and Forestry and the Department of the Environment, Water, Heritage and the Arts. These Departments share responsibility for delivery of the Australian Government's environment and sustainable agriculture programs, which have traditionally been broadly referred to under the banner of 'natural resource management'. These programs have been delivered regionally, through 56 State government bodies, successfully allowing regional communities to decide the natural resource priorities for their regions.

More broadly, a research study based in Tanzania and the Pacific researched what motivates communities to adopt CBNRM's and found that aspects of the specific CBNRM program, of the community that has adopted the program, and of the broader social-ecological context together shape the why CBNRM's are adopted. However, overall, program adoption seemed to mirror the relative advantage of CBNRM programs to local villagers and villager access to external technical assistance. There have been socioeconomic critiques of CBNRM in Africa, but ecological effectiveness of CBNRM measured by wildlife population densities has been shown repeatedly in Tanzania.

Governance is seen as a key consideration for delivering community-based or regional natural resource management. In the State of NSW, the 13 catchment management authorities (CMAs) are overseen by the Natural Resources Commission (NRC), responsible for undertaking audits of the effectiveness of regional natural resource management programs.

Gender-based natural resource management Edit.

Social capital and gender are factors that impact community-based natural resource management (CBNRM), including conservation strategies and collaborations between community members and staff. Through three months of participant observation in a fishing camp in San Evaristo, Mexico, Ben Siegel man learned that the fishermen build trust through jokes and fabrications. He emphasizes social capital as a process because it is built and

accumulated through practice of intricate social norms. Siegel man notes that playful joking is connected to masculinity and often excludes women. He stresses that both gender and social capital are performed. Furthermore, in San Everest, the gendered network of fishermen is simultaneously a social network. Nearly all fishermen in San Evaristo are men and most families have lived there for generations. Men form intimate relationships by spending 14 hour work days together, while women spend time with the family managing domestic caretaking. Siegel man observes three categories of lies amongst the fishermen: exaggerations, deceptions, and jokes. For example a fisherman may exaggerate his success fishing at a particular spot to mislead friends, place his hand on the scale to turn a larger profit, or make a sexual joke to earn respect. As Siegel man puts it, "lies build trust." Siegel man saw that this division of labor was reproduced, at least in part, to do with the fact that the culture of lying and trust was a masculine activity unique to the fisherman. Similar to the ways in which the culture of lying excluded women from the social sphere of fishing, conservationists were also excluded from this social arrangement and, thus, were not able to obtain the trust needed to do their work of regulating fishing practices. As outsiders, conservationists, even male conservationists, were not able to fit the ideal of masculinity that was considered "trustable" by the fishermen and could convince them to implement or participate in conservation practices. In one instance, the researcher replied jokingly "in the sea" when a fisherman asked where the others were fishing that day. This vague response earned him trust. Women are excluded from this form of social capital because many of the jokes center around "masculine exploits". Siegel man finishes by asking: how can female conservationists act when they are excluded through social capital? What role should men play in this situation?

Adaptive Management Edit.

The primary methodological approach adopted by catchment management authorities (CMAs) for regional natural resource management in Australia is adaptive management.

This approach includes recognition that adaption occurs through a process of 'plan-do-review-act'. It also recognizes seven key components that should be considered for quality natural resource management practice:

Determination of scale

Collection and use of knowledge

Information management

Monitoring and evaluation

Risk management

Community engagement

Opportunities for collaboration

Integrated natural resource management Edit

Integrated natural resource management (INRM) is the 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.

References

1. चौधरी चंद्रभान भानुदास, प्राकृतिक भूगोल, प्रथमावृत्ती 15 ऑगस्ट 2020 मेल्फ पब्लिपेड श्रीरामपूर पेज नंबर 68
2. डॉ. निरूबेन अमीन, चिंता,www.dadabhagwan.org,
3. डॉ. जावळे, भारतीय आर्थिक पर्यावरण,Repro Book Limited, 2019 , page no 102
4. सावदी ये बी, महाराष्ट्राचा भूगोल, निराली प्रकाशन,2017,page no.308
5. डॉ. बाबासाहेब वाणी, डॉ. नितिन पाटील, पर्यावरण अध्ययन, प्रशांत पब्लिकेशन, प्रथमावृत्ती 2021.