

Effectiveness of Rural Cooperatives as Means to Enhance Conservation Through Economic Development

Ujjwal Upadhyay

ujjwal.met@gmail.com

Aayusha Prasain

aayushapr@gmail.com

Context and Background

Protected areas are keystones of biodiversity and species conservation (Buddhathoki, 2003; Jones et al., 2006). Protected areas such as national parks, wildlife reserves, hunting reserves, conservation areas are considered to provide the foundations to biodiversity conservation. National Parks represent the outcomes of the prime ideology where people are functionally and theoretically excluded from conservation policies. This pro-conservation strategy, which does not consider local human populations, originated in western conservation ideology and has been replicated by the Government of Nepal since 1972. There is a growing body of evidence that suggests National Park designation is not an effective method of promoting biodiversity conservation (Pimbert & Pretty 1997). The protected area management regime in Nepal has experienced various paradigm shifts in the biodiversity conservation realm. During the 1970's, the thrust was mainly focused on creating national parks and wildlife reserves using a command and control approach. In the late 1980's, the focus shifted to the creation of conservation areas and ecotourism as a means of conservation. Since the late 1990's the focus has been on linking conservation and development, with the aim of resolving park-people conflict and integrating economic, social and environmental aspects (Heinen & Yonzon, 1994). During this period, the buffer zone approach was introduced and implemented to ensure benefits to the local community through conservation. Since then, driven by the objectives of development based conservation approach and vice versa, many initiatives are being taken in the protected areas and around to take both activities together (Ramakrishnan, 2008; Upadhyay, 2015). Integrated Conservation and Development Program (ICDP), this has been one of the most effective conservation initiatives that intertwine development with conservation to make communities more self-reliant where nearby protected areas become free from possible encroachments and exploitations (Brown & Wychoft-Baird, 1992; Baral et al., 2007).

As ICDP is always based on development, mainly comprising socioeconomic betterment of the local people, accessibility financial capital to local community can be the effective instrument. To support such initiatives, the role of cooperatives has significant importance. Cooperatives mainly comprising of various community-based user groups in rural areas, have been found as one of the effective tools to analyze the root causes of the problem (Manandhar & Shin, 2013). Yunus (2007) and UNESCAP (2013) also mentioned the role of cooperatives in identifying nearby resources, empowering people, mainly women, to become the part of micro and macroeconomic development. Thus, there is growing belief that cooperatives can be one of the effective means of making conservation activities more effective and efficient

where communities largely benefit from these initiatives, in terms of better livelihood and living standard to complement conservation initiatives.

As most of the protected areas, mainly in developing countries and least developed countries (LDCs), are surrounded by the people with poor livelihood and economic conditions that often tend to encroach and exploit the forest resources due to the absence of alternative means to fulfill their needs (Gurung, 2003; FAO, 2015). A community having poor access to human, social, natural, physical and financial capitals often becomes susceptible to a vulnerability that may further deteriorate their livelihood conditions making conservation activity more challenging (Mangel et al., 1996; Chettri et al., 2008). Also, in the recent time, the number and areas of protected areas in such zones have been increasing because of the dire need to conserve species, from many environments aggravating factors such as climate change and growing carbon emissions among others (ICIMOD, 2014). Buffer Zone concept¹ (through Buffer Zone Act 1996) brought such an integrated approach that has helped both conservation and development to occur in and around protected areas. Annapurna Conservation Area Project² is one of the biggest conservation endeavors in Nepal that is driven by the similar objectives. It not only harbors some of the most endangered wildlife species but also is the home of one million people that pose conservation challenge. Since conservation is always challenging without the cooperation of the surrounding communities, it is thus important to make them more responsive about conservation which is possible only if they are socioeconomically self-reliant. As the success of conservation is directly associated with surrounding communities' livelihood conditions, there is no way conservation will take place without improving their access to various livelihood based assets (Parker, 2004). As per the need, many conservation programs and projects are conducting various livelihood based development activities mainly focusing on education, income, health, and alternative energy but there must be something that will create the impact faster encompassing a larger group of people covering bigger geospatial vicinity. Out of such few development approaches, community-based cooperatives in rural conservation areas has been known for its result oriented effective outputs that have helped to uplift their living condition and sustainable livelihood (Regmi, 2014; Bahta et al., 2017). Cooperatives, in particular, have been able to identify problems at a local level mainly comprising poverty and also being able to look at the alternatives and ways out overcome such problems by mobilizing resources and enhancing its value chain where an individual and a community can benefit from the investment they make on it (IFAD, 2004; IFC, 2013; Mia, 2016). Thus the study tries to understand the role of cooperatives to enhance the prospective factors and overcoming constraints associated with the conservation.

Objectives

Specific Objectives:

¹ As of Buffer Zone Concept the area of around the park's vicinity could benefit from park revenue (30-50 percent) and in return the community is supposed to participate and assist in park management activities (For more see: Bhusal, 2014).

² ACAP is the largest undertaking of National Trust for Nature Conservation (NTNC) and also the first (1986) Conservation Area and largest protected area in Nepal (For more see: NTNC, 2018).

- To get a better understanding of the overall rationale behind cooperatives and the process with which cooperatives were initiated and its different phases.
- To capture learning on what went well and what bottlenecks or hurdles were experienced that impacted cooperatives and in turn impacted conservation.
- To disseminate and incorporate lesson learned in future projects for more effective community participation in conservation.

Methodology

To investigate and analyse the main objectives of the research, the study adopted qualitative analysis. The data were collected through both primary and secondary sources. The primary data was gathered through in-depth interviews, focus group discussions (FGDs) and observations. 23 in-depth interviews were conducted where one of the respondents was the Manager of the local cooperative while other 22 were share members of the cooperative. As there was the presence of only one cooperative in southern ACAP, the manager of Shree Dhampus Agriculture Development Cooperative Limited was selected through purposive sampling method. All the other respondents were share member of this cooperative and the residents of Machhapuchre Rural Municipality, Ward number 7 which falls under southern ACAP. These respondents were selected through snowball sampling method.

While the secondary data collection was done through related books, journal articles, and reports. Various literature and publications by ACAP and other institutions were reviewed. This was mainly done to understand the rationale of cooperatives in a conservation area.

Finding and Analysis

As the direct beneficiaries of the Shree Dhampus Agriculture Development Cooperative Limited, the residents of Machhapuchre Rural Municipality, ward number 7 were selected as the respondents. Machhapuchre Rural Municipality lies in the Kaski District in the Gandaki Zone of northern-central Nepal. With 11 wards it has the total population of 21,868. The settlement around this rural area is one of the slim and scattered in Kaski district with only 40 people per square Kilometre (Rural Access Programme, 2017). The village covered mostly by the forest, the majority of the respondents depend hugely on subsistence-based farming which can be divided into staple crops, poultry and livestock rearing especially buffalos. Small businesses like grocery shops, pharmacies and fashion wear shops were also seen. The livelihood has been slowly diversifying due to the presence of the local cooperative. Due to the easy access to finance, people in this ward have started to invest in small businesses. Access to finance gives the rural population not only the opportunity to diversify income but also enhances their risk-taking capabilities (Beck & Demirguc-Kunt, 2006; Yunus, 2007). However, the sources of information about the cooperatives are disseminated through friends and relatives. In the Ward number 7 of Machhapuchre Rural Municipality, the use of the informal channel to understand the role of cooperative had a strong importance. All the 22 respondents became the share member of the local cooperative as their friends and relatives told them about the importance of saving money and the accessibility to loan.

The main objective of becoming a member of the cooperative is for the respondents was to uplift their socio-economic condition through easy access to loan and saving opportunities. According to the respondents³, the presence of local cooperative has empowered them. Empowerment can be divided into financial, economic and social. Past studies have also shown the positive relationships between the upliftment of socio-economic conditions and empowerment (Batliwala, 2007 and Pambe et al., 2014). In this rural municipality, financial empowerment is gained through the capital mobilization, access to loan despite lack of property right to the women. According to the census 2011 of Nepal, only 19.71 percent of women have asset ownership⁴. Moreover, there is limited information on the property and asset control by women. In such circumstances receiving a loan without collateral has helped women in Machhapuchre Rural Municipality-7 gain financial independence. In addition to this, dependency on the male member of the family to start up any kind of small businesses has been reduced. Group saving and procurement of loan through the group guarantee approach has them to gain financial and economic independence. Economic empowerment is hence derived from the enterprise development induced social status and dignity. Economic security has induced social security. Equity-oriented group formation among the people representing all caste, gender and ethnicities facilitate better social harmony. As caste and ethnicity is still a deep-rooted system and structure creating division in Nepalese society⁵, the local cooperatives through the equity-based group formation have helped to overcome the traditionally rooted social and ethnic discrimination. As observed during the interviews and FGDs, the ethnic composition of respondents were mix, however, there was no visible discrimination felt. During the field study, group formation irrespective of gender, caste and ethnicity enhancing better social equity assuring so-called untouchables experiencing and practicing we-feeling in harmonized society was felt.

Importance of Cooperatives establishment in your area

The FGD revealed that access to finance has become easier. It saves time as they do not have to go to the urban cities or town to get financial assistance. This has saved their time for business and family particularly to the women. Easy loan disbursement has helped both women and men diversify their income generation sources. Along with the diversification it has built their habit of saving and investment. Flexible agreement between institutions and borrowers has helped them to polish their potentials. Rural people in Nepal often tend to oversee their potentials and asset, grassroot organizations like cooperatives help people take the risk without binding them into strict policies (Bharadwaj, 2012). Compared to the other financial and banking institutions, moral suasion is enforced to the defaulters instead of legally binding policies despite handsome payback. Group formation through such grass root organizations not just helps them in accessing the loan, but in sharing their daily problem

³ Various Interview and FGD taken on 24th and 25th of May, 2018 with the share member of Shree Dhampus Agriculture Cooperative Limited, Machhapuchre Municipality-7, Kaski, Nepal.

⁴ For more see: (CBS, 2012).

⁵ Caste system in Nepal is a traditional way of social stratification, which is still prevalent in the rural Hindu communities. There are four divisions i.e., Brahmin, Chettri, Vaishya and Sudra and this so-called hierarchical divisions often symbolizes power. (For more see: Bennett et al., 2006).

which strengthens we-feeling. Rewarding the people for timely payment of loan boosts the moral component in the society.

Although the locals have started to diversify their income generation sources. There is the absence of export-oriented goods and products. Tourism and enterprise development has not been explored to its maximum potential. Local consumable goods based enterprise development is limiting the growth of business and trade due to small market derived slim and scattered settlement and population. Exportable goods both beyond village and country can greatly help to enhance trade to significantly uplift condition. Poor access to market because of dilapidated road condition induces high transportation cost. This causes higher prices for inputs. Due to poor infrastructure, both inputs and produced goods are expensive in the rural areas (Fukubayashi & Kimura, 2014; IGC, 2017). Consumer prices are higher in the site as compared to the accessible cities and towns around, which makes the business difficult.

Despite such problems, the good example and potential of clustering was seen in the study site. Clustering not only helps the big companies but the network of the same type of firms help the smaller companies benefit from the pool of skills, expertise, and resources (The Economist, 2009; Hanna, 2017). Complimenting factor to the small business related to the cooperatives are big investors. Due to the tourists attracted by the big hotels and resorts small business and enterprise have to be able to grow. Majority of the consumers of such small business are tourists coming for recreation and trekking.

Constraints:

The drain of economically active population is the major limiting factor behind the growth of agriculture-based economy comprising of many high-value cash crops like coffee, large cardamom, fish farming opportunities that can easily done both locally and beyond. Formal education on cooperative and absence of skills and technical training restrict the rural population to establish stable enterprises (Okpara, 2007; Bharadwaj, 2012; Karki & Xheneti, 2017). Lacks of cooperative education make people unable to realize the importance of the benefits they can derive from cooperative. In addition to this enterprise development training and modern farming techniques both at crops and livestock levels is another constraint. Basically, there are three categories of people found on the site. "A" economically capable, "B" economically subsistence and "C" Ultra poor.

As "A" class are not attracted to feebly invest financing opportunities whereas "C" cannot even afford to become a member even by investing nominal share price. As only subsistence class i.e., "B" are attracted and can afford to work with the cooperatives, the majority of the ultra-poor community are excluded from this service. Until and unless they are brought into this financial mechanism and services, conservation and development cannot go further and far.

Due to the limited capital budget of mere NPR 7.5 million (USD 7500), it is not possible to provide a loan to all needy people in the region. As there are no other sources of capital viz revolving fund, which could be disbursed under subsidized interest the amount if

disbursed to ultra-poor people. Without serious precautions capital of subsistence category, people are likely to become even more vulnerable.

Conservation:

The motivation factor for following the pro-environmental behavior can range from one's attitude to norms. One of the main factors that influence the people's attitude towards practicing environmental friendly activities can be a financial factor. Financial factor is conceived usually from the self-interest of the individual. In recent times, many campaigns have focused on this factor to make their movement a more successful.

The government, ACAP and local grassroot organization like cooperatives role in promoting the financial factor can be one of the ways to bridge the gap in people's environmental knowledge, awareness and then practicing it. Due to the people-centered approach, ACAP has been able to bring many conservation initiatives to make environmental protection and its services to the local people more effective (NTNC, 2018).

Forest crown cover gone up by 8.73 percent in during the period 2006-2016, mainly in the southern ACAP. (Singh 2016) Intensive consultation and discussion with local people also inferred the correlation between increased conservation of both flora and fauna with enhanced people's livelihood and socio-economy due to improved access to financial capital. There were direct positive co-relations were spotted where people quoted the cases of their shifting of dependency from forest resources to their own enterprises for their survival and livelihood. Increased sighting of wild fauna mainly ungulates along with macaques and wild hen give the impression of improved bio-diversity and sustained eco-system assuring systematic and healthy food chain to encourage conservators which can be correlated with the increased socio-economic condition of the area. Also, people's visit to the forest has significantly reduced due to their economic capability enhancement as they can afford to have alternative sources of energy like LPG, Biogas and Solar. Moreover, local don't want to visit forest as they find this risky amid faunal growth in numbers. Their economic empowerment greatly helps to keep them away from forest reducing possible human wildlife conflict as well.

a. Status of Fund Availability and Mobilization

The fund available in the cooperative is just less than NPR 7.5 million which is above critical budget cooperative requires to sustain financially. The continuous auditing, both internal and external, has made all financial transaction transparent and cooperative itself sounds accountable and responsive in many sense.

b. Cooperative-Community Financial Linkage :

Access to Finance is still a major constraint in rural Nepal. Among many reasons, the profitability of the financial institution in the operating area influences the availability of financial institutions. Due to these reasons, the presence of commercial banks and other financial institutions are limited in the rural areas of Nepal (IFAD, 2004; Nagarjan & Meyer, 2006). The grassroot organizations like cooperatives play an important role in filling this gap (IFC, 2013; Bahta et al., 2017) however smaller geographical coverage,

less share members of Shree Dhampus Agriculture Cooperative Limited limits their assets to provide bigger loans and expand the opportunities to the local community.

The absence of cooperative education has limited the coverage and knowledge of rural people to maximize the opportunity that cooperative can provide. Although with the small number of household coverage the local cooperative in Machhapuchre Municipality has helped the majority of the respondents i.e., 20 out of 22 had taken a loan. As 2 of them did not require loan they did not use this facility however actively took part in other community programmes conducted by the local cooperative. Out of 20 respondents who took loan 9 of them diversified their economy through the establishment and upscaling of shops, restaurant and a bakery shop whereas, other 11 used their loan for their children's education and household purpose. Presence of cooperative has given them the opportunity to access the financial services. Formation of the group among the members has even provided with the access to loan without the collateral. Not only has it provided the loan but also is developing the habit of saving among the locals. The saving culture is the first step towards the financial awareness among the rural people as it helps them to cope up with the unexpected risks of the future (Ritchie, 2007; Kwai & Urassa, 2015).

c. Reporting and External Auditing

All the cooperatives stated that they report their financial standings to their respective District Division Cooperative (DDC) and Community Forest Coordination Committee (CFCC) every month, according to the Reporting Guidelines set forth by the Division Office.

d. Cooperative Governance :

The cooperative has been able to increase the number of share members over the years, and thus participate community members in livelihood and conservation schemes. However, the proportion of such members is still low in comparison to the total population⁶, primarily due to the limited coverage of cooperative education⁷. Also, cooperatives are limited within its fixed geographic catchment in terms of making local community their share members⁸. The ratio of membership decline as the physical distance from the cooperatives increases (Grandolini, 2015; Pant, 2016). Community members, in general, do have a basic understanding of investment and credit mechanism, however, the majority of those in category 'C' have not been able to reach cooperatives or avail such schemes due to the lack of minimal amount required to become a member (Claessens, 2006; Khatun et al., 2013; Grandolini, 2015; Ferdousi, 2015).

⁶ Out of 4754 households in Machhapuchre Municipality, (Calculated using Annual Household Survey 2015/16), only members of 130 households are associated with Shree Dhampus Agriculture Cooperative Limited. The total population of this municipality i.e., 21,868 was divided by the average size family of Nepal i.e., 4.6 to calculate the total household i.e., 4754. (For more see: Central Bureau of Statistics/ UNDP, 2016; Rural Access Programme, 2017)

⁷ Interview taken with 22 respondents from Machhapuchre Municipality-7, Kaski District, Nepal on 24th and 25th May, 2018

⁸ Interview taken with the Cooperative manager of Shree Dhampus Agriculture Cooperative Limited, Machhapuchre Municipality-7, Kaski district, Nepal on 24th May, 2018.

Although limited geographical coverage was found, the accountability and transparency within the cooperative were intact. Annual General Assembly has been carried out regularly where every share member participates and expresses his/her concerns. The Assembly provides all the stakeholders with an access of over duly shared audited report thus ensuring financial transparency.

g. Cooperative Education to General Public:

Unlike claimed by cooperatives about frequent and intensive cooperative education conducted in their catchment area, 95% of the total 22 respondents expressed unawareness about such education. Plus, according to the FGD⁹ conducted cooperative education is limited within the periphery of cooperative offices, and distant forest users and eligible community members are deprived of such information.

There has been a positive correlation between cooperative education and successful enterprise development (Salwa et al., 2013; Gardeva & Rhyne, 2011; Manaf, 2017). The absence of an effective channel to aware the rural people in the utilization of loan limits their potentials (WHO, 2010; Pant, 2016). A few proportions of borrowers who have attended these educational sessions and have been motivated to acquire membership and loans have done really well in terms of their returns on investment. Whereas, the majority of the borrowers reported that they came to know about the cooperative through their friend circle and personal communication with cooperative staff members, and thus are unaware on the objective of the credit thus availed.

e. Membership

All the cooperatives have prioritized community members belonging to category 'C' in share membership as well as in loan investment, with a higher focus towards women and marginalized groups. Though the policy and membership process is the same in all the cooperatives, the trend of membership increment rates is different in each cooperative due to various reasons that are described in the succeeding chapters.

f. Cooperative – Public Relation

It has been found that community members have a very good perception of the current working committee in the cooperative in all the study sites. All the respondents of the study expressed a strong communal support for their respective cooperative.

g. Disguised Unemployment

Most of the households, in all the study sites, are inclined towards traditional enterprise comprising livestock farming, poultry, and vegetable farming with more focus on subsistence than on commercialization. All the household members are dependent on this particular enterprise, which, however, is subjected to seasonal fluctuations and uncertainties.

⁹ FGD taken with 10 shareholders and Cooperative manager of Shree Dhampus Agriculture Cooperative Limited, Machhapuchre Municipality-7, Kaski district, Nepal on 25th May, 2018.

It was observed that the nature of enterprise among category 'C' borrowers has not been sufficient for an average family size of four, often demanding young members of the family to seek foreign employment. Most of the respondents, including the borrowers with an excellent history of loan repayment under IGA scheme, had at least one of their family members in the Middle East.

Recommendation:

- Establishment of more cooperatives in the region with the main focus to involve more and more people through cooperative education can significantly improve both economic and social status of the community including marginalized, disadvantaged and ultra-poor among others.
- Availing of a revolving fund to effectively disburse to the ultra-poor community who are unable to purchase share capital and even save in conduction of enterprise development activity can greatly contribute to improving their financial condition and will make them more independent from environment resources perspective. This system can provide a limited amount of loan to the ultra-poor community to delicately fabricate their socio-economy whereas established subsistence group having sound track record can be availed with a handsome amount of loan to encourage them to start-up a decent enterprise guaranteeing more employment opportunities.
- In order to bring category C people into development mainstream, they must be provided without collateral facilitated by revolving fund. Such fund can be charitable or welfare both.
- Emphasis on cooperative education focusing backward community both in terms of socio-economic and geographic accessibility.
- To ensure community-managed conservation initiatives more innovative community capital formation schemes must be launched ensuring physical and financial capital generation ensuring basic physical facilities and income opportunities.
- Insurance Policy must be prioritized and practiced particularly to overcome the possible losses like livestock depredation and crop damage by wild animals. Proper compensation policy through insurance or other means can greatly overcome such financial and conflict-induced conservation risks.

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