ACCESS TO COMMON PROPERTY RESOURCES AND ITS IMPACT ON HOUSEHOLD FOOD SECURITY IN INDIA

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ABSTRACT

Common property resources (CPRs) are an important component of rural lives of India. Forests and water resources are two major CPRs which has played a critical role in the sustenance of rural livelihood in India from time immemorial. The dependency on common property resources are high among the landless, who are often the poorest of the poor and are vulnerable. The poorest of the poor are often solely dependent on the CPRs for their food and livelihood. For many CPRs are source of additional source of income at normal times and also acts a safety net during poor agricultural output, seasonal food shortage thus contributing to rural household food security. There are evidences where the village institutions frames rules and regulations on accessing CPRs which ensures optimum use of the resources. In the present day context where there is exploitation of the natural resources and weakening of the rural institutional processes the common property resources are slowly diminishing which is posing a serious threat to the rural economy which is affecting the household food security. This paper is based on review of literature from secondary sources and also from the author's work experience in the development sector. It would focus on how effective management and utilization of CPRs provides opportunity for alleviating poverty and enhance social development.

Keywords: Common Property Resources, Food Security, Rural Livelihood, Social Development.

Introduction

Food insecurity and hunger remains a harsh reality for millions of people across the globe. India is one among the developing nations where hunger and malnutrition still remains a grave concern. As per FAO estimation in 'The State of Food Security and Nutrition in the World, 2018" report, 195.9 million people are undernourished in India. It is a fact that the direct response to hunger and food insecurity issues is development of agriculture and rural development. Almost 70% of the India's population resides in the villages and these are the people who falls victims of poverty, hunger, malnutrition and food insecurity. Food insecurity occurs not only because of lack of availability of food but also due to lack of access to food and entitlements (Sen, 1981). Unsustainable use of natural resources, in which rural poor are dependent for their livelihood, is also considered to be one of the reasons behind food insecurity in the rural households (Cavendish, 2000). The poor often engages in number of occupations to meet their daily needs and improve their standard of living. Diversification of livelihood is a coping strategy of the rural households from crisis situations and this process is heterogeneous in nature (Ellis, 1998). The factors that influence livelihood diversification of the rural households are seasonality, fluctuating labour market, lack of access to financial capital, etc. Along with agriculture and livestock, common property resources (CPRs) form an integral part of rural life of India and play a critical role in the sustenance of rural livelihood from time immemorial.

Common property resources are those resources that are accessible to and are managed/held/owned collectively by an identifiable community and where no individual enjoys exclusive property rights. The community may have legal ownership rights or it may have customarily accepted user rights. In India CPRs includes pasture and grazing lands, village forests, protected and un-classed

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government forests, waste lands, common threshing grounds, watershed drainage, ponds and tanks, rivers, rivulets, water reservoir, canals and irrigation channels (NSSO, 1999). CPRs are intrinsic part of rural communities and traditional human settlement. It helps the community in their economic, cultural and social develoment. A resource can be said to be common or collectively managed if its users constitute a group and the members have the right to use the resources with formulation of rules and regulations and exclude those who are not members of the group from using the rsources(Arnold, 1993).

The CPRs can be placed within three property right regimes i.e open access, communal property and State property. Open access properties are free for all;user rights are niether exclusive nor transferable. The rights are owned in common and everyone can access it. In communal property the user rights are enjoyed by a particular group/community. These are not privately owned or managed by the government. These resources are owned, managed and governed by the community; who formulates rules and regulations for the usage of the resources. In State property the resources are owned or managed by the State or nation. These are public resources to which use rights and access rights have not been specified (Topal, 2015).

CPRs are safety nets for the community in terms of food and livelihood security. This regime arises in situations when the people living in the community obtain a lower net benefit from the available resources. They understand the fact that their coordinated and cooperative strategies can give them better returns from the available resources. Their joint effort protects and conserves the core resources and allocates the fringe though rules and regulations framed out of consensus decision making. Effective monitoring and enforcement mechanisms are devised to check and protect the CPRs; setting the limits of access too high can result in over exploitation of the resources, inequitable distribution whereas setting the limit too low may reduce the benefits attained by the users. It is a fact that access to CPRs is not always free and common pool resources are not public goods. Access to common property resources as well as common pooled resources is geographically bounded with regulated and monitored access. It excludes outsiders from accessing the resources. Hence in other words it can be said that CPRs from outsider's perspective can be considered as a private property of the community but from the insider of the community it is a common property shared by its people (Hussain, 2010).

India has witnessed some major movements and success stories where communities have played commendable roles in managing and protecting CPRs. The Chipko movement of Garhwal, Appiko movement in Karnataka, the Sukhomajri experiment in Hariyana, Pani Panchayats of Maharastra, Participatory watershed management at Ralegan Siddhi village, Narmada Bachao Andolan etc.

Cprs and Its Impact on Household Food Security

Products collected from CPR are an important source of employment and income for the rural people especially when other opportunities are almost non-existent (Jodha, 1990). Well managed CPRs are contributes to sustainable livelihoods of the local people. It provides ample scope to diversify their livelihoods thereby improving their condition of living. CPRs support community livelihoods in three ways: firstly by providing subsistence need for fuel and fodder, secondly as a source of income and finally as capital goods or savings to be cut and encashed to meet contingencies. The livelihoods of the poor would be negatively affected if there is loss of forest cover, degraded forests and CPRs or denied or reduced access to such resources (Chambers, Saxsena and Shah, 1991).

Literature review brings out the fact that in many parts of India i.e north east, Jharkhand, Odisha, West Bengal, Rajasthan, Madhya Pradesh, Bihar etc. a majority of the population is dependent on CPRs. The dependency is high among the tribals, scheduled castes, landless and the poor households compared to the non poor rural households. A study in Arunachal Pradesh shows that 60-90% of the rural poor are dependent on the CPRs for food, fodder and fuel. Therefore any change in the status or productivity of the CPRs directly affected the household food security and income (Mandal, 2014).

Empirical research from West Bengal shows that irrespective of large scale decline in access to CPRs, the dependency of poor people on CPRs are high and it makes a notable contribution to the livelihoods of the households. The dependency on CPRs is high in regions where there is less scope for agricultural intensification. The study finds out that CPR contributed to 19-29% for the rural poor's livelihood. (Beck & Ghosh, 2000). A study in Karnataka of four villages indicated that mulberry trees and plants found in the common property lands and tree groves contributed to 30-40% of income diversification opportunities for small and marginal farmers those who practiced sericulture (Damodaran, 2001).

Having rights to access CPRs is significantly related to food security be it directly through supply of food or indirectly in through generation of income which helps in accessing food. Rural people's access to forest enables them to diversify their diet. Forest resources provides wide range of food to the

rural people through roots, tubers, fruits, mushrooms, leaves, seeds, honey, meat, flowers etc. Collection and consumption of these items fulfills their dietary requirements to a great extent throughout the year. It also provides a safety net for food during occurrence of food shortages due to seasonal fluctuations of food availability, low agricultural productivity, crop loss or natural calamity. CPRs play an important role in supplying the fuel wood requirements of the villagers. A large number of household in the villages are still dependent on bio mass fuel for cooking. CPRs have significant contribution to private farming too. Evidence from research shows that 31- 42% of the total own farm inputs used by small and marginal farmers during pre sowing to pre harvesting stages of cropping are contributed by cash or kind inflow from the CPRs(Jodha,1990). Livestock is considered being an important asset in the rural households. Landless people, who are often the poorest of the poor, engage themselves in livestock rearing and their household income solely depends on it. It also acts as a supplementary source of income for many households. Access rights to pasture land or common grazing land ensure fodder supply for the cattle. Without CPR facilities for fodder and feed resources, the users would had to divert a substantial proportion(48-55%) of agricultural lands from food and cash crops to cultivation of fodder/feed for the cattle or else they had to reduce the number of cattle from which they derive a sustenance income (Jodha, 1990). A study on CPRs in Odisha reveals that 46% of the total fodder used by households holding livestock was derived from CPRs (Sahoo & Swain, 2013). Collection of Non-timber Forest Products (NTFPs) help the families cope with seasons of vulnerability and unanticipated shocks. The traditional management system of CPRs acts as a social capital for the poorest of the poor, because of relationship of trust and reciprocity and social networks. The village institutions make provisions in access to CPRs for the poorest of the poor, women headed families, elderly of the villages and support them in times of shock and crisis.

Access to community managed water resources emerges as a positive asset in addressing food security. Many literature highlights that, communities have benefitted through pisiculture/fishery from commonly managed water bodies in the communities. Other than direct benefits in the food basket of the rural households, access to common water resources have an indirect linkage to food security which operates through agriculture (Delvaux and Paloma, 2018). There are examples of villages accross Odisha where the village is governed by traditional village institutions. These villages frame rules and regulations regarding various aspects of the village including management of CPRs. Many of these villages take up fisheries in common waterbodies and the duty of looking after the water body/water bodies where the fishery activities have been taken up are allotted to each family of the village/community. The villages have a system of collection of subscription from which the investment on the fishery is done. With mutual consent rules are framed which is followed by each of the households failing which they would be penalized. The share of fish after harvest is fixed along with the number of times of harvesting. The surplus fish would be sold and the income earned would be deposited in the village fund which would further be used in any community activity. NGOs and government departments working in those areas have acknowledged the community efforts and extend their support through providing technical and expertise knowledge as and when required to strengthen the process so that they can increase the production and get better returns.

The low purchasing power of the poor also affects the household food security. As mentioned earlier that the poor often engages them in multiple livelihood options for their survival. The livelihoods of the people are determined by the capitals available in the communities, these capitals are natural capital, social capital, financial capital, human capital and physical capital. CPR serves as a major natural capital for the poor in diversifying their livelihoods. Other than consumption of edible items from the CPRs, the poor collects Non timber forests produces like seeds, flowers, leaves, gum, bamboo etc. and sell them to earn an income. Value addition to these NTFPs like drying, basket making, leaf plate making, incense stick making and handicrafts brings better returns to the poor families thus enhancing their purchasing power. Improvement in the standard of living of the rural households accelerates the social development process.

Present Challenges and CPRs

Owing to the degradation and exploitation of the natural resources, the CPRs are also shrinking and at present fail to offer high returns to the communities. Globalization has resulted in open market and in the name of development of the economy constant pressure is imposed on the natural resources(forest,water,minerals,land) of the country. Land acquisitions are done for industrial purpose which results in the displacement of the local and indegeneous people. This affects the ownership rights of the rural communities over their private aswell as the common property resources. In the process of industrialization the ownership of these resources are transfered from the communities to the State or corporates. Tribal communities in India have been the victim of such process of privatization. They have

always been close to the nature; to tribal people natural resources have much more meaning than a mere sense of physical entity and means of livelihood. These resources are interwoven into their life and culture. Alienation and exclusion of these people from the CPRs have a deep impact on their food and livelihood security as well as socio cultural sustainability (Behera & Basar, 2014). Displacement does not merely includes physical loses but also includes loss of social capital like social integration, culture, community living and participation etc. Undoubtedly, industrialization is essential for economic growth of the country but not at the cost of rich natural resources which are essential for living of every human being.

The relationship between CPRs and equity is very complex. In recent years, the weakening of the community institutions in managing the CPRs results in inequitable distribution of resources and accumulation of the resources in the hands of non poor, inducing distrust among the community members. Encroachment of common lands is yet another challenge to the CPRs. Thus these situations of weak community resource management and distrust among the people often results in conflicting situation and reluctance in abiding the rules and regulations formulated for managing the commons. The existence of economic inequality with the rural communities sometimes enforces improper harvesting or access to the CPRs. Those members in the community who have sound financial condition and politically connected often pay less heed to the management process and try to exploit the system.

Inter village/community conflicts over sharing of resources is yet another challenge in the management of the CPRs. The reasons for conflicts may be demarcation of boundaries, stealing of timber from other communities CPRs, open grazing of cattle etc.

The relationship of distrust and apathy between the forest department and the local communities related to forest protection is yet another challenge to the CPRs in many States. While the forest dwellers fears the loss of their access to the forest which they have being protecting and using traditionally, the forest department apprehends of illegal felling, encroachment, grazing, poaching etc. This relation of mutual distrust compromises the conservation and protection of forests. But, it was realized by the administrative machinery that conservation and management of forest is not possible with total alienation of the local communities residing within or fringes of the forest. They acknowledge the voluntary effort of the communities in forest protection and Joint Forest Management (JFM) was introduced in 1990 (Pattnaik & Brahmachari,1996). In this JFM committees are formed and Memorandum of Understanding is signed between the State machinery and the committees where roles and responsibilities of different work are clearly defined. It also provides the guidelines for sustainable harvest for both NTFPs and timbers and the share of the communities in the harvest. In many places the sustainable harvest of the NTFPs are allowed to the communities free of cost.

Community Based Management of Common Property Resources

Hardin's in 1968 in his essay 'Tragedy in of Commons' viewed that open access to CPRs and other natural resources results in overexploitation and degradation of the CPRs as CPRs are no body's responsibility. His thoughts have been criticized by many academicians, activists and scholars as majority of the studies have shown that where rights to access to common property rests on the local community on the basis of their long standing customs and traditions, there the protection and conservation of the CPRs have been done in true spirit. Communities have framed user rules, user rights protection, access regulations and also retributions for violation of the rules. This has resulted in minimizing and often eliminating over exploitation of natural and common property resources (Ostrom, 1990). Further degradation of CPRs is not always a consequence of open access to the resources but it occurs due to institutional failures to manage and control access to the resources.

Elinor Ostrom, won the Noble Prize in 2009 for her contribution in the field of 'Commons', has laid down 8 principles for managing commons. These principles are:

- Defining clear group boundaries.
- Match rules governing use of common goods to local needs and conditions.
- Ensure that those affected by the rules can participate in modifying the rules.
- To ensure that the rule-making rights of the community members are respected by outside authorities.
- Develop a system, carried out by community members, for monitoring members' behavior.
- Use graduated sanctions for rule violators.
- Provide accessible, low- cost means for dispute resolutions.
- Build responsibility for governing the common resource in nested tiers from the lowest level up to the entire interconnected system.

She viewed that community based common resource management institutions evolved through the process of social learning. Trial and error methods make the community learn and adapt to the local context, in the process they form effective and efficient institutions-thereby attaining a 'self-organizing' status. The sustainability of CPRs depends on the management practices of the community i.e strong monitoring and enforcement. It is also depends on the equity of sharing the benefits from the resources, sharing the expenses, graduated sanctions for violation of CPRs and formation of local forums or federations for avoiding and resolving conflicts. The advantages of community based resource governance and management has been acknowledged and well documented in many literatures. It strive for more active community participation in planning, monitoring and equitable distribution of CPRs. Equitable access and distribution of resources from the CPRs are essential for protecting the rights and entitlements of the marginalized. Awareness of the community people must be raised on the benefit of community based resource governance and management.

Development of community leadership is essential for effective management system. Community leadership can protect them from conflicts arising out of access and distribution of resources. This would also strengthen their internal social dynamics. People have an innate capacity to take responsibilities of managing the CPRs through self monitoring and enforcement. The use of traditional/ indigenous knowledge and expertise in framing the rules and regulations for access to the commons by the community makes the process more effective, which meets the communities own needs and conditions. It also permits a sufficient degree of flexibility and can be modified as and when required with consultation and consensus of the community. Participation of the community people in the formulation of CPR management strategy and implementation leads to higher degree of acceptability and a stronger sense of commitment from the community's end. It gives a sense of ownership to the resources, as they realize the benefits they get from CPRs, the mechanism they adopt to protect and conserve the CPRs have long term sustainability (Pomeroy, 1994). Village specific bye-laws on resource governance and management in written can strengthen the institutional process and adherence to the rules and regulations formulated, by the rural people. Leasing of private or State owned resources to marginal groups for collective use can help in reduction in poverty and counter household food insecurity. Self Help Groups, Cooperative members or collective groups can reap the benefit from these resources collectively which would otherwise not have been possible if they acted individually.

Initiations of federating process in the region, with the representatives of the traditional village institutions can reduce the chances of inter village conflicts arising out of resource sharing. It would also have a larger implication on the ecological restoration and conservation of the natural resources in the area. The federation would also provide a platform for the communities to share their experiences, concerns, conflict resolutions and raise common voices for any issues related to the common property resources. A regional federation comprising of 40 forest fringe villages of Satkosia Tiger Reserve is doing a commendable work in natural resource management. These villages were covered by a Watershed Project supported by NABARD implemented by a leading NGO. The federation has been successful in mitigating inter village conflicts on CPRs along with regulation of open grazing which was seen as one of the main causes of degradation and degeneration of the forests. With their constant effort they have been successful in motivating the people to practice sustainable harvesting of NTFPs and controlled grazing.

The Joint Forest Management Committees are registered bodies, the functioning of these committees should be strengthened through preparation of proper micro plan with consultation with the forest departments. The Forest Rights Act 2006 is yet another milestone where the Rights of the forest dwelling Scheduled Tribes and other traditional forest dwellers are recognized. Along with individual rights the Act lays downs rights and guidelines for Community rights over forest which includes: (a) rights to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use (b) right of ownership, access to collect, use, and dispose of minor forest produce which has been traditionally collected within or outside village boundaries; (c) other community rights of uses or entitlements such as fish and other products of water bodies, grazing (both settled or transhumant) and traditional seasonal resource access of nomadic or pastoralist communities (Forests Rights Act, 2006).

Conclusion

CPRs play a vital role in the rural economy but their contributions are seldom recognized. Traditional methods of access control, equitable distribution of resources, management and conflict resolution mechanisms are slowly diminishing because of the social, economic and political changes occurring in the villages. Population pressure, migration, commercialization and privatization are

changing the pattern of resource usage among the community which in turn affects the uniformity of interest and community cohesion. This change in the social process is impacting the lives and livelihoods of the rural people as the social cushion to cope with the environmental hazards are getting hampered; making the poor people more vulnerable and exposed to the risk of food insecurity. The need of the hour is to revive and strengthen institutional arrangements for sustainable management of the CPRs. Revival or strengthening of the traditional CPR management and governance mechanisms by the communities and equitable distribution of the resources can help in countering the present day challenges of the CPRs and sustainable development of the rural areas. Community efforts in conservation and protection of CPRs have shown notable contribution to the village economy. Communities protect and conserve forests not merely because of ecological effects or forest degradation/destruction but also as a response to the shrinkage of forest produces which is the life support system of the households.

Motivating people to organize and educating them to mobilize available resources for their needs is what needs to be done in the present context. Decentralized policy formulation and programme implementation at micro level, capacity building of the traditional/local community institutions, and awareness generation among the people on conservation of natural resources are some of the way outs to address the issue of diminishing commons in the recent days. CPRs also assist in maintaining the ecological balance by checking deforestation, soil erosion and siltation. These have a broader impact on the lives of the rural poor. Policy makers, NGOs and the local government should work towards strengthening of the community based institution so that the CPRs can be protected and conserved for sustainable development of the community and the nation as a whole.

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