



Securing sustainable small-scale fisheries: sharing good practices from around the world





Rupa Lake and the Annapurna mountain range

©FAO/RUPA LAKE RESTORATION AND FISHERIES COOPERATIVE

Restoring Rupa lake fisheries and rural livelihoods through rights-based inclusive governance

Tek Bahadur Gurung

Nepal Agricultural Research Council, Nepal

Pashupati Chaudhary

Agriculture and Forestry University, Nepal

Kiran P. Bhatta

Faculty of Agriculture, Far Western University, Nepal

ABSTRACT

This paper presents a case study of the Rupa Lake watershed, where a bottom-up approach to fisheries management was adopted through the formation of the Rupa Lake Restoration and Fisheries Cooperative. The cooperative introduced a fisheries management system based on participation, engagement and inclusiveness that helped restore the lake and its fisheries. The system was designed to be inclusive and to distribute benefits among communities living both up- and downstream from the lake, thus helping ensure the necessary buy-in and behaviour change across diverse stakeholder groups. To collect data on cooperative's contribution to lake and fisheries restoration, and socio-economic changes in the area, we employed a range of social research methods such as Focus Group Discussion (FGD), Key Informant Surveys (KIS), Direct Observations and review of secondary information. At the core of the discussions we contextualized the human rights-based approach (HRBA) to development and Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries connecting Food Security and Poverty Eradication (SSF Guidelines). Results indicate that households were satisfied with the efforts of the cooperative in promoting lake restoration, increasing fishery production and fishing incomes, and in supporting development activities including education and loans to modernize traditional farming methods in catchment areas. A majority of respondents agreed that inclusive rights-based governance contributed to socio-economic improvements, implying that such an approach to sustainable development for fisheries can be applied elsewhere. The results also confirm that the HRBA and democratic practices adopted by the cooperative succeeded in engaging the people and ensuring the benefits were shared among them. In summary, the keys to success of the cooperative include inclusion and fair representation, empowerment of marginalized communities, transparent governance, and equity in benefit- and burden-sharing. However, some grievances were also reported by certain communities. Thus, potential conflict is likely in the future if proactive management and governance are not properly pursued.

1. INTRODUCTION

1.1 Rights-based approaches

The human rights-based approach (HRBA) to development is normatively based on international human rights standards and operationally directed at promoting and

protecting human rights. The objective of HRBA is to address the root causes of poverty, including discrimination, marginalization, exploitation and abuse, and to grapple with policy, regulatory and institutional frameworks to bring about systemic changes. As proclaimed by the United Nations in its 1948 Universal Declaration of Human Rights (UN, 1986), “All human beings are born free and equal in dignity and rights without any form of discrimination.” Human rights are values and moral principles or norms describing certain standards of human behaviour normally protected as natural and legal rights (Jonsson, 2003; Vandenhole and Gready, 2014; Nickel, 2017). According to Parlevliet (2010), human rights violations occur when state (or non-state) actors abuse, ignore or deny basic human rights in civil, political, cultural, social and economic life, generally leading to conflict, deprivation and poverty. Indeed poverty is one of the forms of injustice connected with the structural inequalities in Nepalese society, such as gender and caste divisions as well as the social system of the “untouchables” (Bennett, 2005). In this connection, inclusive development is a long-standing feature of the HRBA (UNDP, 2014; UN, 2015).

The rights-based concept also applies to the fisheries sector. Wild fish is a communal resource with multiple users and beneficiaries, and thus has the potential to cause conflict (FAO, 2016). The use of the term “rights” in a fisheries context has tended to imply fishing rights as part of rights-based fisheries management. Especially in the context of small-scale fisheries, more recent discussions have evolved to include a human rights perspective and the right to secure and just livelihoods, including social and economic rights as well as rights to related resources (such as land). Linking fishing rights and human rights reflects a move towards an approach more in line with the reality of the diverse livelihoods of small-scale fishing communities and the complexity of poverty. Within this concept of a broader rights approach, the importance of secure access to resources and tenure rights should be stressed. The FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) promote responsible management of fisheries and ecosystems, with benefits equally shared between small-scale fishers and fishworkers, both men and women. They also recognize the need to build strong organizations, including cooperatives. It is important to protect fishery resources, as they are important not only for fishing communities’ livelihoods (i.e. for income, food and employment), but also for their social and cultural well-being (FAO, 2016).

Studies are beginning to be carried out on human rights-based approaches to small-scale fisheries (Charles, 2011; Willman et al., 2017). However, there is not much published data available on inclusive and caste-based reservation systems in cooperative governance for restoration of lake fisheries. Béné (2003) has described the experience of Bangladesh with usage rights for natural water bodies, which are generally government property and often leased through auction to generate revenue. In these auctions, traditional or ordinary fishers can rarely afford to compete; hence licenses are often obtained by “water lords” – individuals with the resources to purchase licenses and who in turn hire fishers as day labourers. This practice results in traditional fishers being exploited by small groups of elites (Béné, 2003), thus increasing the gap between the rich and the poor, and undermining efforts to improve the livelihood of traditional fishers who depend on these resources.

This case study concerned the restoration of Rupa Lake in the Pokhara Valley, Nepal, and of its fisheries. The governance process included marginalized and impoverished traditional fishers (*Jalari* or *Pode*), women, local elites (*Brahmin* and *Chhetri*), the indigenous community known as *Janjati* (i.e. *Gurung*, *Magar*, *Newar* and *Gharti* ethnic castes), and the “untouchable” *Dalit* (*Sarki*, *Kami*, *Damai*). The *Dalit* in particular, according to Gurung (2005a), represent a socially ostracized, economically deprived and politically excluded Hindu caste in Nepal. The study looked at how inclusive governance can be possible when there is mutual understanding and support between

elite and marginalized groups. Chaudhary *et al.* (2015) have already documented how conflict between populations can be transformed into collaboration in managing lake fisheries through a rights-based approach. But how this process can also be seen through an HRBA perspective and include those living in catchment areas has not previously been described. Hence, building on previous work (Gurung, 2005b, 2007; TEEB, 2013; Chaudhary *et al.*, 2015), this paper outlines how the cooperative has been able to restore the rights of fishing communities. As it is also relevant to assess whether the cooperative still continues to be successful in maintaining collaboration and peaceful relations using HRBA (as mandated), we also analyse how it has charted human rights issues for benefit-sharing in harmony with upstream and downstream communities.

1.2 Social structure of Nepal

Nepal is a multiethnic, multilingual, heterogeneous society, with a powerful caste system that includes the social class of the untouchables (Bhattachan, Sunar and Bhattachan, 2009; Bennett, Dahal and Govindasamy, 2008; DFID, 2006; Gurung, 2005a). Those born into the upper castes are seen as having inherent leadership rights over the rest of the population. Although the country's constitution prohibits this kind of hereditary leadership hierarchy as well as caste-based discrimination, these practices still thrive (Pradhan and Shrestha, 2009; Gurung, 2009; ADB, 2010). As there is often competition in Nepal for control over its water resources such as lakes, rivers, streams and irrigation canals, power relations often play a critical role in decision-making and benefit-sharing processes (Bastakoti, Shivakoti and Lebel, 2010), with discrimination an important factor in how these play out. EU (2009) describes how victims of caste discrimination (especially the *Dalit*) have been customarily denied access to water, schools, health services, land, markets and employment. Other groups are similarly marginalized: Prasai (2016) categorizes six minorities based on their population numbers and on their access to governance processes, with women in particular being deprived politically, socially and financially, as well as being treated as weaker individuals. Moreover, in the past the state religion customarily discriminated against other religious groups in the country (Bennett, Dahal and Govindasamy, 2008; Dhakal, 2013).

These types of discrimination are a major obstacle for development, and have resulted in extreme poverty among the affected population. Indeed, several authors (Sharon and Emily, 2001; Rao, 2010; Mondal, 2014) cite caste-based discrimination as one of the strongest drivers of poverty. If appropriate measures are not taken to eradicate these forms of social discrimination, it is likely that poverty will continue generation after generation. Previously, poverty was attributed to low income, while development was mostly regarded as a function of economic growth. However, after a conceptual paradigm shift in the 1990s, poverty alleviation and development were henceforth associated with multidimensional improvement in people's ability to lead lives that they value (FAO, 2016).

Debates on issues of social exclusion and discrimination against *Dalit*, Muslim, *Madhesi* and several other minor castes have become more fervent since the democratic movement in the 1990s (ADB, 2010). Indeed, social exclusion is seen as one of the major factors fuelling Maoist conflict in Nepal (Upreti, 2006). According to the World Summit for Social Development (UN, 1995), an inclusive society is one in which "every individual, each with rights and responsibilities, has an active role to play". In this society, all members must be treated equally and with respect for all human rights, freedoms, and for the rule of law (UN, 2007; Avis, 2015). A useful tool for social inclusion is the reservation system found in the Nepalese Constitution, by which access to government jobs and higher education opportunities is "reserved" for marginalized minorities and other excluded communities. Thus, rights of reservation are conferred to women, indigenous minorities, and so-called untouchables, such as *Dalit*, *Jalari* and others (Upadhyay, 2011; Prasai, 2016).

1.3 Rights-based cooperatives: composition and governance

The Rupa Lake Restoration and Fisheries Cooperative was formed in 2001 on the initiative of the first author of this paper. The cooperative is legally registered in the Kaski district cooperative office, and came into full operation in 2002 under the co-management of the Pokhara Fisheries Research Station, itself of the Nepal Agricultural Research Council (Gurung, 2005b, 2007). After several rounds of stakeholder meetings, consultations and public hearings, a constitution was created to ensure the effectiveness of the restoration activities (Research Gate, 2018). According to this constitution, the president can be chosen from any ethnic group, but must be elected democratically. The constitution provides for vice-presidents to be nominated from either *Jalari* or *Dalit* communities. A quota is also reserved for one woman as vice-president. Similarly, two executive member posts are nominated from the *Jalari* community, one of whom must be a woman; all other remaining posts are to be elected (Gurung, 2007). For the *Jalari* communities, fishing is not only the source of their livelihood; it is also part of their tradition and culture. Ensuring their participation allows them to share their traditional fishing knowledge with elite communities.

At the beginning there were 36 household members in the cooperative, including the 11-member interim executive committee. These members contributed NPR 5 000 (USD 65) each for the initial establishment of the cooperative. The membership then increased to an impressive 444 in 2008 and to 746 in 2013, with approximately 40 percent women. Chaudhary *et al.* (2015) describes how, with support from the Local Initiative for Biodiversity, Research and Development (LI-BIRD), a Pokhara-based NGO, the cooperative established a mechanism to distribute benefits among upstream and downstream communities. LI-BIRD also provided capacity-building training, *inter alia*, in management, leadership, sustainable practices and biodiversity conservation as a part of ongoing projects in community-based biodiversity management.

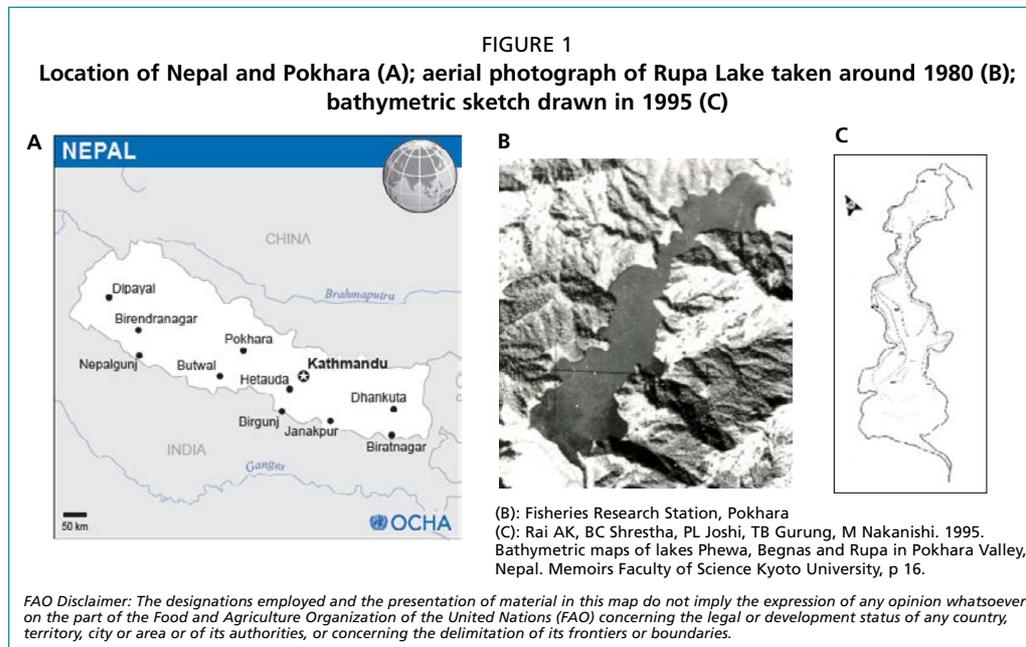
In 2008, the cooperative devised a policy of investing up to 25 percent of its annual net profit to projects in sustainable management of the upper Rupa Lake watershed. In 2012, it invested in the creation of a fish hatchery and six nursery ponds on the north bank of the lake to produce fingerlings for raising native fish. Furthermore, in 2013, the cooperative spent NPR 150 000 (USD 1 685) on watershed health activities, of which NPR 95 000 (USD 1 100) was invested in six Mothers' Groups and 17 Community Forestry Users' Groups (Chaudhary *et al.*, 2015). These efforts demonstrate how deteriorating lake ecosystems and fisheries can be restored and managed sustainably through collective efforts (Gurung, 2007; THT, 2017).

2. METHODOLOGY

2.1 Study site

Rupa Lake is a small, shallow lake situated in the Pokhara Valley in the central Himalayas at an elevation of 600 m (Figure 1). It currently has an area of around 100 ha with an average depth of 4 m; in 1972, it measured around 135 ha with a maximum depth of around 6 m (Ferro and Swar, 1978; Pillai and Swallows, 1980; Rai *et al.*, 1995; Gurung, 2007). The lake began to deteriorate considerably in the 1990s as a result of deforestation, sedimentation load, agricultural runoff and environmental pollution (Rai, 2000; Gurung, 2005b, 2007; THT, 2016). An existing subsistence cage fishery almost collapsed due to anoxic conditions resulting from excessive growth and decomposition of aquatic macrophytes (Rai, 2000; Gurung, 2005b, 2007; Rowland *et al.*, forthcoming). Since restoring the lake using modern equipment would have been a high-cost intervention, a low-cost bottom up approach was devised – establishment of a cooperative of local communities including traditional fishers, improving group governance, human capital and use of scientific knowledge (Gurung, 2005b). The cooperative attracted smallholder fishers and other farmers who had also been involved in a subsistence cage fishery begun by FAO in cooperation with the Government of Nepal (Pillai and Swallows, 1980). The

head office of the cooperative (formerly the Rupakot Village Development Committee) is located in the Pokhara-Lekhanath metropolis of Kaski District, on the southeastern bank of the lake. To some extent the cooperative structure resembles that of other community-based forest conservation programmes which have been highly successful in Nepal (Ojha, Persha and Chhatre, 2009).



2.2 Data collection methods

Surveys were carried out in the months of May and June 2017 to measure the contribution of inclusive rights-based governance to lake fisheries restoration, as well as the socio-economic impacts. Household surveys were administered to cooperative members in the form of a questionnaire. Information on the number of cooperative members, fish catch, markets, income and other socio-economic factors were obtained directly from the cooperative office and from members as well, using the participatory rural appraisal method as described by Mukharjee (1995). A one-day workshop was also organized to hear members' opinions on the success of the cooperative's restoration activities.

To gather data on compliance, violations and usage concerning different people's rights as mentioned in the cooperative's constitution, focus group discussions and key informant interviews were conducted with upstream and downstream communities of all castes, including both women and men; with local business people; and with government officers and cooperative management teams.

Household survey

The household survey was administered to 48 respondents of which 18.75 percent were women, 14.58 percent *Jalari*, 41.66 percent *Janjati*, 4.17 percent *Dalit* and 20.84 percent elites. The survey gathered the views and opinions of these communities on the performance of the cooperative, mainly in terms of governance, management and benefit-sharing.

Focus group discussions

The focus group discussions involved both upstream and downstream communities, including interviews with women, *Dalit* and *Janjati* members. It was important to learn the views of the upstream communities, as they could potentially play a greater role in protecting the lake from sedimentation, thus helping restore the lake and contributing to improved fish production. Similarly, it was important to understand the perspectives

of women, as they might have different views than the traditionally dominant male groups due to the unique problems they face. Such data would also be useful to throw light on a wide range of issues and paradigms: as the *Dalit*, *Janjati*, fisherfolk and the local business community have been traditionally linked and dependent on the lake for their livelihoods, any restrictions on accessing the lake might affect them directly.

Key informant interviews

The lake ecosystem in Nepal is often taken as a resource that is “common for all”, but used without consideration for its longevity – the so-called “the tragedy of commons” described by Hardin (1968). However, in this particular case we applied the concept of Leal (1996) which states that community-run fisheries might avoid this “tragedy” and improve environmental quality through markets. Because examining the perspectives of different stakeholders was essential, we conducted one-on-one interviews with the following respondents:

- Local business representatives (both former and current presidents of the Hotel and Restaurant Association in Lekhnath Municipality)
- Government representative: Ward Chair of Ward #31, Pokhara-Lekhnath Metropolitan City Office
- Incumbent President (Office Bearer) of the cooperative
- President of *Paurakhi Kalimati Sundaridada* Community Forestry Users’ Group, located upstream of Rupa Lake
- Office Bearer (executive committee member) of the cooperative (and also a *Janjati* woman)
- Representative of *Jalari* women fisherfolk
- Office staff (manager) of the cooperative

3. RESULTS AND DISCUSSION

The ethnic composition of members in the cooperative, its executive committee and its staff (Table 1) indicate how well the indigenous, *Dalit* and other marginalized communities have been included in lake restoration governance. After the cooperative took on governance responsibilities, it was important to know the perspectives of the affected marginalized communities; some of the findings were as follows.

3.1 Composition of Rupa cooperative

There are presently 756 members in the cooperative, consisting of men and women from *Brahmin*, *Chhetri* (elite), *Janjati*, *Dalit* and others. The proportions of women, *Janjati*, *Jalari*, *Dalit* and elites were 30.82 percent, 14.68 percent, 1.19 percent, 3.83 percent and 49.48 percent, respectively. An analysis of the composition of the executive committee revealed that *Janjati*, *Jalari* and *Dalit* were included as provisioned (Table 1). However, the total numbers of executive members fluctuated as per requirement.

TABLE 1
Composition of the Rupa cooperative executive committee over the years

Year	Ethnic groups				Gender	
	BCT	<i>Janjati</i>	<i>Jalari</i>	<i>Dalit</i>	Male	Female
2001/02–2004/05	6	3	1	1	9	2
2004/05–2006/07	5	4	1	1	9	2
2006/07–2009/10	8	5	0	0	11	2
2009/10–2011/12	10	4	0	1	11	4
2011/12–2014/15	6	8	0	1	11	4
2014/15–2017/18	8	5	2	0	13	2
2017/18–2019/20	8	5	2	0	12	3

*Committee members serve two-year terms.

The Rupa cooperative has given due priority to *Jalari* communities when hiring staff, in respect of their traditional rights to fishing in the lake. The representation analysis revealed that *Jalari* were duly considered for job opportunities in the first few years; since then, however, their number has decreased gradually while the number of *Janjati* has increased dramatically (Table 2). The key manager position was held by *Brahmin* and *Chhetri* elites; however, the leadership rotation may change later. The staff composition is summarized in Table 2.

TABLE 2
Composition of Rupa cooperative staff over the years

Year	BCT	Janjati	Jalari	Dalit	Male	Female
2002/03	2	3	2	2	9	0
2003/04	3	5	3	1	11	1
2004/05	3	5	3	1	11	1
2005/06	3	6	3	1	12	1
2006/07	3	5	3	1	11	1
2007/08	3	7	3	1	13	1
2008/09	6	8	2	1	16	1
2009/10	6	10	2	2	19	1
2010/11	6	10	2	2	19	1
2011/12	6	10	1	2	18	1
2012/13	6	10	1	2	18	1
2013/14	4	10	1	1	15	1
2014/15	5	10	1	1	14	3
2015/16	5	12	1	1	16	3
2016/17	4	13	1	2	16	4
2017/18	4	13	1	2	16	4

Note: BCT denotes *Brahmin*, *Chhetri* and other so-called "elite" groups.

3.2 Beneficiary satisfaction (intracommunity in downstream region)

Almost all the respondents of the household survey reported satisfaction with the governance of the cooperative, citing its transparency, regular general assembly meetings, fair decision-making, and timely benefit-sharing. Economic benefits were shared once a year, and all members received an equal amount irrespective of their position. Respondents were also satisfied with the positions reserved for women and for *Jalari*, *Dalit* and *Janjati* groups. They believed that the success of the lake restoration efforts was due in part to the competent work of the cooperative staff, as well as the transparent decision-making of the executive members and cooperative leadership. As a result of these efforts, the condition of the lake has improved significantly (Figure 2A, B), although further improvement is needed for it to be fully restored.

All the respondents stressed that in the future, the most important goals would be removal of sediment deposits from the lake bottom, promotion of lake-based tourism, and development of markets for local and indigenous household products in order to improve their livelihoods. When asked for their opinions on whether rights-based inclusive governance contributed to the success of lake fisheries restoration, 93.75 percent fully agreed, while 4.16 percent moderately agreed, and 2.08 percent thought there was no contribution. Every member of the executive committee responded that decision-making was done through a democratic process. Moreover, every year the cooperative holds an Annual General Meeting (AGM) where all of its members are invited to share their ideas, opinions, suggestions and queries. The committee is obliged to take into due consideration the feedback of all general members.

tenure they misinterpreted the constitution and allowed others to compete in the same post, and obviously I cannot compete with such powerful people who have money and influence. My age and health also do not allow me to aggressively seek votes from others in the election. I lost the election” (Jalari representative)

The *Jalari*, however, did acknowledge that prior to the restoration effort, the shrinking and sedimentation of the lake was rendering fishing almost impossible. They agreed that if the cooperative hadn't taken over lake management and governance, they would no longer have been able to fish in the lake.

Perspectives of women

As with *Jalari* members, one vice-presidential post and one executive committee member position are reserved for women. One additional quota is reserved for women from the *Jalari* community. Similar to *Jalari* representatives in the executive committee, women's contribution to decision-making is not very significant due to illiteracy.

3.3 Upstream–downstream conflict and mitigation measures

The cooperative distributes up to 25 percent of its revenue to upstream communities, schools, clubs, women's groups, community forest user groups and youth groups, as described by Chaudhary *et al.* (2015). However, as these upstream communities have seen the benefits being generated from the lake basin, they have begun to want to become a more integral part of the cooperative. In response to their demand for membership coverage, the cooperative opened a membership call. This subdued the conflict, but the process was time-consuming, and the new members complained about the exorbitantly high membership fee. The following statements were given by the upstream communities during focus group discussions.

“The membership fee is exorbitantly high and has been raised from NPR 5 000 to NPR 30 000, despite the fact that all founding members have already obtained a dividend worth more than what they invested.” (Upstream communities)

“To silence our voice, the cooperative provides us a meagre NPR 2 000 to 3 000 each year despite our large contribution to the lake. In fact, the lake is surviving because we planted trees in our hills, use pesticides at a minimum, and reduce erosion and sedimentation of the lake by constructing check dams etc. in our rivulets. But all this effort has not been well recognized in terms of sharing the benefits.” (Upstream communities)

3.4 Successful inclusive governance

The Rupa cooperative demonstrates how rights-based structural organization can lead to successful lake fisheries restoration (Figure 2A, B). It is evident that the various restoration activities have benefitted all cooperative members, as well as their families and others living both upstream and downstream, in various ways. Moreover, the cooperative also provides school children in upstream communities with scholarships regardless of caste, ethnicity or any other social category. This provision is particularly progressive because, as noted by Sharon and Emily (2001), in many areas benefits are confined to the community managing the lake resource.

The success of the inclusive governance of the cooperative presents an example of affirmative action towards promotion of minorities and women as provisioned in the Nepalese Constitution for proportional representation, reservation and secularism. Also, the legal framework of the Universal Declaration of Human Rights provides an important point of reference in efforts to promote social development and improve governance of fisheries (Ratner, Edward and Allison, 2014). Such provisions as illustrated in the SSF Guidelines (FAO, 2016) aim to alleviate inequality through

bottom-up, inclusive human rights approaches for stable and sustainable socio-economic progress.

The tolerance and understanding demonstrated by all ethnic communities in the cooperative is highly commendable (Tables 1 and 2). Such a participatory and inclusive approach could not have been possible without the understanding and support of the elite groups. For its part, the inclusion of the fishing community allowed fishers to share their technical skills in capturing fish, landing nets, handling fish, boating, etc. Without these skills, the cooperative would not have succeeded as rapidly. Studies in India have shown that the reservation model has been successful in reducing poverty (Prakash, 2012; Queen and Ingale, 2012; Mondal, 2014). The present cooperative approach could be used to save numerous deteriorating lakes, wetlands, rivers and estuaries elsewhere, especially those considered “common property”, and thus ensure the food and nutrition security and livelihoods of their fishing communities. The good practices that allowed the cooperative to succeed are discussed below.

3.5 Good practices

Inclusion and representation: The Rupa Lake cooperative ensured that marginalized communities who relied on the lake for their livelihood, such as the *Dalit* and indigenous peoples, would be included in fisheries restoration governance processes and in decision-making committees. Members from traditional fishing communities were also prioritized for employment in the cooperative.

Empowerment: Members from marginalized fishing communities have been empowered by engaging in lake and fisheries restoration governance and management activities. As a result, now these members are more knowledgeable about natural resource management, the impacts of climate change, and other issues that have serious impacts on their livelihoods. Staff members also feel more confident speaking to others during business transactions such as selling fish.

Transparency: The cooperative has adopted fair and transparent decision-making processes. The members can obtain information about management, loss and profits, and future planning during the AGM and in personal interactions with executive committee members. As the members are allowed to speak for and against different actions taken by the cooperative and their concerns are taken into account during the AGM, the decision-making and governance process can be rated as transparent.

Equity in benefit- and burden-sharing: Benefit-sharing is also highly fair, transparent and equitable: every household is entitled to one equal share of the dividends. The cooperative has included a large portion of the relevant community as general members, executive committee members, or staff. Upstream communities also receive benefits through the “up to 25 percent revenue sharing” mechanism. Equality of access is addressed by adopting various generous mechanisms to bring in members from marginalized communities, such as allowing them to pay their fees in instalments.

Good management and governance: The cooperative has a well-established management system, with appropriate rules, regulations and policies in place. The smooth functioning of the cooperative, without any problems or irregularities, can be credited to its good governance. Decision-making is also fair, and members from different communities are satisfied with their level of participation. Members not represented in the executive committee also have a say during the AGM, where they can raise any issues and questions to be addressed by the office bearers.

Resource leveraging and synergy: Government organizations such as the Pokhara Fisheries Research Station of the Nepal Agricultural Research Council, the District Cooperative Office in Kaski and Lekhnath Municipality, and the Village Development Committee have fully supported this initiative, seeing restoration of the lake as a priority of utmost importance. The cooperative has been able to leverage support and collaborate with various NGOs, INGOs, and private sector groups such as LI-BIRD, the International Union for Conservation of Nature, the World Wide Fund for Nature, the International Centre for Integrated Mountain Development, the Hotel Association Nepal, and the Federation of Nepalese Chamber of Commerce and Industries district chapter.

4. CONCLUSIONS

In general, the cooperative is doing very well in terms of restoring and cultivating human rights in the Rupa Lake surroundings. As noted by Chaudhary *et al.* (2015), it has been able to turn past conflicts between communities into collaboration. However, because certain human rights issues have yet to be duly considered, new challenges keep emerging. Thus, conflict may arise both between the upstream and downstream communities and also within the region. Moreover, efforts to further include women and marginalized members of the community will be an integral part of the overall success of the cooperative.

The expansion of boundaries to include more downstream communities is becoming an important issue. The requests for membership will keep increasing in the days to come as the revenue of the cooperative increases. Given that membership from marginalized communities has decreased in recent years, this might be a concern, as their representation will weaken. Furthermore, the concerns of women must be addressed more judiciously, as their current participation is more or less passive. Effort is needed to empower women further so that the system of rights-based governance can be said to be truly inclusive.

In order to achieve sustainable development and improve local livelihoods, governance mechanisms based on equal rights, non-discrimination and gender equity are essential. It is anticipated that with rights-based inclusive governance, the Rupa Lake cooperative will continue demonstrating to the world that a cooperative approach in line with the Universal Declaration of Human Rights is indeed capable of restoring deteriorated ecosystems.

ACKNOWLEDGEMENTS

We are indebted to the members and the executive committee of the Rupa Lake Restoration and Fisheries Cooperative for all their support in preparing this paper. Funding for the study was provided by the Food and Agriculture Organization of the United Nations. We would like to extend our gratitude to Dr Lena Westlund for her valuable comments and suggestions for improving this paper.

REFERENCES

- ADB (Asian Development Bank). 2010. *Overview of gender equality and social inclusion in Nepal*. Publication Stock No. RPS1026852010. Mandaluyong City, Philippines, p. 50 (also available at www.adb.org).
- Avis, W. 2015. *Evidence for the added value of an inclusive societies approach*. GSDRC Helpdesk Research Report 1234. Birmingham, UK, GSDRC, University of Birmingham.
- Bastakoti, R.C., Shivakoti, G.P. & Lebel, L. 2010. Local irrigation management institutions mediate changes driven by external policy and market pressures in Nepal and Thailand. *Environmental Management*, 46(3): 411–423.
- Béné, C. 2003. When fishery rhymes with poverty: a first step beyond the old paradigm on poverty in small-scale fisheries. *World Development*, 31(6): 949–975.

- Bennett, L.** 2005. Gender, caste and ethnic exclusion in Nepal: Following the policy process from analysis to action. Paper presented at the Arusha Conference, “New Frontiers of Social Policy”, World Bank (also available at <http://siteresources.worldbank.org/INTRANETSOCIALDEVELOPMENT/Resources/Bennett.rev.pdf>).
- Bennett, L., Dahal, D.R. & Govindasamy, P.** 2008. *Caste, Ethnic and Regional Identity in Nepal: Further Analysis of the 2006 Nepal Demographic and Health Survey*. Calverton, USA, Macro International Inc., p. 36.
- Bhattachan, K.B., Sunar, T.B. & Bhattachan, Y.K.** 2009. *Caste-Based Discrimination in Nepal*. Working Paper Series. New Delhi, Indian Institute of Dalit Studies, p. 59.
- Charles, A.** 2011. Human rights and fishery rights in small-scale fisheries management. In R.S. Pomeroy & N. Andrew, eds. *Small-scale fisheries management: frameworks and approaches for the developing world*, p. 59. CAB International.
- Chaudhary, P., Chhetri, N.B., Dorman, B., Gegg, T., Rana, R.B., Shrestha, M., Thapa, K., Lamsal, K. & Thapa, S.** 2015. Turning conflict into collaboration in managing commons: a case of Rupa Lake Watershed, Nepal. *International Journal of the Commons*, 9(2): 744–771.
- DFID (Department for International Development).** 2006. *Unequal citizens: gender, caste and ethnic exclusion in Nepal*. Working Paper, Report Number 37966, p. 44.
- Dhakal, D.** 2013. Analyzing Reservation Policies in Civil Service of Nepal. Paper presented to Professor Nobuhiro Hiwatari as a requirement for the course on International Political, Economy (Case Study) at GraSPP, the University of Tokyo (also available at www.pp.u-tokyo.ac.jp/graspp-old/courses/2013/documents/5140143_10a.pdf).
- EU.** 2009. *Caste-based discrimination in South Asia: situational overview, responses and ways forward*. Study commissioned by the European Commission to the International Dalit Solidarity Network (also available at www.idsn.org).
- FAO.** 2016. *Human rights-based approach to the implementation and monitoring of the SSF Guidelines*. Background paper, 24–26 October 2016, Mexico Room D211, Rome, FAO. 30 pp.
- Ferro, W. & Swar, D.B.** 1978. Bathymetric maps from three lakes of Pokhara valley, Nepal. *J. Inst Sc.*, 1:177–672.
- Gurung, H.** 2005a. The Dalit context. *Occasional Papers in Sociology and Anthropology*. <https://www.nepjol.info/index.php/OPSA/article/download/1133/1558>
- Gurung, O.** 2009. Social inclusion: policies and practices in Nepal. *Occasional Papers in Sociology and Anthropology*, 11:1–15. DOI: 10.3126/opsa.v11i0.3027
- Gurung, T.B.** 2005b. *Restoration initiatives of Rupa, a small hill lake through forming a cooperative: A suitable strategy for lake conservation in poverty-laden areas in developing countries?* 11th World Lakes Conference, Nairobi, Kenya. Proceedings Vol. 1, pp. 93–101.
- Gurung, T.B.** 2007. Restoration of small lakes through cooperative management: a suitable strategy for poverty-laden areas in developing countries? *Lakes and Reservoirs: Research and Management*, 12: 237–246.
- Hardin, G.** 1968. The tragedy of the commons. *Science, New Series*, 162(3859): 1243–1248.
- Jonsson, U.** 2003. *Human Rights Approaches to Development Programming*. UNICEF, p. 122.
- Leal, D.R.** 1996. *Community-Run Fisheries: Avoiding the “Tragedy of the Commons”*. *Improving environmental quality through markets*. PERC Policy Series Issue No. PS–7.
- Mondal, A.** 2014. Dalit reservation and the issue of social upliftment: an overview. *International Journal of Scientific and Research Publications*, 4(10) 1–5.
- Mukharjee, A.** 1995. *Participatory rural appraisal, methods and applications in rural planning*. New Delhi, Vikas Publishing House Pvt Ltd.
- Nickel, J.** 2017. Human rights. In E.N. Zalta, ed. *The Stanford encyclopedia of philosophy*, Spring 2017 Edition [online]. <https://plato.stanford.edu/archives/spr2017/entries/rights-human>
- Ojha, H., Persha, L. & Chhatre, A.** 2009. *Community Forestry in Nepal: a policy innovation for local livelihoods*. IFPRI Discussion Paper 00913.

- Parlevliet, M. 2010. Rethinking conflict transformation from a human rights perspective. In V. Dudouet & B. Schmelzle, eds. *Human rights and conflict transformation: the challenges of just peace*, pp. 15–46. Berghof Handbook Dialogue Series No. 9. Berlin, Berghof Conflict Research.
- Pillai, T.G. & Swallows, J.D. 1980. *Cage culture of fish in Nepal*. A report prepared for the Integrated Fisheries and Fish Culture Development Project. F1: DP/NEP/73/025, Field Document 8. Rome, FAO. 28 pp.
- Prakash, N. 2012. Political reservation in India: the effect on poverty. *Ideas for India* [online], 10 December 2012. http://www.ideasforindia.in/article.aspx?article_id=81
- Pradhan, R. & Shrestha, A. 2009. *Ethnic and Caste Diversity: Implications for Development*. NRM Working Paper No. 4. Kathmandu, ADB, p. 32.
- Prasai, D.R. 2016. Issues of reservation and affirmative action for minorities in Nepal: an anthropological review. *Himalayan Journal of Sociology & Anthropology*, Vol. 7.
- Queen, V. & Ingale, M.K. 2012. *Role of cooperatives in inclusive growth – comparative study of success of AMUL & Lijjat Papad in India*. Gedu College Of Business Studies, Gedu, Bhutan.
- Rai, A.K. 2000. Limnological characteristics of subtropical Lakes Phewa, Begnas and Rupa in Pokhara Valley, Nepal. *Limnology*, 1:1–13.
- Rai, A.K., Shrestha, B.C., Joshi, P.L., Gurung, T.B. & Nakanishi, M. 1995. Bathymetric maps of Lakes Phewa, Begnas and Rupa, Pokhara Valley, Nepal. *Mem. Fac. Sci. Kyoto Univ. Ser. Biol.*, 16(1): 49–54.
- Rao, J. 2010. The caste system: effects on poverty in India, Nepal and Sri Lanka. *Global Majority E-Journal*, 1(2): 97–106.
- Ratner, B.D., Edward, B.A. & Allison, H. 2014. Fishing for justice: human rights, development, and fisheries sector reform. *Global Environmental Challenge*, 27: 120–130.
- Research Gate. 2018. *Constitution of Rupa Lake Restoration and Fisheries Co-operative Association* (available at https://www.researchgate.net/publication/325525509_Constitution_of_Rupa_Lake_Restoration_and_Fisheries_Co-operative_Association).
- Rowland, R.F., Rebecca, L., North, P., McEachern, D., Obrecht, V., Gurung, T.B., Jones, S.B. & Jones, J.R. (forthcoming). Nutrient deficiencies vary with season in sub-tropical lakes of Nepal. *Hydrobiologia*.
- Sharon, S. & Emily, H. 2001. Who goes to school? Educational stratification by gender, caste, and ethnicity in Nepal. *Comparative Education Review*, 45(3): 354–378 (also available at <http://www.jstor.org/stable/10.1086/447676>).
- TEEB (The Economics of Ecosystems & Biodiversity). 2013. *Community-based lake restoration increases income from fisheries, Nepal* (available at teebweb.org).
- THT (The Himalayan Times). 2016. Rupa Lake at risk of extinction. *The Himalayan Times*, 31 July 2016 (also available at <https://thehimalayantimes.com/nepal/rupa-lake-risk-extinction/>).
- THT. 2017. Government to begin Rupa Lake conservation. *The Himalayan Times*, 2 January 2017 (also available at <https://thehimalayantimes.com/nepal/government-to-begin-rupa-lake-conservation/>).
- UN (United Nations). 1986. *Declaration on the Right to Development*, A/RES/41/128, 97th plenary meeting (also available at <http://www.un.org/documents/ga/res/41/a41r128.htm>).
- UN. 1995. *Copenhagen Declaration on Social Development*. World Summit for Social Development. A/CONF.166/9 (also available at http://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.166_9_Declaration.pdf).
- UN. 2007. *Final Report of the Expert Group Meeting on Creating an Inclusive Society: Practical Strategies to Promote Social Integration*, Division for Social Policy and Development United Nations Department of Economic and Social Affairs, p. 65.
- UN. 2015. *UN General Assembly: Transforming Our World: The 2030 Agenda for Sustainable Development*. UN Doc. A/RES/70/1, 21 October 2015.

- UNDP (United Nations Development Programme).** 2014. Inclusive Development. In: *UNDP* [online]. http://www.undp.org/content/undp/en/home/ourwork/povertyreduction/focus_areas/focus_inclusive_development.html
- Upadhyay, S.** 2011. Reservation: Understanding the Past, Present and Solutions. In: *Youth Ki Awaaz* [online]. <https://www.youthkiawaaz.com/2011/02/educational-reservations-india-solutions/>
- Upreti, B.** 2006. *Nepal's Armed Conflict: Security Implications for Development and Resource Governance*. Kathmandu, Swiss National Centre of Competence in Research (NCCR), p. 19.
- Vandenhole, W. & Gready, P.** 2014. Failures and successes of human rights-based approaches to development: towards a change perspective. *Nordic Journal of Human Rights*, 32(4): 291–311.
- Willman, R., Franz, N., Fuentesvilla, C., McInerney, T.F. & Westlund, L.** 2017. A human rights-based approach to securing small-scale fisheries: a quest for development as freedom. In S. Jentoft, R. Chuenpagdee, M.J. Barragán-Paladines & N. Franz, eds. *The Small-Scale Fisheries Guidelines: global implementation*, pp. 15–34. MARE Publication Series. Cham, Switzerland, Springer International Publishing.

This document explores good practices in support of sustainable small-scale fisheries and the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). It includes eight case studies from across the world and it is hoped that the experiences that these present will help inform policy and policy processes and, in this way, promote sustainable small-scale fisheries according to the SSF Guidelines and the human rights-based approach to development (HRBA).

ISBN 978-92-5-131260-5 ISSN 2070-7010



9 7 8 9 2 5 1 3 1 2 6 0 5

CA3041EN/1/02.19