

Co-management of Rangeland Resources in Hindu Kush–Himalayan Region: Involving Farmers in the Policy Process

Zhao-Li Yan

Abstract: When the majority of rural research and development fellows sparkplug putting farmers first by using participatory approaches, this paper reviews the author's personal experiences on the engagement in participatory information collection, participatory action research, and promoting co-management approach. The examples are mainly from rangeland resources management and pastoral development efforts in Hindu Kush-Himalayan Region that applies to the management of other commonly used natural resources too. The paper indicates that we should use participatory tools and participatory action research toward achieving end goals of sustainable development – gathering needed information and taking actions – rather than simply for the purpose of applying participatory approaches. The paper also points out the importance of engaging all concerned parties especially the community and government for equitable negotiation of the common goals, and the responsibilities, entitlements, benefits and actions of each party to co-manage rangeland resources. The emphasis is that outsider rural research and development experts must look at the whole picture and promote most effective trade-offs between conservation and development, rather than to deem self as the saver of local people by excluding local government.

Introduction

Rangeland covers more than 60% of the land terrace in Hindu Kush – Himalaya Region (HKH), which has been and will be mainly used for livestock grazing to support a large number of people and their livestock in the high mountains. The other uses of rangeland resources such as tourism development and herbal medicinal plants collection are bringing people more livelihood options too. Sustainable use of rangeland resources, however, is of paramount interest not only to the sustenance of local populations but also for the conservation of many rare and endangered flora and fauna species, water capture, carbon sequestration, climate stabilization and preservation of cultural and natural landscape.

Mountain communities which are entirely or mainly dependent on rangelands – these farmers have another name “pastoralists” – have been managing rangelands for thousands of years in HKH. Through this age-old association they have accumulated abundant indigenous knowledge of their environment and adaptive production systems. Ironically, the pastoralists are hardly heard in rangeland management decisions. Instead, contemporary policy-makers and some researchers often blame them for overgrazing and practicing “backward” production and living systems that cause severe rangeland degradation.

The fact is that many of the goods and services that the high mountain rangelands and pastures in HKH provide have uses by multiple stakeholders, as a result, the lack of efficient communication even

conflicts between stakeholders are not uncommon. Beside, the state governments in HKH generally have ownership rights of rangeland while the use rights belong to different groups especially the pastoralists. Rangeland and pasture management decisions made by people far away from pastoral communities in low lands are often found not the best for local people or environment. Furthermore, the uses of rangeland resources in HKH and their consequences go beyond national boundaries that need regionally coordinated efforts.

To address above issues, the intergovernmental organization ICIMOD – international Centre for Integrated Mountain Development – has begun its keen concern and dedicated efforts in promoting appropriate rangeland management and the regional exchange and sharing on rangelands from mid 1990s. ICIMOD's aim on rangeland piece is to develop and support a process for community based management of rangeland resources in the HKH, in cooperation with regional and international partners, which foster action and change for overcoming rangeland dependent mountain communities' economic, social and physical vulnerabilities.

As a Rangeland Specialist at ICIMOD, I was born and brought up in rural mountain area of the eastern Tibetan Plateau where I had very close relation to the nature and experienced difficulties of mountain people and the importance of natural resources to them. Consequently, I set up my goal to dedicate to the sustainable management of natural resources originally for my hometown but with a growing geographic and intellectual coverage of similar vulnerable places and the people depend on natural resources. I have worked with government department and pure academic research institute in China, and ICIMOD an intergovernmental organization.

This paper summarizes my experiences in seeking after the most effective way of managing natural resources in the Tibetan Plateau and HKH. It consists of a brief introduction of my engagement and perception in participatory approach, a main body of the introduction of co-management of rangeland resources in HKH, and a discussion on the debate of participation of farmers is obviously important but it is more important to promote political and legal environment to put farmers (pastoralists) first in the decision-making, implementation and reviewing process.

Participatory approaches to involve farmers

Primely, I was involved in a number of international aid projects in China that required application of participatory methods in 1990s. I understood and appreciated the idea of putting farmers and their knowledge first and learned to use PRA tools. I also joined the Southwest China PRA Network of which members from different provinces and various working-fields meet once a year to share experiences on applying participatory approaches and discuss practical improvements.

My initial experience on the application of participatory approach, like that of many other peer fellows, was to document local situation and traditional knowledge by using audiotapes and PRA tools. During that time, the diverse and rich information documented through participatory way made colleagues and me happy, but lot of information documented had indeed hardly been used for follow-up actions. In the Southwest China PRA network meetings, it was not uncommon to hear about complaints of the waste of resources and documented information and time consuming of applying PRA tools.

We – it was all a learning process for me and colleagues together – then realized that we had used PRA tools only for the use of the tools mostly because of the projects required so, but we should rather document information for certain objectives by using most relevant PRA tools. We also realized that the results from participatory documentation must contribute to well involving community participation in research and development efforts. After having been aware of the true essence of participatory approach, we further learned and started to apply participatory action research (PAR) in the research projects whenever possible.

Through PAR approach, we researchers moderate communities to gather information, analyze situation, discuss strategies and monitor action process in a participatory way. As a result, communities incorporate development and conservation theories and introduced technologies with their own existing knowledge and practices of best uses. We can share here three successful cases of using PAR to promote local innovations, mainly from the implementation of ICIMOD's regional rangeland programme (RRP) and field surveys to identify adaptable successful stories in managing common natural resources for sustainable development.

One example was from Upper Mustang of Nepal on the initiation of collecting and planting indigenous forage species. Upper Mustang belongs generally to the cold desert ecological zone where livestock faces severe winter feedstuff shortage. RRP introduced 16 exotic fodder and forage species to Upper Mustang for hay-making, of which several could produce seeds and had impressive productivity in irrigated hay meadow center. Two years later, the project staff distributed seeds to 48 households upon requirement. After organizing more farmers to visit the hay meadow centre and to discuss how to overcome winter feedstuff shortage, many of the farmers suggested collecting and planting seeds of indigenous species for they are much easier to manage. In the third year, the farmers collected 50 kg seeds of one grass and one legume local forage species for plantation and seeds multiplication. Similarly, researchers and farmers together in Balochistan Province of Pakistan selected and planted drought-tolerant local fodder scrub species in degraded dry lands for environmental restoration.

Another highlight of using PAR approach could be applying prescribed burning-control in Paro District of Bhutan. The government of Bhutan has promulgated burning ban on rangelands for environmental conservation since late 1960s. After three decades of burning ban, however, RRP project staff heard lot of complaints from farmers on the invasion of thorny shrubs and loss of palatable species on previous good grazing lands where they used to practice fire management. Together with farmers, researchers collected information on unwanted vegetation change on rangelands and they eventually convinced government authorities to approve setting up prescribed-burning trials. Researchers collected second year vegetation data from fire management trials in autumn 2007 with very encouraging results, which could be used to advocate for policy changes.

Co-management for enhanced livelihood and conservation

While working with communities on needs analysis and coming up with in point solutions, we have realized profoundly the importance of letting decision-makers to put farmers first in the whole process of decision making, implementation and revision. In the management of commonly shared natural

resources such as rangelands, good policy can actually play a very important role but it is still missing in HKH and many other parts of developing countries. Therefore, we initiate and promote adoption of co-management of rangeland and other commonly used natural resources in policy and practice for getting trade-offs between rural development and conservation.

Co-management of rangelands involves multi-stakeholders for the multiple uses of rangeland resources, which has different contents and varies in forms when implemented in different levels and places. Some of rangeland co-management practices below were mostly initiated by the pastoralists themselves and some by aid/research projects or local government. Regardless of their origin, we document the process and forms of co-management with some analysis.

In its primary form, an example of rangeland co-management is from Zoige County of Sichuan Province, China. China's rangeland ownership belongs to the state government, and the national policy encourage (Grassland Law 1985 and its revision in 2002) to allocate rangeland use rights to individual households or least contract unit for long term lease. Reer (Upper and Lower) Villages of Zoige County decided to keep summer pastures on the mountain behind their winter settlements for common use but to allocate a long patch of other three-season pastures to individual households so that every household got equally all types of rangelands stretching from east to west. The result was that one household got only a patch of tens of meters wide (depends on number of family members) but thousands of meters long (about the same length for all households) pasture. It was hardly possible for the villagers to manage their rangeland individually in a long narrow piece of land. Therefore, they agreed to manage rangeland at village level and formulated together regulations on how to guide their grazing actions. This case of rangeland co-management within community is to adapt to the changed legal environment.

Rangeland co-management is also for community regulation and conflicts resolution. For example, there used to be commonly agreed winter-spring and summer-autumn pastures in VDCs (Village Development Councils) of Upper Mustang District of Nepal, but people started off season grazing when forage shortage became acute. The disordered use of seasonal rangelands led to shaper feedstuff shortage especially during winter and spring, and also increased conflicts between households and VDCs. We thus supported formation and function of Pasture Management Sub-Committee (PMSC) at VDC levels. The PMSCs built participatory three dimensional (P-3D) model under our project support and brought villagers to define together boundaries between VDCs and seasonal pastures on the P-3D. The villagers designated PMSC to stop any activities against their commonly agreed regulations.

Co-management plays also a vital role in alleviating poverty. In sparsely populated Chiang Tang Plateau in north Tibet Autonomous Region (TAR) of China, the elevation is over 4600 meters above sea level and local people depend solely or largely on livestock grazing. Shortly after previous communally owned livestock was allocated to individual households, a large number of pastoral families lost their livestock – means of living – and became poor due to lack of livestock managing skills, unsuccessful trade or natural disasters. Nima County government first initiated the co-management in Jiagu Township by gathering all 39 poor households from three villages to form one special production group. Out of the 39 households, 38 lived as beggars at that time. The government subsidized 16 sheep unit to per person and the rich families lent also livestock to the poor families who could return the same structure and number of livestock five years later. Each household then pooled their livestock and labour force as

shares for co-management. After rangeland has been privatized, they added individually contracted rangeland also into their own shares in 2002. They had agreement on production, benefit sharing, security and some other issues. In 2006, there were no more beggars in the group of 62 households of which per person owned averagely 38 sheep unit (local norm indicates a poverty line of 30 sheep unit per person). Similar arrangements are now common in northern TAR.

Co-management can also enhance environmental conservation without sacrificing livelihoods. In Upper Mustang of Nepal, our researchers and herders recorded seasonal livestock migrating routes and active spots of snow leopard and Tibetan gazelle. The researchers then mapped seasonal hot spot of the overlaps of livestock and wildlife by using geo-informatics analysis. Therefore, the researchers and community together discussed and decided to change grazing routes to avoid overlap in same places at the same time so that to reduce livestock predation and better conserve wildlife. Nima County of Tibet, China falls completely into Chiang Tang National Preserve, where the population of wild ass (Kiang) has kept sharp increase over last decade since the establishment of the national reserve. It is good to have increased population of wild ass, but they stay in groups of hundreds and eat up forages on winter pastures when people and livestock move to summer pastures. Wild ass groups also run a lot which tramps and destroys the vegetation. The county government and herders invested 70:30 respectively to build fences around some vital winter pastures but still leave sufficient places for wild ass. As a result, the conflicts between wild ass and livelihood have significantly reduced according to our recent visit to Nima in October 2007.

Discussion

Participatory approaches have no doubt allowing rural development and research workers to put farmers first in needs (situation) analysis and coming up with in point solutions. However, it is still common to hear some rural research and development staff spending much time and efforts in applying PRA tools in project areas without much flexibility or follow-up actions. I would like to emphasize here that participatory approach is not only information and data gathering by applying PRA tools, and that participatory approach itself should encourage local innovation and participation of all concerned parties so that to contribute to sustainable development.

Similarly, participatory action research is an interactive mechanism, which assures rural R&D receiving adequate involvement of farmers throughout project development, implementation, and monitoring and evaluation stages, only when it is properly understood and used. Researchers especially some of those from developed countries, however, often have the misperception of that they are the main strength or “the only aware intelligence” who place farmers first in implementing research and development projects. Such type of professionals typically applies participatory theories in a mechanical mode but tends to forget the end goal of development and thus fail in engaging most effective way toward sustainability.

Sustainable rural development and management of commonly used natural resources also require political and legal encouraging environment to put farmers first for long-term systematic and organized actions. This falls into the philosophy of co-management or collaborative management of common pool natural resources, which we have just introduced some examples of various types and their roles in the above section of this paper. Otherwise, only research and development staff efforts of putting farmers

first may not really work in many cases. For instance, there are more than two hundred international organizations and over three thousand local non-governmental organizations working in natural resource rich county of Nepal, but the country still remains one of the poorest countries in the world after decades of aid projects. On the contrary, China has a strict top-down decision-making and implementation system, but she has managed to alleviate poverty of hundreds of million people in last three to four decades.

Co-management of natural resources involves communities, governments and all other key stakeholders. It is worthwhile to flag out that co-management is not only participation of all concerned parties, but all the relevant parties come together on equitable base to negotiate amongst themselves for each of their benefits, responsibilities and roles in managing set of resources or lands toward their collectively agreed goal. Each party has to defend for their own interest/mandate and play one part in the whole team and process. In Bhutan, for example, rangeland used to belong to the state government but its use rights was permitted to individual households, communities and monk bodies which was ambiguous yet not equitably distributed. As a result, the government decided in 2007 to nationalize rangeland so that to have a clear mapping and inventory of all rangeland resources for equitable redistribution and appropriate management.

My main argument of this paper is therefore to indicate the new challenge of putting farmers first is to change the mindset of governmental officials for their sufficient involvement of farmers in the never ending policy process – formulation, implementation and revision. Some Chinese people in remote mountain areas say that the central government policy is the gold when it is formulated but becomes a stone when implemented in remote mountains. This implies the need of flexible and adaptable interpretation and implementation of the policy according to environmental and cultural settings, which is difficult when the policy implementers do not really understand policy intention or local situation. When I interviewed local governmental officials who had encouraged co-management of rangeland resources and livestock production in Tibet of China for the reasons of doing so while the central government actually intended to privatize those production means, their answer was simply to solve the locally practical problems and eradicate poverty. They said the real intention of policy-makers must be also the same so that they had adjusted the implementation of policies to make them more effective in their location.

Co-management itself is a process of learning by doing and its forms can vary from a place or one time to another. The essence of promoting co-management approach is to bring all concerned parties together to let them realize the need of collaborative actions and facilitate them for equitable negotiation. To proceed co-management of natural resources, we have got to build capacity of all parties especially to build up the confidence of farmers to defend for their needs and interests, and to advocate for policy change (include the policy process and attitudes of policy-makers and implementers) that might be the key to sustainability.

Research and development staff from outside sometimes think themselves as the savior to an area and its people when they come to one place with project(s), but this in reality can be hardly true. We always hear communities in HKH express their request to government instead of NGOs to solve the fundamental problems in countries where there are strong governmental presence such as China, or

even in countries where governmental capacity and working system are yet to be strengthened such as Afghanistan, in who propels and Needs lot of study of local culture and even politics. Therefore, we must review the local situation with objective eyes on what really work in that area and rethink of our approaches if we aim for sustainable development that goes beyond simply putting farmers first in information collection or certain project activities.

In this context, fostering good leadership within both community and government that concerns local people and environment are extremely important. I have found in many cases locally grown-ups who speak the language and are familiar with the culture are much better than outsiders to moderate negotiations of multiple stakeholders.

Zhao-Li Yan has a PhD on restoration ecology and she is dedicated to promoting co-management of natural resources in HKH and beyond. She works currently as Rangelands Specialist for the International Centre for Integrated Mountain Development (ICIMOD) and an Assistant Professor for Chengdu Institute of Biology, Chinese Academy of Sciences. Zhao-Li Yan has published more 20 papers mainly on rangeland management and pastoral development in the Tibetan Plateau and Himalayan region.