Chure Conservation Area:

Lessons for the Management and Use of Natural and Biological Resources in Nepal







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Preface

This is a study of the Chure Conservation Area where conflicts have arisen between the government authorities and local communities over the issue of who will manage and use the natural and biological resources of the region. Expressing its deep concerns over the rapid degradation and misuse of the resources of the Chure Region, the government has taken a bold initiative to form and mobilize a centrally-governed high-level committee for the conservation of the area. However, local communities—represented by the local community forest user groups—have been opposing the government's plan to promote the conservation and use of resources through the mobilization of the high-level government committee. They call it a regressive path and advocate that the government's action is not in accordance with the principles and objectives of the international treaties and conventions of which Nepal remains an active member.

In this backdrop, this study—which also includes an analysis of the views expressed by stakeholders during interviews and focus groups discussions presents a case of the status of plans, policies and laws of the country that significantly impact the conservation and use of natural and biological resources of the region. The study also presents a brief analysis of the related international agreements that shape Nepal's policies and laws for the conservation of natural and biological resources and the protection of the rights of local communities. This study offers a broad overview of how the management of natural and biological resources has always been an area of concern and debate among scholars, policymakers and development practitioners. Before presenting the case of the Chure Region, the study discusses different property regimes for resource management, such as state property, private property and common property. The idea is to develop some clarity around the options for the management and use of natural and biological resources. One of the recommendations of the study is that the conflicts over the management of the Chure Region cannot be addressed without building trust and cooperation between and among government authorities and local communities. Another recommendation is to build the capacity of local communities by recognizing their rights in relation to the management and use of resources.

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Chairman

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Abreviation

CBD : Convention on Biological Diversity

CFUC : Community Forest Users Committee

CFUC : Community Forest Users Committees

CSRC: Community Self-Reliance Centre

DADO: District Agriculture Development Office

DDC: District Development Committee

DFO: District Forest Office

DFRS: Department of Forest Research and Survey

DIPROSC: Development Project Service Centre

DRO: District Road Office

DSCO: District Soil Conservation Office

FECOFUN: Federation of Community Forestry Users, Nepal

FGD: Focus Group Discussion

DFRS: Department Forest Research Survey

GM : Genetic Modification
GoN : Government of Nepal

I/NGOs : International Non-Government Organisation

ILO: International Labour Organisation

ITPGRFA: International Treaty on Plant Genetic Resources for Food and

Agriculture

MLS : Multilateral System

MoAC : Ministry of Agriculture and Cooperatives

NGO: Non-Government Organisation

PCTMCDC: President ChureTaraiMadhesh Conservation and Development

Committee

PGRFA: Plant Genetic Resources for Food and Agriculture

PIC : Prior Informed Consent SGS : Sand, Gravels and Stones

TK : Traditional Knowledge (Not sure)

VDC : Village Development Committee



Table of Contents

AcknowledgementsError! Bookmark not defined.
Abreviationiii
CHAPTER 1
Introduction1
1.1 About Chure
1.2 Chure's Challenges as a Hotspot of Biological Diversity
1.3 Rastrapati Chure Tarai Madhesh Conservation Development Committee 4
1.4 Conflicts over the Management and use of the Resources of Chure
1.5 Focus of the Study6
CHAPTER 2
Natural and Biological Resources, Property Regimes and international
Agreements7
2.1 Property Regimes
2.2 Community Rights for Resource Manamgent in International Agreements 9
2.2.1 ILO 169
2.2.2 Convention on Biological Diversity (CBD)
2.2.3 International Treaty on Plant Genetic Resources for Food and Agriculture
(ITPGRFA)
CHAPTER 3
Nepal's Plans, Policies and Laws to Manage Natural and Biological
Resources14
3.1 Development Plans
3.2 Policy Measures for Natural and Biological Resources
3.3 Legal measures for Natural and Biological Resources
CHAPTER 4
Stakeholders' Perception about the Management of Natural and
Biological Resources in Chure23

4.1 Selection of Methods and Sites
4.2 Key Trends and Practices
4.3 The Chure Crisis
4.3.1 Government Intervention
4.3.2 Market Intervention
4.4 Activities of Government Line Agencies with Regard to Implementation of
Treaties
4.5 Community Efforts in the Management of Nearby Natural Resources
4.6 Stakeholders' Participation In Decision Making Process
CHAPTER 5 Way Forward44
Reference49
List of Tables
Table 1.1: Distribution of land and population in the Chure and Tarai areas 2
Table 2.1: Forms of Property Rights on Natural Resources
Table 4. 1: Area, households and population of Chure areas in the selected
districts

CHAPTER 1

Introduction

1.1 About Chure

Chure is a young mountain range situated between the Mahabharat Range in the north and the Tarai plains in the south. The range is mostly a long single file of a low hill that runs continuously from Indus River in Pakistan in the west throughout the length of Nepal until it reaches Bramhaputra River in India in the east. Chure Range is also known as the Siwalik Hills. This range was formed by sediments deposited during the origination of the Himalayas 40 million years ago. The range covers about 12.8 per cent of Nepal's total land area (18,860 sq km) and touches 36 districts. It has varied elevations ranging from 200 meters above sea level to nearly 2,000 meters 1.

The range is sculptured heavily by fluvial erosion. Its mountain is made up of geologically young sedimentary rocks such as mudstones, shale, sandstones, siltstones and conglomerates (Paudel: 2011). Auden (1935) classifies it into three layers: the Lower Siwalik, Middle Siwalik, and Upper Siwalik. Because of its young age, sloped incline and loose lithology, the conglomerates and sandstones are easily erodible. So, the range—which is already experiencing the highest precipitation rate in Nepal —has become more vulnerable due to the possibility of unpredictable rainfall and devastating floods caused by climate change. In addition, Pokharel (2013) adds that deforestation, unplanned road construction and cultivation on steep slopes, among others, have further made the region fragile. So, it is argued that rivers passing through the Chure are contributing to gradually desertify Chure, Bhawar and Tarai regions. There are a number of inner valleys adjoining this range of hills that have a long history of settlement. Kamala, Chitawan, Dang and Surkhet are some of them. These valleys are the traditional homeland of the Danuwar community—one of the indigenous tribal communities in Nepal (Khatry: 1995). In the ancient times, they were involved primarily in agriculture and

http://rccp.gov.np/ accesed on 8 September 2015.

Bhawar region is a buffer area which separates the tarai from Chure/Siwalik region. Though it is very thin regarding its width, the bhawar region sediments the sand and boulders as well as the mud, came from the northern part during rainy/flood season.

fishery for livelihood. In those times, river bank areas were cultivated for food production and nearby rivers and ponds were visited for fishery. The remaining parts were covered with dense forest. Right now, about 60 per cent of the Chure is covered with dense forest, about 23 per cent of the nation's forest cover (DFRS: 2015).

1.2 Chure's Challenges as a Hotspot of Biological Diversity

Chure is considered a hotspot of biological diversity and home for many wildlife. FRA/DFRS (2014) mentions that a total of 666 different species of flora (240 trees, 144 shrubs, 187 herbs, 70 climbers, 22 ferns and three epiphytes)—including 305 species having medicinal values—are available in Chure Region. The region also serves to recharge the ground water for the lower plains. Out of twenty, six protected areas—such as national parks and wild life reserves—are situated in Chure and Tarai regions. Those protected areas are instrumental for conservation of wildlife and plants. The region has become home for about 14 per cent of the country's total population (FRA/DFRS: 2014).

Table 1.1: Distribution of land and population in the Chure and Tarai areas

Region	Area	As % of total area	Population
Chure hill	1,348,955	34.4	
Narrow gorge	88,077	2.2	1,792,082
Inner valley	330,868	8.4	1,324,043
Bhawar region	584,581	14.9	28,676,680
Tarai	1,571,075	40	8,559,703
Total	3,923,557	100	14543509

Source: chureboard.gov.np

It is argued that deforestation began in this region after the enactment of Land Tax Act of 1977. The Act defines forested land as government property enabling the government to undertake strategies to use forest resources for revenues (FRA/DFRS: 2014). The deforestation further accelerated after there was increased migration of people following the eradication of malaria in the region and construction of the East-West Highway (Bhatta et al., 2007). In addition, in different periods, the government distributed a significant size of forest land for various causes—such as to accommodate the people of Nepali

origin returning from Myanmar or to solve the problem of landlessness³. Despite many government initiatives—such as declaration of protected areas and buffer zones, promotion of community forestry— forest encroachments and forest fires have not stopped thus far.

In-migration has been a regular phenomenon in the Chure for many decades. So, both population and development activities have been increasing there causing rapid urbanization of the region. At, present, the region hosts 30 municipalities and 355 VDCs⁴ indicating the possibility of further squeeze of the Chure resources- deforestation, extraction of water and construction materials- in the future.

The Chure and its surroundings are considered to be home for immigrants and people of mixed ethnicities. CSRC:2007, based on a survey of six districts, revealed that people immigrated to this area from 30 districts. Among them, about 67 per cent and 17 per cent of the people are Janajatis (including the Danuwar community) and Dalits respectively (CSRC: 2007). Agriculture is the main source of employment of the people living in the Chure. But, only about 14 per cent of the total land area is cultivable. Here, the average land ownership is about 0.3 hectares. People mostly practice subsistence farming-largely food crop farming and animal husbandry (Paudel: 2011). The main crops being cultivated are paddy, maize, millet, wheat, mustard and the like. Regarding seed use practices, the traditional system of seed storage, reuse and exchange is prevalent. However, the use of modern and hybrid seed is also increasing.

The region is one of the main sources of construction materials. A study suggests that the region supplies such materials (particularly, sand, gravels and stones (SGS)) to the tune of 6.5 million cubic meters per year, legally. Illegal extraction is estimated to be twice as that amount 5. With the enactment of Local Self Governance Act in 1999, DDCs acquired the rights to sell the sand and stones, among others, as a way to mobilize resources. The

Conflict between state and landless people is an unfinished agenda since the settlement started in Chure region. Land mapping and survey programme conducted in different periods and construction of east west highway invited more people in the region. As a consequence, number of landless people increased in this region.

PCTMCDB (2015). Chure Conservation Area (An atlas of 36 districts). Lalitpur: president Chure-Tarai Madhesh Conservation Development Board, Government of Nepal.

http://rccp.gov.np/ accesed on 8 September 2015.

share of internal revenue of those bodies in the SGS category has climbed up remarkably after that. Moreover, excessive extraction of such materials is encouraged by the rapid infrastructural growth and construction of buildings and roads in the nearby states of India as well. To illustrate this, a study suggests that districts such as Makawanpur and Bara are exporting 90 per cent of the processed gravel and sand to the adjoining states of India, namely, Bihar, Uttar Pradesh and West Bengal. However, in order to check the haphazard excavation of SGS, Nepal banned the export of sand and stones for 100 days and issued a procedure to regulate such exports in 2009/10. Various cabinet decisions were taken in 2013 to limit the geographical areas for crusher industries to be set up In spite of that, illegal exports of those materials to India still take place through a number of routes. As a consequence, the region is becoming more fragile by the day.

To conclude, the region is facing various troubles. The increasing incidences of unpredictable rainfall and flash floods are not helping any. Population growth and human encroachment in forest and river areas; unscientific land distribution and the existence of a large number of landless people; and rapid construction and excessive extraction of SGS have resulted in a grave situation in the Chure. These factors are responsible for the erosion of biological diversity, desertification of the Chure and lower areas and increasing threats to people's access to food and water.

1.3 Rastrapati Chure Tarai Madhesh Conservation Development Committee

Conservation of Chure Region has been discussed since the Fourth Five Year Plan (1970-75). Earlier discussions were confined to protecting forest areas and managing watersheds. However, concerns with regard to the misappropriation of the region as a whole came to the fore when the first president of Republic of Nepal, Dr. Ram Baran Yadav showed his worries about the impact of Chure's destruction on the Tarai. His concerns were mainly on the increasing incidents of draught and devastating floods in, and gradual desertification of, the lowland areas. This led Government of Nepal to

http://nepalitimes.com/news.php?id=17080#.V0WKWDV97IV accessed on 4 July 2015.

http://moc.gov.np/uploads/27Stone%202.pdf accessed on 4 July 2015.

http://kathmandupost.ekantipur.com/news/2014-05-21/fncci-sides-with-agitating-crusherindustries.html accesed on 4 July 2015.

launch "Rastrapati Chure Tarai Madhesh Conservation Programme" in 2010. However, the stakeholders, such as forest user groups and ethnic communities have criticized the programme on various grounds.

The new government formed after the second Constituent Assembly election of 2013 realized that the degradation of Chure was multifaceted in nature. Therefore, it required a political intervention and an integrated approach to tackle the problems effectively. To this end, the government declared the entire Chure Region as a conservation area according to the Environment Protection Act, 1996. A high-level "President Chure-Tarai Madhesh Conservation Development Committee" (PCTMCDC) was formed in 2014. As per the mandate of the Development Committee Act, 1956, the committee was to oversee and coordinate the management, utilization and conservation of the Chure resources in an integrated manner.

The PCTMCDC constitutes a state-minister level chairperson and five members. They are appointed by the government for five years. A joint secretary of the government is designated its member secretary. The roles of the committee include formulation of policy and strategy for the protection and management of the Chure area; development and implemention of the management action plan by way of establishing relationships between Chure proper and the adjacent parts; identification of risky and sensitive areas and making plans for their protection; and maintaining the required coordination with concerned bodies and organizations. In order to perform the entrusted duties, the committee has a set of officials at the central level. It has also established five cluster offices at the local level across the country. For coordination and facilitation of the activities, various GoN line agencies have been listed as partner organizations. Though the master plan of Chure conservation is still being prepared, the current focus is on the embankment of selected rivers, tree plantation and the expansion of income opportunities for the poor section of the people living in the Chure area.

1.4Conflicts over the Management and use of the Resources of Chure

The government decision to declare the Chure Conservation Area and form a centrally-governed PCTMCDC has been highly criticized. About 20 civil society organizations representing various communities have initiated a forum to oppose the decision. One of the stakeholders, the Federation of Community

Forestry Users, Nepal (FECOFUN), argues that community forestry is the best means for conserving forests⁹. It accuses the government of taking a mildly regressive path¹⁰ by trying to squeeze the stakeholders' rights without consulting them¹¹. The government did so by highlighting the ill deeds of some community forest users committees (CFUCs), it says. It is also argued that the government decisions have completely ignored the association of the indigenous communities with the Chure, their traditional homeland. The contribution of these communities in its conservation and the livelihood of the landless people living in the region are said to have been disregarded. Moreover, the government is said to have violated many international commitments, such as ensuring participation and taking consent of such communities while making such decisions¹².

1.5 Focus of the Study

This study's main focus is on the conflicts that have arisen between the government and local communities. With a case study that builds on the analysis of the views and perception of stakeholders, the study seeks to identify and assess the dynamics of the ownership, management and use of natural and biological resources in Nepal. The study attempts to explore the local people's traditional association with the Chure and understand how various interventions made in the past decades are changing such relationships. The study presents an analysis of the past and present plans, policies and laws that Nepal has implemented in view of the management and use of natural and biological resources, including for the Chure Region. The study also includes an analysis of the international agreements that Nepal has ratified for the protection of the rights of the local people in relation to the management of natural and biological resources.

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⁹ http://ennnepal.com/en/2014/06/18/fecofun-concern-over-formation-od-chure-conservationcommittee/ Accesed on 14 August 2015.

¹⁰ http://www.myrepublica.com/portal/index.php?action=news_details&news_id=78604_14 August 2015.

¹¹ http://fecofun.org.np/pressrelease.php 14 August 2015.

¹² Facebook page of Community Forestry Users, Nepal (fecofun) 14 August 2015.

CHAPTER 2

Natural and Biological Resources, Property Regimes and international Agreements

2.1 Property Regimes

Natural and biological resources are often claimed as a property that can be owned with a set of property rights. John Locke, through his *Two Treatises of Government*, in 1690, revealed that the property and property rights had existed prior to the evolution of government. The English Parliament enacted the *Parliamentary Enclosures* in early 16th century to institutionalize property rights. It is argued that, in course of time, it is such legal steps that allowed private rights over land which resulted in the conversion of a lot of public property into private property¹³.

However, Henry Sumner Maine says that the concept of property in ancient times was primarily the occupation of land by a single proprietor and his family (Grossi: 1981)¹⁴. But, other forms of property regime could exist during that period on the European continent. To illustrate, in South Western Germany, peasants were de facto owners of their farms. Common pastures were granted to them to enjoy their defined use. They had similar rights over forests as well. In the East of the Elbe, in contrast, peasants had weak property rights over their farms. They had the usage rights over the commons. The property regimes then were confined to natural resources, such as land, water, minerals etc. The issues at the centre were: who decides and who manages the resources and who gets the benefits out of their utilization.

Many scholars have defined property rights their own way. Guerin's definition is considered the most comprehensive compared to others. He argues that

http://wealthofthecommons.org/essay/commons-%E2%80%93-historical-concept-propertyrights accessed on 11 September 2015.

¹⁴ Grossi, Paolo (1981). An Alternative to Private Property; Collective Property in the Juridical Consciousness of the Nineteenth Century. Chicago: University of Chicago Press

property rights constitute rights to use, possess and dispose the property. Under the right to use component, a property holder has the right to access (enter into) the property area and withdraw (take) the unit of property. The right to possess constitutes management and excludability rights, that is, only the property right holder can decide how the resource is managed and who is allowed to access it and who not. Finally, the right to dispose the property is the capacity of the right holder to sell or transfer the right to another 15. Thus, strong property rights constitute the right to use the property, earn from it, exclude others from using it and transfer the right to others. Ostrom, explains, in the table below, derived from Ostrom and Schladger, that the more the conditions, ranging from access to alienation, are satisfied the stronger the property right is assumed to be.

Table 2.1 Forms of Property Rights on Natural Resources

	Authorised Entrant	Authorised User	Claimant	Proprietor	Owner
Access	X	X	X	X	X
Withdrawal		×	×	×	×
Management			×	×	×
Exclusion				×	×
Alienation					X

Source: Ostrom (1999) and Schlager and Ostrom (1992)

Property rights to natural resources are categorized by looking into who the right holders are. Any property owned by a defined individual or a corporate entity is a private property. The owner of such property has all the rights to use, possess and dispose the property. Private land is the most common example of private property. If a property is owned by a group, it becomes common property. With regard to natural resources, the local community is generally considered to be the right holder. Such community is generally engaged in the conservation of those resources to fulfil some of their livelihood needs. Traditionally, every individual of such communities has been accessing the property area and withdrawing the resources available there. And, the respective group/community collectively decides the issues of management, exclusion and alienation. However, one important feature is

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Guerin, K. (2003). Property Rights and Environmental Policy: A New Zealand Perspective.
Wellington, New Zealand: NZ Treasury

that it is costly to exclude one from using the resources, both physically and legally. Moreover, the consumption of such resources by one will make them less available to another. This situation of common proprietorship is often characterised by scholars as the 'tragedy of commons'. Water and forests are generally considered as common property resources.

If ownership and control over resources are with the state, the resources are considered state property. An individual or a group can use such resources only with the permission of the designated authority of the government. National parks are examples of state property. However, in practice, people living nearby use the resources freely, unless the authority has a strong local presence. Therefore, in practice, such property is treated as open access property. Any property that does not fall under a defined jurisdiction of any country is open access property. It is sometimes termed as 'everybody's property' as well as 'nobody's property'. Each potential user has equal ability to use such resources and no one has the right to exclude the other from using them. In addition, no one has an incentive to conserve the property or invest for its improvement. Therefore, such property is liable to be misused or over consumed. This is the tragedy of commons. Inshore fisheries and forests are generally considered to be open-access property.

There are a few conflicting and overlapping practices. Common property resources are often used as open access property. They are like private property of non-members (property of excludability). If it is about river water, the property regime is questioned on the grounds that people of the upper riparian areas get the benefits and those from the lower riparian areas pay the costs. The same question arises in the case of forest use or extraction of sand and boulders in countries like Nepal, especially if upstream practices affect downstream livelihoods. It is this that led, in the 1960s, to many developing countries nationalizing all their land, forest and water resources that had not yet been recorded as private property (Ostrum: 2008). As a result, the de facto common property resources were converted into de jure government-property. They were later transformed to de facto open-access property.

2.2 Community Rights for Resource Manamgent in International Agreements

There are a number of international agreements to deal with common property resources. They mainly aim to coordinate and harmonise policies

and laws and synergize the action to ensure sustainable use and conservation of such resources. For the purpose of this research, three important international conventions are reviewed. These international initiatives recognise the rights of various local communities—farming communities, tribal/indigenous communities—over certain natural resources. Therefore, the governments should protect the rights of those communities over their traditional lands and biological and natural resources available within their territories. Such communities should have the right to participate in decision making on matters that may affect the communities and to get an equitable share of the benefits arising from the utilization of those resources. Additionally, communities should have the right to continue their traditional practices that are so important for their livelihood. As Nepal is a party to these conventions/treaties, the obligations are naturally converted into government commitments. Conflicts between the state and the communities are bound to emerge in due course of time if state organs do not implement, or fail to implement, those commitments.

2.2.1 ILO 169

The Indigenous and Tribal Peoples Convention, 1989 is introduced by the International Labour Organisaiton (ILO) and popularly known as ILO 169. It mainly aims at protecting tribal and indigenous communities' life and livelihood and guaranteeing their integrity. The convention is related to the rights of self-determination of tribal and indigenous communities with regard to their needs and priorities. Moreover, the convention obliges member countries to protect the rights of the peoples to keep their own custom, institutions and practices. The convention accepts that tribal and indigenous communities and their custom, institutions and practices are deeply associated with land, water, forests and other natural resources. So, realising the common nature of such resources and their relation with the associated communities¹⁶, the convention asks the member countries to protect the rights of peoples over land and other natural resources, which they traditionally occupy, and customary practices, culture and institutions of such communities.

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Article 17 urges governments to respect the existing traditional process of transmission of land rights, if such process exists, within the same community and the need to prevent other communities from taking advantage of the community's custom. As defined in the earlier section, transmission of ownership rights is one of the four pillars of property rights.

Thus, in order to implement the convention, national governments have to develop legal institutional mechanisms and launch the relevant programmes. There is an urgency to safeguard the livelihoods of the communities, protect their relationship with natural resources and institutionalise their rights to participate in the management, decision making and benefit sharing. For example, the respective governments are obliged to adopt special measures to safeguard the institutions and customary laws of the tribal communities (4.1); take initiatives to protect their rights of ownership on the traditionally occupied land (13.1); and establish their rights to participate in the formulation, implementation and evaluation of national and regional plans and programmes which may affect them directly (7). Additionally, governments should be proactive to take measures, in cooperation with concerned peoples, to protect and preserve the environment of the territories they inhabit.

2.2.2 Convention on Biological Diversity (CBD)

Biological resources are the property of future generations. However, actions of the present generation could constrain their future supply. The CBD was launched in 1992 with the aim of conserving biological resources, sustainable use of their components and fair and equitable sharing of benefits arising from the utilization of genetic resources. In order to address such objectives, the CBD envisages shared responsibilities: critical role of the national governments, active engagement of local and indigenous communities and meaningful contribution of developed-member countries.

The convention underlines every country's sovereign right over its biological resources. Therefore, the government has a key role in the conservation and sustainable use of such resources. For example, it has to develop the necessary legislation and other regulatory provisions to protect threatened species and populations. Additionally, it is supposed to provide incentives and initiate measures to promote the conservation and sustainable use of the components of biological diversity (Article 11). Moreover, the convention obliges governments to check environmental consequences and ensure public participation in the programmes and policies that could impact biological diversity (Article 14).

In addition, the convention recognises the contributions of local and indigenous communities in the conservation of biological resources. Also, it

realises the importance of such resources in their livelihood. The preamble and the various articles state that local and indigenous communities have knowledge, innovations and practices embodied in their traditional lifestyles and that they are relevant for conservation and sustainable use of resources. Therefore, Article 9 urges the member countries to ensure people's participation in the decision making process; provision equitable benefits sharing arising from the utilization of traditional knowledge, innovations and practices mentioned (Article 8.j); and protect and encourage costmary use of biological resources and support local people to develop and implement remedial actions in resource-degraded areas (Article 10.c). Moreover, the convention also obliges the member countries to launch conservation strategies; conduct the documentation and protection of traditional knowledge, innovations and practices; empower and engage local and indigenous communities in the decision making process.

2.2.3 International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

Plant genetic resources for food and agriculture (PGRFAs) are the raw materials for genetic improvement of crops. Therefore, the PGRFA stock available in nature is critical for future food security, especially against the backdrop of environmental unpredictability and changes. However, as these resources are also diminishing ever year, their proper management should be a common concern. This is very important for enhancing access to seeds in the days to come. It is because of this fact that the ITPGRFA came into being as a binding treaty in 2001. The treaty recognises the enormous contribution of the farming community in the conservation, development and sustainable use of PGRFA—particularly through their traditional practices of using those resources—from all regions of the world.

Three pertinent issues in the treaty are discussed here. One, the treaty prescribes a global system of access and benefit sharing with regard to the 64 crops important for global food security. The member countries, as provisioned in Articles 11 to 13, are obliged to facilitate access to genetic materials of those crops. Two, the state is primarily responsible for management of and minimising the threats to all PGRFAs available in the country. Therefore, governments have to, as mentioned in Article 5, survey and make an inventory of such resources. Moreover, in order to contribute to the sustainable use of such resources, the treaty recommends initiatives for

maintaining diverse farming systems, strengthening research, protecting traditional knowledge etc.

Three, the farming communities practice ever-evolving traditional knowledge and skills that are relevant for management of PGRFAs. Additionally, farmers' traditional practice of reuse, storage and sale of farmed and saved seeds is the lifeline of the poorer sections who are involved in subsistence farming. Therefore, the treaty, by its Article 9, obliges member states to protect farmers' rights to save, use, exchange and sell the farm-saved seeds and other propagating materials. It also calls for ensuring farmers' participation in equitable benefits sharing and decision making. Article 5.1.c urges the governments to assist community efforts in the management of PGRFAs.

In the next chapter, we discuss the status of Nepalese plans, policies and laws in relation to the (a) management of natural and biological resources with a major focus on the Chure region; and (b) implementation of related international agreements.

CHAPTER 3

Nepal's Plans, Policies and Laws to Manage Natural and Biological Resources

3.1 Development Plans

The First Five Year Plan (1956–61) was the first formal effort in Nepal to chart a course of modern development for the country. The government had to face limitations of human resources, legal and institutional mechanisms, technology, etc. In the forestry sector, the First Plan made some commitments to address the concerns of the local community, particularly in supplying fuel-wood and grazing land. However, conflict emerged between the government and local users groups as government had tried to manage the resources in its own way.

By the Seventh Five Year Plan (1985-90), it had long been realized that one of the causes of such conflicts is due to inadequate supply of fodder, timber and fuel-wood. The Seventh Plan implemented a number of programmes¹⁷ to make fodder, firewood and timber adequately available to the local community. Moreover, participation of nongovernmental, social and class organizations, local bodies and women was also planned. A vital lesson learnt from past experiences is that participatory forest management helps address local concerns, eventually managing the conflict between government and the community with regard to forest resources.

The Eighth Five Year Plan (1992-97) acknowledged the farming community's own traditional techniques of adaptation to cope with resource management constraints like diversity, remoteness, marginality and fragility. It also realized that unattractive schemes for people's participation had weakened the efforts of forest protection. Therefore, the plan proposed the community forestry programme. Under this programme, nearby forests were to be transferred to

14

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¹⁷ Such as forestry development, afforestation and conservation, reforestation programmes.

users' groups for better management¹⁸ and utilization. Yet, the government went ahead to manage the Chure as a specially protected area without involving the local community. Was community mobilization just a strategy of the government to get community support in conservation work and not a realization of their stake over resources?

The Ninth Five Year Plan (1997-2002) continued some of the programmes and methods of the Eighth Plan¹⁹. Moreover, people's participation was extended to the protection of national heritages with religious and cultural importance. Additionally, the plan proposed to issue the concept of community ownership. This was a realization that past failures in the management of common resources were due to the lack of property rights. However, a regime of common property rights had yet to be introduced as the programmes only envisaged the participation of local people in conservation works²⁰. In addition, the Ninth Plan identified concerns of both upper and lower riparian areas of the Chure . It underscored the interdependence of Tarai flood control and upper riparian watershed conservation.

Poverty reduction was the central objective of the Tenth Five Year Plan. So, forest management became a part of overall employment creation as well. Moreover, the plan acknowledged the contribution of the community forestry programme to gender and social equality, social empowerment and local democracy. Additional forest areas were handed over to user communities. Similarly, the proposed to initiate registration of biodiversity and indigenous knowledge available in the country²¹. And, people's participation was at the core of these activities. An important departure in the Tenth Plan was that it

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Additionally, mobilization of the local resources with peoples' participation was also planned in the national parks and protected forests for enhancing people's faith in them.

Concept of community forestry; participation of NGOs, private sector, unprivileged community, women as well as local bodies in the leasehold forests and watershed management, and biodiversity conservation; creating skills and knowledge at community level for resource management; direct participation of the local people in the national parks and wild life conservation programmes and sharing the monetary benefits with them.

Plan document on the methods of managing the Siwalik region

Beside the community forestry programme, there were other programmes—such as lease hold forestry, cooperative forests, biodiversity conservation, watershed and soil erosion management, protected buffer zone management, collaborative forest management—where local participation was at the centre. Groups formed under such prgrammes had direct access in formulation of plan, decision making, implementation and monitoring and evaluation of the programmes.

intended to initiate similar participation in soil and watershed conservation in the Chure as well.

A three year interim plan was prepared immediately after the popular movement of 2006. The challenge then was to address the growing aspirations of the people of different communities that had been ignited by the movement. The concerned communities made their voice heard about the need to include them in formulating and executing policies and programmes related with natural resources. Accordingly, the plan moved towards decentralization of forest and watershed management, biodiversity conservation and protected areas management. It also invited active participation by the local people in such activities. With regard to the Chure, the plan proposed integrated management of the region with people's participation. However, those efforts were directed towards a sustainable supply of forest products and social and economic empowerment of the deprived communities, rather than handing over ownership of the resources to the local people. Planning efforts are still clueless regarding the contribution of farmers and how their knowledge can be used.

The successive two plans were not much different, nor were they progressive, compared to the Three Year Interim Plan. They all reiterate active participation of the various deprived communities. They have also tried to define such participation in a quantifiable form. Moreover, it is important to assess the status, the dynamics and the effects of people's participation in resource management, particularly in the Chure.

3.2 Policy Measures for Natural and Biological Resources

Forest Sector Policy, 2000 is the first policy of its kind. It has recognized the ancient right of the community to collect fuel-wood and fodder from forest areas. The policy has promoted community forestry whereby communities mobilize themselves in order to protect their property. However, the policy does not seem open-hearted about giving the local community²² their due

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Even Forest Sector Safety Plan, 2013 has not recognized the rights of the local people. It mentions that all kinds of community forestry groups will be involved in controlling the encroachment of forests. However, the central level committee headed by the forest minister to oversee the implementation does not include representatives of the local community.

rights. To illustrate this, there is a strategy to gradually hand over all accessible 'hill forests' to local communities. But, in the case of the Tarai and Shiwalik regions, collaborative partnership is proposed. Additionally, the definition of community forests does not allow one to go beyond the scope of 'basic needs'²³. This is a kind of speed breaker in mobilizing local and indigenous communities as per the spirit of CBD. The policy does highlight the conflict between upper and lower riparian areas, with regard to the Siwalik region, and realized the need for meeting the demands of the local people and maintaining the renewal capacity of the groundwater reserves in Tarai.

In 2000, Government of Nepal introduced a new concept in managing forests in the Tarai, Churia and Inner Tarai. The concept highlighted the fragile geology of Chure Hills as well as their deteriorating rainwater absorptive capacity to recharge the ground-water for low land areas. Moreover, it tried to address the revenue concerns of the government and the Chure-Tarai based user communities²⁴. So, there have been multifaceted concerns: access to forest resources, sustainable supply of underground water to the Tarai people and revenue interests of the local community and the government. However, this initiative called for managing the Chure hills as a protected area, which showed a lower level of willingness on the part of the government to collaborate with the community. The provisions are inadequate to keep the customs, institutions and practices of indigenous and tribal communities alive and protect the vulnerable communities. The concept ignores the deteriorating PGRFA in this region and the role and involvement of farmers in its conservation.

In 2003, a separate Wetland Policy was launched. The policy follows the principles of the Forest Policy with regard to people's participation²⁵. However, this policy too does not fully recognize the ownership of the local people over such resources. For example, the policy advises the government to levy an environment tax on the use of wetland-related resources, but it does not propose the revenue sharing mechanism with the local people. The

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Those forests which are handed over to users' groups to conserve, manage and utilize for their basic needs are community forests.

The initiative has fixed the percentage share of income, generated from government managed forests and community managed forests, between the government and the communities.

For example, the policy includes stakeholders' participation in the management of wetlands, highlights the importance of traditional knowledge and skills of the local community, and stresses equitable sharing of the generated benefits.

policy has proposed a central level coordination committee to prepare the laws and guidelines and advise the government on related matters. Yet, it does not include representatives from the local and indigenous communities.

The Agro-biodiversity Policy, 2006 was amended in 2014. It was prepared with the realization that identification, conservation, maintenance, development and sustainable use of biodiversity are vital for future food security. Taking into consideration the future risks in food security due to climate change, the policy gives priority to:

- the conservation of agrobiodiversity and associated traditional knowledge;
- protection of farmers' rights over agro-genetic resources and TK and rights to participate in decision making process; and
- sharing of benefits arising out of the utilization of such resources with farming communities.

In addition, the policy highlights the need for coordination between agriculture and forest sectors, identification of agro-biodiversity hotspots, and exploration of farmers' TK. It makes the commitment to increase Nepal's access to international gene banks and restore the Nepalese agro-genetic resources that were made available to international gene banks in the past. The policy pledges proper coordination among the nation's gene bank, community seed banks, and C'imon bank as well as coordination among the stakeholders, including farming communities and NGOs.

Biodiversity Strategy, 2014 assesses the related policies, programmes and laws and tries to learn from the past successes and failures. It identifies human settlement, cultivation, local market expansion and infrastructural development²⁶ as the major threats to forests and biodiversity in Nepal, in general, and the Tarai and Siwaliks, in particular. In addition, the strategy is able to figure out the multifaceted conflicts in the forestry sector. Four such conflicts are cited here as examples: One, there is a conflict within the government regarding the choice between the strategy of protected areas and the participatory approach. Two, there has been conflict between traditional tenure systems (e.g. *Kipat* system in the eastern mountains) and formal laws/regulations in some places. Three, there is mistrust between government and the local community with regard to some of the community

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such as roads, schools, hospitals, temples, water tanks

deeds²⁷. Four, because of the conflict among the sectoral agencies, different sectoral policies and laws are not adequately harmonized²⁸. In order to address such conflicts, the strategy reiterates the need for the participation of the local community in the management of buffer zones and conservation areas. While declaring a protected area, it also calls for bringing them on board in the decision making process. Further, the strategy realizes the urgency of protecting the rights of the local communities over their traditional knowledge and associated genetic resources. So, it considers the need for a comprehensive legislation to provision such rights.

3.3 Legal Measures for Natural and Biological Resources

National Park and Wildlife Conservation Area Act, 1973 is considered to be the first law of its kind. One of the objectives of the act was the conservation of wildlife and their habitat. The act gave powers to the government to declare conservation areas, national parks, or reserves, as well as their buffer zones, by publishing a notice in Nepal Gazette. Also, the government may abandon, or transfer the ownership or alter the boundary of already established conservation areas, parks and reserves by publishing a similar notice. The act prohibited entry into national parks and reserves without permission of the designated authority. Moreover, within the national parks or reserves, permits were required from the said authority for wildlife hunting; construction or possession of a house, hut, shelter, or any other structure; occupation, clearing, reclamation or cultivation in any part or growing or harvesting any crop; grazing any domestic animal or bird; mining stones or removal of any mineral, stone, boulder, earth or any other similar material; or blocking or diverting any river or stream flowing through.

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The strategy mentions that there are a lot of evidences of human encroachment in the Tarai and Siwalik. Moreover, local communities, living along the East West Highway, are active and self mobilized for expansion of local markets and development of infrastructures—such as schools, temples and water storage tanks. The strategy mentions that most of these activities do not follow the legal requirements. Additionally, illicit felling of valuable trees has taken place in those areas.

For example, with regard to forest resources, the Local Self-Governance Act (1999) empowers VDCs to sell specified natural resources and DDCs to sell river sand, stone, soil and driftwood. However, the Forest Act empowers CFUGs to fix their respective prices and sell them

Needless to say, the act is weak in accepting the roles and rights of the local communities with regard to such protected areas. Its enactment restricted people's access to the national forests, protected areas as well as buffer zones from where they were withdrawing resources. Moreover, no provision of the participation of local communities was framed. There is a provision on the user community in Article 16.c., but it gives rights to the warden of such protected areas/buffer zones who 'may' form a committee to manage fallen trees, dry wood, firewood and grass. The committee is consulted only for compensation to destroyed households if they fall within the existing natural boundaries of any protected area, or the buffer zone, due to floods or landslides. However, the households are excluded while taking management decisions regarding such protected areas, utilization of the resources and sharing the benefits arising out of the utilization. Moreover, it does not consider the growing vulnerability of tribal communities, like Danuwar, which is deeply associated with the resources of the Chure.

Forest Act, 1992 has categorized the country's forests into national forests and private forests. National forests are further categorized as government-managed forests, protected forests, religious forests, leasehold forests and community forests. The act recognizes the stake of local communities over forests and tries to minimize the conflict between government agencies and such communities by addressing their grievances. Local users groups can organize and register as community forest users groups, under the act. They can prepare their constitution and action plan on their own to develop, manage and conserve the forest resources. Such periodic action plans have to be approved by district forest offices under given conditions. The executive committee of such group is periodically elected by the general members. Similarly, any religious body, group or community desirous to develop, conserve and utilize a part of any national forest, in a religious place or its surroundings, may be transferred to it as a religious forest.

However, some pertinent issues still need to be addressed urgently by the act. For one, it is not too effective in establishing coordination between the forest users groups and local bodies. Similarly,the act does not recognize the importance of local and indigenous communities in managing the overall forest resources. Conservation of their customs, institutions and innovations remain untouched by the act.

Environment Protection Act, 1997 attempts to minimize, as far as possible, the adverse impacts likely to be caused from environmental degradation on human beings, wildlife, plants, nature and physical objects and pledges to protect the environment through proper use and management of natural resources. This act allows the government to declare Environment Protection Areas by a notification in the Nepal Gazette. The government can maintain any place within Nepal that houses natural heritage, natural beauty, rare wildlife, biological diversity, plant, and places of historical and cultural importance, if they are considered extremely important from the viewpoint of environment protection. However, the act is clueless regarding the management of such areas, mobilization of indigenous communities and addressing possible conflicts between government agencies and local and indigenous communities that may arise after such declaration.

Local Self-governance Act. 1999 was designed for devolution of power to the local level. The act gives certain kinds of legislative powers to locally elected bodies. They include endorsing their annual budgets, plans and programmes; adopting resolutions relating to taxes and charges; evaluating their administrative functions; evaluating their development²⁹ and construction works; and approving the by-laws of the respective political units. The act envisaged two layers of local government bodies: District Development Committee (DDC) at the district or upper level and municipality/Village Development Committee (VDC) at the local or lower level. Representatives of VDC/municipality were to be directly elected while DDC representatives were elected indirectly. The act ensured the participation of indigenous and local communities in the local-decision making process as well. A separate council was to be formed at each VDC/municipality and DDC. These councils had directly elected representatives of the respective territory including several nominees. Regarding nominees, the act reserved six seats in the village councils, six to 20 seats in the municipal councils and six seats in district councils. The reserved seats were filled by representatives of socially and economically backward tribes and ethnic communities, down-trodden and indigenous people of the respective territories. Therefore, the act played a significant role in implementing inclusion at the local level. Moreover, it ensured the participation of the concerned communities in decision making,

Such as agriculture development, forest and environment protection, irrigation and soil conservation, and other developmental works

particularly on the management of natural resources and distributing the benefits arising from their utilization.

Yet, there are issues that Government of Nepal must tackle. It has made certain pledges through international treaties/agreements and policies/strategies, but has yet to fulfill them. For example, Nepal has not legally ensured farmers' rights over their traditional resources and protected their rights over seeds and their use. Despite the commitment in policy, the government has not yet introduced any legal mechanism to ensure the protection of threatened crops. The government has already ratified ITPGRFA which obliges countries to provide MLS on sixty four crops, listed in Annex One of the treaty. But, there is no legal basis for its enforcement in Nepal. These inconsistencies will surely result in conflict between the state and other of stakeholders in the days to come. The management and conservation of Chure must consider such concerns.

CHAPTER 4

Stakeholders' Perception about the Management of Natural and Biological Resources in Chure

4.1 Selection of Methods and Sites

This is a section that builds on the analysis of the views and perception of stakeholders expressed during focus group discussions (FGDs) and individual interviews. FGDs were conducted purposively in the Chure area among various local communities—including indigenous communities, farming communities and, forest users communities. In addition, individual interviews were conducted with community leaders, senior citizens and former local government representatives. Besides these, personal observation of forest areas, rivers and flood areas, and government offices was helpful in coming to a conclusion. Interviewees were selected purposively following the snowball technique in selected parts of the Chure areas.

The study was conducted in various parts of Dhanusha, Sindhuli, Mahottari and Bara Districts. These areas do not only belong to Chure Region, they are also home to many indigenous and farming people. In Sindhuli, the visited areas include Ranibas and Harshai VDCs and a few wards of Kamalamai Municipality. They are situated along the Kamala River Basin and are ancient places in Chure Region. Tulashi VDC of Dhanusha and several wards of Bardibas Municipality in Mahottari were also chosen for this study. Among the districts of Chure Region, these two districts fare badly in resource degradation. Also, Dhanusha is the home district of the first president of Nepal, Dr. Ram Baran Yadav. In Bara, Nijgadh Municipality was visited. Bara has the highest number of crusher industries that produce stone aggregates in Nepal at the moment³⁰. These areas are considered the food basket of Janakpur and Narayani Zones. They are also the traditional homes of

23

http://www.myrepublica.com/portal/index.php?action=news_details&news_id=70800 accessed on 19 August 2015

indigenous communities- Danuwar in Sindhuli, Majhi in Dhanusha and Kachhariya in Bara (Danuwar hereafter).

Table 4. 1: Area, Households and Population of Chure Areas in the Selected
Districts

District	Area (hectare)	Number of Households	Population
Sindhuli	14394.5	38822	194474
Dhanusha	34056.7	8151	41739
Mahottari	16287.7	6246	28591
Bara	20526.7	6298	31124

Source: Chure Conservation Area (An atlas of 36 districts): 2015

4.2 Key Trends and Practices

A customary land tenure system was in practice in Nepal in ancient times. However, ownership of land was distributed through orders of the crown, or rulers³¹. The case was not different with regard to forested land. Up until the demise of the Rana regime, rulers used to treat such lands as their private property. So, they distributed such resources according to their will. Even so, local people used to access and withdraw the forest resources freely. Mr. Tilu Adhikari (Danuwar) one of the senior Danuwar citizens in Ranibas, said that systematic legal attempts were made after establishment of multiparty democracy in 1950 to bring forests under the jurisdiction of the government. Mr. Arun Kumar Thing, Headmaster, Prabhat Higher Secondary School, Ranibas said that *Jagir*, *rakam and kipat* systems of land ownership were abolished in 1951, 1955 and 1964 respectively³². Similarly, Private Forest (Nationalization) Act, 1957 brought all forest resources under the ownership and control of the government.

Private Forest Nationalization Act, 1957 turned all forests and forest resources into de jure state property. According to Mr. Tanka Bdr. Chauhan, senior citizen, Tulashi, these resources became de facto common property resources due to inadequate policing. During the same period, various traditional land

http://www.fig.net/resources/proceedings/fig_proceedings/fig2008/papers/ts07b/ts07b_02_acharya_2747.pdf) aceesed on 19 August 2015.

³² Similarly, Birta Abolition Act 1959 systematically terminated the Birta system in Nepal.

tenure systems were abolished. The consequent land measurement and survey programmes also helped some immigrants to acquire such forest land for their private use. Additionally, Land Survey and Mapping Act, 1963 recognized the newly acquired private rights over those forest areas. The region became more attractive when the government declared Chure-Bhawar Area as a malaria free zone. The locals say that hill people started migrating to Harshai and Ranibas of Sindhuli in 1948 and 1961 respectively, Tulashi of Dhanusha in 1961, and Nijgadh of Bara in 1964. Since then, a mixed population of indigenous and hilly communities has been living in Chure Region. They are primarily engaged in agriculture and livestock rearing. As mentioned above, the Danuwar are the traditional dwellers of Chure Region. They have been living in the river valleys where fertile land was available. For example, Kamala Khuni is one of their traditional homes. Maheshi Kumar Tharu, central president of Kachhariya Society Nepal, Nijgadh, said that he is from the 12th generation of the Danuwar Community living in this region. Narayan Adhikari (Danuwar), Harshai, said that the Danuwar were immune to malaria epidemics.

Earlier, the Danwar depended on the available natural resources for their livelihood. This community was engaged in agriculture and fishing and hunting. People used to cultivate the available land on the river banks. Before, land was cultivated only once a year. The forests and rivers fulfilled their remaining needs. As fish curry was a part of their regular meal, the Danuwar used to fish almost every day. Tilu Adhikari (Danuwar), a senior citizen of Chandanpur, Ranibas, said that snails and crabs were delicacies.

They had open access to forest resources which were critical for their livelihood. For example, they collected *kans* grass for roofing and wood for cooking, warming and making farm tools like the plough. Moreover, mushrooms, mangoes, monkey jack (*Artocarpus lacuchar*), gooseberry, black plum and the like also came from the nearby forests. They learned more sophisticated farming methods, livestock rearing and vegetable farming from new settlers from the hills. Mr. Indra Prasad Pokharel, former chairman, Noopen Grazing Area Committee, Ranibas, said that the immigrants taught the Danuwar to grow maize and vegetables during the 1950s. The Danuwar households acquired seeds and farming methods from them.

Thus, one could conclude that, within the Danuwar community, there is a gap of farming knowledge between the earlier and the successive generations.

Traditional knowledge regarding agriculture is fading away and new ones

taking their place. Different ethnic groups have been assimilated to form a mixed society. But they are all engaged in farming and livestock rearing. Moreover, all the ethnic groups share the same sources of water for irrigation and household use and access the same forest areas for fodder and firewood. In other words, every ethnic community has similar stakes over these resources.

In the ancient times, the Danuwar used natural resources from rivers and forests³³ to treat diseases. The medicinal knowledge had evolved over a long period of time. However, today, one cannot find anyone with such knowledge. Ram Avatar Adhikari (Danuwar), immediate past chairman, Harshai VDC, said that his mother was a traditional healer. She used to be called by people from even distant places for treatment. Several foreigners were also reported to have visited her to learn about her treatment practices.

Different ethnic groups practice traditional rituals which are helpful in the conservation of agricultural biological resources. The Danuwar mark *Nemani Pooja* to worship their food crops once a year. Maheshi Kumar Tharu, shared that *Thuli Ekadashi*—the day that Hindus consider as the wedding day of *Tulashi*³⁴—is celebrated by eating *Nwagi* (a mix of alo vera with *jirasari* rice). Additionally, *Anidhi* rice in *Fagu Poornima*³⁵, and yam on the first day of *Magh*³⁶ are still necessary. Moreover, the migrants have continued their traditional practices of the hills, for example, taking *Quati* (mixed beans curry) in their meal on 15th *Ashad* in the rainy season and offering *Satbiu* (mix of the seeds of paddy, Sesam) in the winter. Such lifestyles compel them to keep farming such crops and varieties. Additionally, most of the farmers still cultivate crops to fulfill their own regular needs. So, such practices have become instrumental for maintaining crop diversity in the region.

Most of the farmers in the Chure do practice the traditional system of seed use, that is, they select the best part of their harvests to be stored as seeds for next year. For seeds storage, small homemade pot-like *Kothi* (see picture

For example, liver of Roho fish (*Labeo rohita*) was used to treat jaundice and Chiretta (*Swertia chirayita*) was used to cure skin allergy.

Tulashi is regarded as a holy herb by Hindus. Each family belonging to Aryan community in Nepal rears it in front of their house. Hindus regard Tulashi as the reincarnation of Lord Vishnu.

Hindus consider this day as the victory of Pralhad, one of the 12 reincarnations of Lord Vishnu, over Holika, a savage woman in Hindu mythology.

Danuwar celebrate this day as *Maghi* festival.

below) are used and stored in the *Bhakari*, a cool and dry place. However, nowadays, modern plastic and metal-drums are used. Moreover, a practice of seed exchange between the farmers within and outside the village also exists. Mr. Maheshi Kumar Tharu, Nijgadh, said that exchange of seeds can take place also with their in-laws living in different localities. Mr. Bishnu Hari Baral, Ranibas, shared that he had brought a good variety of horse gram³⁷ from his parental land. Such practices in the region have been helpful as the whole farming community serves as a seed bank.

Thus, Chure Region accommodates a number of natural goods. They include medicinal herbs, fodder, water, sand and boulders, non-timber forests and wildlife. There are many practices prevalent within different communities which could be useful in the



Traditional seed storage clay pot of indigenious community

conservation of such resources which exhibit the features of common property resources. However, they are gradually being converted either into private³⁸ or public properties³⁹. Such pressure will lead to strains in the human-bio resources relations becoming weaker. Consequently, the traditional knowledge, skills and practices related to biological resources will disappear.

4.3 The Chure Crisis

Degradation of Chure Region is multi-faceted in nature. It is often characterized by, among others, the deterioration of the forested area, soil erosion and drying up of rivers and other water sources. The region has become very fragile because of deforestation, construction works and extraction of sand, boulders and gravel.

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³⁷ Scientific name: Macrotyloma uniflorum

By way of distributing land to the landless, converting the forests to community forests, devising the rights of local government bodies

By way of declaring wildlife conservation area and environmental conservation area

Nepal had passed through many political, social, economic and environmental upheavals. Each of them has left a profound mark in national life in general. Chure has always been in the receiving end of such changes. This section will discuss the various changes after the inception of planned development.

Considering the various limitations, the study investigates and assesses only government interventions and market interventions. After the historical political change in 1950, the government took various initiatives towards modern development, planned development. Various programmes, policies and laws were drafted for the country's holistic development. Changes also occurred due to the various national and international interventions that unleashed the global market forces into the country. In Chure Region, all these interventions have not only affected the natural resource stock, but also caused to change the life, value system and human-natural resource relationship.

4.3.1 Government Intervention

As stated earlier, Forest Nationalization Act, 1957 converted the forests and forest resources into government property. However, the government has been accused of using the forest resources to fulfill political objectives rather than managing the resources scientifically. More precisely, sometimes, the government is seen to be working to conserve the resources, at other times, it is seen to be the cause of their erosion. Initiatives such as establishment of various government offices⁴⁰ and declaration of conservation areas⁴¹ have helped to protect the forest resources. Conversely, the Malaria Eradication Programme and Landlessness Resolution Programmes, in order to manage population problems, have battered them. For example, people currently living in Chandanpur (lower part of Ranibas), and Harshai, Sindhuli, were translocated by the government from Tandi, and Hatpati, lower Kamala Khunj, in 1994 after they displkaced by a devastating flood. Additionally, hundreds of landless people were settled in the forest areas of Tulashi, Dhanusha, in the 1940s.

The government often takes such decisions without consulting the affected communities. Some of the initiatives have created conflict between them. For

Such as Department of Forests, Department of National Parks and Wildlife Conservation

Such as national parks and wildlife conservation area, buffer zone area, environmental conservation area, among others

example, no local community was informed and approached seeking consent from them prior to settling the landless people in Tulashi. A discussion there revealed that some local politicians were behind the plan. Today, the landless people have become the main cause of deforestation. Similarly, though the government held a discussion with the local community with regard to the expansion of Parsha Wildlife Conservation Area, Nijgadh Municipality, the local community and FECOFUN argue that they were not heard properly. People in Ranibas, where community forest management is exemplary, were found to be against the declaration of Chure Conservation Area. The Ranibas community argues that the declaration is an effort to keep the local people away from the resources in the name of protection. Such activities will adversely affect the livelihood of local people, discourage the community effort of conservation and create conflict between the government and local communities.

As discussed in Chapter 2, government property is, to some extent, de facto common property. So, people are at a rush to exploit the resources and apathetic about their conservation. Ultimately, resource degradation becomes unavoidable. Mr. Bhagawn Pokharel, Ranibas, said that they faced problems like floods, soil erosion, water unavailability and the like, when there was open grazing system in the forest and river bank areas. Similarly, Mr. Tanka Bdr Chauhan, Tulashi, said that excessive felling of trees and haphazard extraction of sand from river beds have led to degradation of nearby forests and cultivable land. Such activities ultimately affect the availability of resources and create dual conflicts- conflict among the communities in the race to exploit resources, as Mr. Chauhan shared, and conflict between the community and government, in the name of resource-protection. Government efforts to check illegal access to the resources often turns into an incentive to smuggle the timber and sands from the region for some. Mr. Gorkhali Majhi, Ranibas VDC, during an FGD at Ranibas, said that a number of people from lower areas (Kanbariya in their local language) are engaged in smuggling timber. Local people say that such smuggling would not be possible without the concerned officials turning a blind eye.

One of the reforms that Nepal undertook since the restoration of multiparty democracy in 1990 is the devolution of power to local government bodies and communities to manage natural resources. After the enactment of Forest Act, 1992, a big share of national forests has been handed over to users groups. Today, Nepal's community forestry has become renowned. globally, as an

effective tool to mobilize and empower users communities and appropriately manage forest resources⁴². Even though there are remarkable examples of community managed natural resources, there are also instances where there has been gradual increase of social decontrol over such resources, particularly in the recent past. This tragedy can be seen in some of southern parts of Chure Region in the form of resource mismanagement. There are cases where community forestry leaders themselves are involved in deforestation and supporting smuggling. Mr. Padam Basnet, Tulashi, says that there is collusion between some community forestry leaders and *Kanbariya*. Mr. Ram Kr Sigdel, Nijgadh, said that community forestry user groups in Bara were formed not by the communities but by middlemen and traders dealing with forest products⁴³.

The enactment of Local Self Governance Act, 1999 can be taken as another turning point for natural resource management. The act makes provisions for local government bodies to tax natural resource exploitation. It also prescribes a mechanism of revenue sharing between the different layers of the local bodies. Since local elections have not been held since its enactment, the caretaker office bearers have not acted according to the spirit of the law. There are examples of many decisions that have only targeted revenue generation ignoring the long run impacts. One such impact, as reported by the local people, is the haphazard extraction of aggregates from the riverbed. Kamalamai Municipality sold large amounts of boulders from the Kamala, to Hazama and Ando Corporations, for the construction of B.P. Highway in the last decade. Similarly, Dhanusha District has already started selling sand and gravel from Sundari and Rati Rivers. Also, Nijgadh has the largest 'crusher' industry which quarries boulders and gravels from nearby rivers. It exports them to India after processing. Ram Hari Pokhrel, Ranibas, argues that extraction of such resources from the rivers has already crossed critical limit. The government bodies do not consult the local people and associated

In Ranibas, the local community, organized under a forest users group, has helped make the forest dense and control the river. The Kamal River basin had almost become desertified in the not too distant past.

Similarly, government has launched the collaborative forest management programme and leasehold forest programme as well. The aims of those programmes are to fulfill the need of people living at a distance from forest areas and contribute to the broader goal of poverty reduction. However, as the discussion at Harshai revealed, community leasehold forestry programme has been largely misappropriated.

communities prior to such extraction. As a result, Chure and the lowlands are gradually getting desertified.

4.3.2 Market Intervention

It is almost 60 years since Nepal began planned development. During this period, it has brought many laws, policies and programmes which have contributed to get the country move toward modernization. Consequently, Nepal has made critical achievements in the areas of infrastructural development, information and communication and living standard of the people. Moreover, after the restoration of multiparty democracy, the government liberalized its policy regime and conducted many reforms. Today, many local level changes can be seen in Chure Region that promote the market forces. They include the presence of the private sector, NGOs and community organizations, increased mobility of the people, strong desire for personal freedom, increased use of information and the like. These changes have impacted many dimensions of the management of Chure resources.

Farming System

Farming is gradually shifting from the traditional to a modern system in the visited areas. Earlier, the Danuwar used to cultivate the land once a year to produce only one crop. With the people from the hills joining them, both the communities have had the opportunity to learn from each other. Today, there is increased cultivation. Three crops are harvested every year. The Danuwar have even started vegetable farming. They are gradually moving towards commercial farming. Commercial farming is promoted basically for two reasons: improved availability of modern seeds, chemical fertilizers and credit, expanded markets due to urbanization and increased road networks and communication services. Field discussions revealed that Nijgadh, Bara, is popular for commercial maize production and Sindhuli supplies vegetables to Kathmandu Valley.

FGDs organized at different places revealed that most of the farmers use hybrid vegetable seeds. It was found that government line agencies and some non-governmental organizations distribute such seeds and occasionally give training to the farmers. In Kamala Khunj of Sindhuli, Development Project Service Centre (DIPROSC)—an NGO working for improving income level of the farmers through commercial farming—has given such exposure to the local farmers. The other important finding was that, due to commercialization of agriculture, the farming pattern is gradually moving toward monocropping at

the cost of a diverse farming system. As a result, according to Mr. Buddi Nath Poudel, Tulashi, and Bhoj Raj Baral, Ranibas, many vegetables, such as luffa gourd, and a number of pulses, such as horse gram, are disappearing gradually. Moreover, the local landrace varieties and the associated traditional knowledge are disappearing from the community. According to participants of various FGDs, the local varieties of rice—such as *Thumka*, *Bajji*, *Gola*, *Sataro*—have already gone. It is clearly going to be difficult to find their custodians in days to come. However, the traditional system of seed reuse, exchange and storage still prevails.

Because of growing commercialization of farming, demand for irrigation water has been increasing. The sources of water, on the other hand, are drying up. The water volume in nearby rivers has also fallen substantially. Therefore, farmers have left some of the farmlands fallow, even though they are still suitable for agriculture. To cope with the problem, people have reduced the cultivation of crops like wheat, which need more water. Also, people living in the lower riparian areas have started a rotation system to irrigate their fields. There were only micro irrigation schemes in the visited areas and they were informally operated. Users have started to register such schemes as Irrigation Water User Groups at DADO. Moreover, conflict has emerged between upper and lower riparian areas over river water. Mr. Tanka Chauhan, Tulashi, thinks that biodiversity associated with the river might have eroded in their locality. They rarely see egrets today, both in the river and waterlogged areas. The other important change is that, due to the shortage of labour, farmers have started using modern equipment, such as tractors, threshers. The Parma system of labour exchange is gradually fading away.

Employment and Livelihood

Liberal policies has also meant change in the occupation and life style of the people. Youths in Nepal in general and in Chure Region in particular are gradually moving away from traditional subsistence farming. A significant number, including those from Danuwar Community, have emigrated for foreign employment or in the process of doing so. This is happening in spite of increasing employment opportunities even in rural areas due to improved market access, greater access to road networks and information and communication technology and increased credit opportunities caused by the expansion of private banks, cooperatives, NGOs and the like. This is buttressed by an expanding financial sector, mushrooming private schools and

a burgeoning informal sector- including commercial farming, poultry farming and small shops. These have offered additional employment to rural youths. Mr. Ram Avatar Adhikari (Danuwar), Harshai, said that, because of such changes in employment as well as increased exposure to information and communication, Danuwar youths are forgetting their own customs and language. It was observed during the FGD at Chandanpur (Ranibas) that some from among the migrants from the hills, like a man named Subas BK, had more information about Danuwar cultural practices and history than the Dunuwar leaders themselves.

Construction and infrastructural development have expanded in Chure Region, not unlike the overall national scenario. Mr. Ram Hari Pokharel, Ranibas, Tanka Bdr Chauhan, Tulashi and Mr. Amar Lal Tamang, Nijgadh shared that road construction and concrete buildings have significantly increased in their localities over the last 20 years. Likewise, the number of crushers and saw mills has increased in the visited areas. They acquire the stones from nearby rivers and trees from forests. FGDs conducted at various locations blamed the prolonged political transition and absence of elected-local government bodies for creating an environment for a few local politicians, corrupt officials and extortionists to form alliances in some parts of Chure Region. This nexus is responsible for accelerating the extraction of resources and creating conflict between local governments and ordinary people. Mr. Ram Avatar Adhikari (Danuwar), Harshai said that accomplices of such cartels can be found within their own families, communities and locations as well.

One of the features of the new liberal policy regime is that it recognizes civil society organizations as partners of development. So, I/NGOs are allowed to work and expand. In the visited areas, several NGOs were found to be highly active sensitizing the local people through various trainings and awareness campaigns. They were also supporting and encouraging community mobilization with regard to natural resource management. NGOs like Parivartan Nepal had taught the locals of Kamala Khunj about the importance of traditional farming and resource management systems. Today, farmers at Ranibas initiate many innovative works on their own—such as organic farming, improvement of animal-sheds and conservation and use of local landraces. Such activities have contributed to mobilize, empower and strengthen the voices of the local communities.

To conclude, various government interventions have promoted social decontrol and market forces in the country. Such changes have also affected the use and management of natural resources in Chure Region. These interventions have given birth to a number of interest groups. They are able to influence decisions on natural resources in Chure Region, such as on forest management and use of water and biodiversity. As public policies are largely influenced by the lobbying of such interest groups, the current policies appear weak in maintaining the traditional community-resource relationship. If this situation continues, traditional knowledge regarding natural and biological resources will soon be lost forever.

4.4 Activities of Government Line Agencies with Regard to Implementation of Treaties

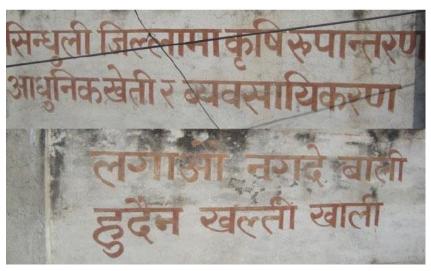
A number of government-line agencies exist in Chure Region. Organizations such as District Agriculture Development Office (DADO), District Forest Office (DFO) and District Soil Conservation Office (DSCO) implement government policies and programmes and enforce the national laws and regulations at the local level. District Development Committee (DDC) and Village Development Committee (VDC)/municipality are the local political institutions run by people's elected representatives. They receive grants from the government and spend according to the decisions of the representatives. In 2014, the government constituted President Chure Tarai Madhesh Conservation and Development Committee (PCTMCDC) entrusting it with the task of coordination and facilitation of conservation related activities within Chure Region.

DADO works for agricultural development at the district level. It primarily provides extension services to farmers. Discussions during FGDs, and also observation, revealed that DADO's priorities are in constructing small irrigation schemes, promoting cash crop farming and encouraging use of improved seeds. Farmers at Harshai, Tulashi and Nijgadh benefit from the subsidy given to small irrigation schemes. DADO provides such subsidies based on the number of beneficiaries. Irrigation programmes for garden and vegetable farming are executed at Ranibas.

DADO helps commercialize agriculture through various interventions. One is promoting the use of improved seeds. DADO and its sub-district level offices distribute improved seeds of cereal crops like paddy, maize and wheat from

time to time. Participants of an FGD at Tulashi said that, occasionally, it also provides improved seeds of a few vegetables and fruits. Mr. Amar Lal Tamang, participant of an FGD in Nijgadh, was one of the beneficiaries of vegetable farming subsidy. He received NRs. 60 thousand to purchase seeds for cultivation of vegetables in 0.243 hectares (1.5 bigha) land. DADO also bears about 50 per cent of the cost of seedlings for banana farming around Nijgadh. A couple of NGOs are also helping such farming by distributing improved seeds. Additionally, DADO promotes community seed production in different areas. Seed producing farmers at Bhiman, a market centre of Kamala Municipality near Ranibas, and Nijgadh get technical advice and marketing support through a number of government agencies.

DADO is promoting commercial farming in the visited areas of Chure Region (see pictures below). However, there is no programme aiming to conserve and document local landraces and associated traditional knowledge. Mr. Bhagawan Pokharel, one of the activists of Community Seed Bank, Ranibas, said that National Gene Bank approached them and accessed the landraces preserved by his community. However, such government agencies have not come with any programme to help conservation at the community level.



Social campaign awareness by DADO, Sindhuli for commercial farming

Moreover, it is not clear how the rights of the local community over those resources are ensured and how the community will accrue the associated benefits. The government could at least initiate community plant breeding

and variety development in such areas. That way, they could benefit from any scientific advancement of their own knowledge.

DFO is the district level line agency of Ministry of Forest and Soil Conservation. There are several sub-district level offices to support DFO. Mr. Bhola Prasad Baral, Chairman, Singhdevi Community Forestry Users Committee, Ranibas-2, said that they are more engaged in policing the national forests than other conservation works. With regard to community forests, they monitor the activities of users groups, provide seedlings for plantation, provide training on social mobilization and build capacity and leadership. Mr. Raj Kishor Adhikari (Danuwar), Harshai, said that DFO has supplied seedlings of a few fruits and medicinal plants at Harshai to poor and backward households under Leasehold Forestry Programme.

In Bara District, there is Collaborative Forestry Programme ⁴⁴. Mr. Amar Lal Tamang, Nijgadh, said that DFO-Bara supplies firewood to people living in lower Chure Region under this programme. But, Collaborative Forestry does not address genuine concerns of lower riparian areas—such as the right to participate in the management and equitable share of the benefits. There is a real possibility for conflict here, between upper and lower riparian areas, especially with the increasing incidents of resource misappropriation in the days to come.

Currently, there is no programme to help conservation and utilization of local knowledge, practices and technology. The government could begin by documenting biological resources and associated traditional knowledge. As mentioned earlier, the indigenous and tribal communities are gradually losing their traditional knowledge and skills. There should be no delay in establishing the rights of the communities in such resources and allowing them to benefit from their utilization.

PCTMCDC focuses its work on integrated river management, protection of vulnerable areas and improvement of the agriculture system in Chure Region. It also takes into account the technology development relevant for Chure's conservation. During the FGDs, it was found that the committee was working for Ratu River's management in Mahottari and commercialization of agriculture in Bara. Mr. Bashu Dev Ghimire, local activist, Tulashi, said that it

This programme tries to address the grievances of lower riparian areas with regard to their access to firewood, which was withheld after the nationalization of forests, in the beginning, and promotion of community forestry users groups, later.

has conducted various meetings in his locality to indentify the intervention areas for Chure's conservation. Additionally, as informed by Mr. Maheshi Kumar Tharu, Nijgadh, the committee has formed a number of groups in his municipality. These groups are to be encouraged for income generating activities in various ways. However, no programme was found for Sindhuli District during the field visit. Moreover, the committee was not engaged in any activity regarding conservation and sustainable use of biological resources, whether it is agrobiodiversity or associated local knowledge and technology⁴⁵.

Local government bodies are supposed to work for the interest of local communities, but they are closed to them. Local Self-governance Act, 1999 has provisioned two-tier local bodies: VDC/municipality at the lower level and DDC at the higher level. In the visited areas, these bodies were found to be prioritizing rural road construction. The other priorities were construction of bridges and drinking-water schemes, flood control and income generating activities⁴⁶. But, some of the concerns of the local communities remain untouched. They could do a lot here, particularly protecting the traditional land of the tribal community, sustaining their livelihood options and encouraging traditional practices of conservation and sustainable use of natural and biological resources. However, Nijgadh Municipality was found to have spent the money allocated for improving indigenous community livelihood on vocational training. The only encouraging fact was that Sindhuli DDC has allocated a budget in Fiscal Year 2015/16 for establishing the Indigenous Nationalities Museum. The museum is supposed to serve as a place for research on civilization and development of indigenous nationalities. Mr. Ram Hari Pokharel argued that, due to the absence of elected representatives, local bodies were less interested to raise the concerns of socially and economically backward tribes and ethnic communities in their respective councils.

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The committee is preparing its master plan for the next 15-20 years. It has joined hands with Kathmandu University and Tribhuvan University for applied research in forest conservation and improvement of livelihood practices in the region. This is expected to build national capacity in Chure's research and conservation. Therefore, the future strategy should be looked into more critically.

Most of the VDC budget is allocated for rural roads and drinking water schemes at Ranibas and Harshai. Nijgadh did so for watershed management and rural roads, among others. Sindhuli DDC allocates money for flood control, rural road construction, social security etc.

4.5 Community Efforts in the Management of Nearby Natural Resources

Despite the gradual move of rural life toward a market based system, some of the community activities in Chure Region are praiseworthy. A large number of local people are associated with various users groups, such as irrigation, drinking water, forestry as well as farmers' groups, seed producers' groups and mothers' groups. People work for the community's collective benefit through such groups transcending their caste and ethnicity boundaries. Such community efforts have produced positive impacts in some places, particularly in northern parts of Chure Region. These impacts can be seen in forest management, river and watershed management and improvement of health and hygiene. Mr. Krishna Hari Ghimire, Chairman, Radio Sindhuligadhi, said that this part of Chure Region is inhabited by a mixed population, with similar lifestyles and facing similar opportunities and threats. Therefore, the society as a whole has similar perceptions with regard to community work.



Notice of community related to prohibition for grazing

Community efforts at Ranibas are exemplary. Earlier, the area was getting desertified. The forest cover had declined substantially, Kamala River used to change its course frequently and the farms near river were buried in piles of stones and sand. Mr. Indra Prasad Pokharel, one of the community leaders, said that the local

community decided to ban open grazing in 2003 in public lands, such as forests and river banks. They closed Ward Nos. 2 and 3 of Ranibas VDC to open grazing. Parivartan Nepal, an NGO based in Hetauda, supported the local people in borrowing and sowing the seeds of many plants that are important for flood control and soil conservation. These plants had disappeared from that area earlier. In the meantime, a community forest users committee was formed. Today, the forest has revived, river course controlled and many

desertified farmlands recovered. The forest users committee has contributed to biodiversity conservation as well⁴⁷. Interestingly, communities from other areas of the district, such as those from Belghari, Harshai, have replicated the moves against open grazing. The Harshai FGD revealed that Government of Nepal now provides incentives to community forest users committees to close open grazing areas.

Ranibas is an example of agrobiodiversity conservation. A Community Seed Bank has been established there that has conserved the various varieties of 43 crops. It also facilitates the cultivation of those landraces⁴⁸, organizes seed fairs for the collection of local varieties and rewards conserving farmers, annually. The bank maintains samples of those varieties in the bank (see photo below) and recently shared those landraces with National Gene Bank for additional safety. The Ranibas community has recently started organic

farming as well. The community is gradually moving toward displacing chemical fertilizers from the area. DADO is helping this initiative through its Animal-shed Improvement Programme and Earthworm Farming Programme.



Plantation by the community along the bank of Kamala river, Sindhuli

The seed bank requests farmers to cultivate at least one such conserved variety every year.
Other farmers are requested to cultivate those varieties the next year.

39

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⁴⁷ According to Mr. Bhola Prasad Baral, Chairman, Singhadevi Community Forest Users Committee, Ranibas-2, his committee has surveyed and recorded of 848 kinds of plants available in the nearby forest.



Community seed bank, Ranibas, Sindhuli

But, community initiatives are difficult to come by as the younger generation is moving toward formal sector employment. Moreover, it should not be expected that community efforts will be effective everywhere. Therefore, the government could replicate the best examples in similar communities. This helps in the use of local knowledge and technology for conservation and the sustainable use of biological resources. The government could help community efforts if only to honor and encourage the community. It could do more by bringing together the community and scientists and promote their collaboration for agricultural development.

4.6 Stakeholders' Participation In Decision Making Process

Stakeholders' participation is to be looked at from three perspectives: who represents the communities, how concerns of the communities are taken onboard; and how concerns are addressed by various layers of government. To this end, this study considers the current system of representation, communities to which the representatives belong, and the engagement of different communities with government agencies.

The Local Self-governance Act, 1999 designed the governance bodies at the local level in two tiers- the lower layer VDC/municipality and upper layer DDC. These two entities are the true representatives of the people: local representatives irrespective of class and ethnicity are elected to these entities. For example, at Harshai, the immediate past chairman was a Danuwar, an active farmer, and a fisherman. In Nijgadh, during the last local election, the mayor was elected from the Pahadi community, which makes up more than 81 per cent of the total population. However, there are times when some communities feel that they are not truly represented in this local-level decision making mechanism. The FGD showed that Danuwars of Chandanpur, lower parts of Ranibas, felt that they were not properly represented all the time.

Prolonged political problems have meant that these local bodies remain vacant since 1999, when the last local elections took place. They have been run by government employees for 16 years. So, accountability of these officials towards the local people is not as robust as it would be with elected representatives. Decisions made by such bodies have often become controversial. When Sindhuli DDC offered contracts to extract stones from Kamala River at Ranibas, two years back, the local people stood up against the decision. Similarly, people at Tualshi said that the local people were not adequately consulted prior to contracting out the extraction of stones and sands from Ratu River. This has led to excessive quarrying. Similarly, the voice of the local community was not adequately presented when the government held discussions to expand Parsa Wildlife Conservation Area in Bara. Indeed, the gap has widened between the local people and their local bodies in the 16 year period.

At the central level, the Interim Constitution, 2007 adopted a mixed system of representation. The current legislature is composed of 245 directly elected legislators and 356 are elected through a proportional system. The large size of proportionally elected legislators was constitutionally reserved to include people from tribal communities/indigenous people, Dalits, Madheshis and others from backward regions as per the proportion of their population. The recently promulgated Constitution of 2015 follows more or less the same method to ensure inclusive representation. In addition, the new constitution provisions proportional inclusion at every structure of each level of

government⁴⁹. At the moment, in Sindhuli, the central legislator from the visited areas, in the upper reaches, belongs to the hill community. Those from Bara and Dhanusha, in the lower areas, are Madheshis. However, the remaining communities are able to reach the legislature through the proportional system.

The other important representation issue is about the relationship of the local and tribal communities with government line agencies. Such agencies forward the local people's aspirations to the government machinery. To this end, they have to consult the concerned stakeholders—the farming community, local and indigenous community and users community— while deciding on issues which affect their livelihood. However, people do not feel that these agencies are doing that. For example, no public hearing was conducted prior to expanding Parsa Wildlife Conservation Area in Bara. While contracting out the extraction of sand from Ratu and Sundari Rivers, the affected Danuwar and other people were totally ignored. People at Ranibas still do not know how they will benefit when their seeds are handed by National Gene Bank to commercial users. DRO did not consult the Danuwars before constructing the link road between Hetauda and Chatara, which was about to displace them from their traditional homeland at Marin Khola VDC. Even while forming PCTMCDC, the local and indigenous communities and other stakeholders were not adequately consulted.

Sometimes, such agencies are influenced by the political power structure. Mr. Maheshi Kumar Tharu, Nijgadh, and Keshav Chauhan, Tulashi, said that Madheshis have the highest share in the population of the lower riparian districts, meaning that they have more legislators from that community. So, the local leaders are either from lower riparian areas or are influenced by the people there. In this case, the district line agencies try to balance the power relations, instead of addressing genuine concerns, while making decisions. For example, river embankments are supposed to be built first from up-river in order to control floods. But, according to FGD participants, huge amounts of money is allocated for down-river stretches of the Ratu River, because of political influence⁵⁰. Moreover, PCTMCDC sources the money only to the

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Nepal's constitution has provisioned three layers: central, provincial and local governments. Each has its own legislature and executive. The constitution has ensured ethnic inclusion in every structure of each layer of the government.

Lower part of Ratu river falls in Dhanusha district and affects the large number of Madheshi community.

lower riparian areas. Additionally, NGOs, selected for social mobilization under the committee, are based in lower parts of Dhanusha and Bara Districts. Such decisions not only create a distance between the local community and the authority, but also animosity between the communities. Thus, stakeholder participation, particularly the participation of the local and indigenous community, has been little institutionalized at different layers of the government. However, mandatory inclusion and consent of the farming community is not practiced while dealing with natural resources. Moreover, the practices of government line agencies do not allow us to conclude that associated communities are consulted adequately.

43

CHAPTER 5

Way Forward

The case of the Chure Region shows that there could be conflicts over the use and management of natural and biological resources if the government and local communities fail to build trust and cooperation. It also shows that the government would not resolve such conflicts only through the enforcement of the top-down approaches and strategies for resource management, including that of PGRFA. Nepal's involvement in the CBD, ITPGRFA and ILO 169 calls for ensuring the participation of the concerned communities while making decisions that may affect their livelihood. Such communities have their rights over natural and biological resources. Such rights have been recognized by the new Constitution and a number of other laws. But, there is lot more to be done to protect the rights of local communities over natural and biological resources. For example, institutionalization of prior informed consent (PIC), while taking decisions regarding natural resource management, could address conflicts between government and the concerned communities to some extent.

The field study showed that the extent of willingness to implement these treaties and national policies and laws is affected by the relative presence/influence of the related stakeholders. It was also found that limited availability of resources restricts the ability of the government to translate some of the promises into action. In this context, four factors, identified during the field visit, are discussed below to examine the factors affecting the ability and willingness of the government to implement the treaties.

First, Nepal in general faces many institutional gaps. And, Chure Region is no exception to that. The new constitution requires many legal and institutional arrangements, from the centre to the local. This particularly true about institutions that are required to realize the level of inclusion envisioned by the constitution. Additionally, even existing institutions have not been functioning the way they should be. Local local government bodies have not seen elected representatives ever since the Local Self-government Act was promulgated. Whatever local structures were there got destroyed in the 10 year long armed conflict. This means that there is a kind of vacuum is at the local level. This void is filled by local networks of bureaucrats, politicians and security forces,

in many instances, creating their own vested interests. In any case, government officials are less willing to address the concerns of the locals than working not to disrupt the local power balance. This has created conflict between the communities and the state organs that are there to serve them.

Participants of FGDs said that local bodies are less inclined to take up the decisions of the local councils than the wish lists of the abovementioned nexus. For example, these bodies and agencies maintained silence while forest encroachment went on at Tulashi or when excessive extraction of sand took place on Ratu River; or when budget was diverted from agriculture to the rural road sector in Sindhuli District. The field study also showed that government agencies were readily serving the interests of upper riparian people than those living downstream in Sindhuli. This was found to be just the reverse in the cases of Dhanusha and Bara, where lower riparian people received more priority than those in the upper areas ⁵¹.

Institutional gaps have created a coordination gap in the Chure. Article 204 of Local Self-government Act gives powers to DDC to carry out coordination between all the district level governmental and nongovernmental agencies. But, in the absence of elected representatives, the spirit of the article has deviated from the main objective. Today, one can see distribution of river embankment materials, tree plantation and water source conservation being carried out by DSCO, People's Embankment Programme, PCTMCDC and DDC separately. PCTMCDC and DDC distribute the seedlings of a few fruits/herbs and improved seeds of vegetables, promote private forestry and other income generating activities in their own ways. Additionally, a couple of NGOs are also involved in these activities in Sindhuli, Dhanusha and Bara. Participants of the FGDs shared that such duplication is deliberately done by the authorities in order to serve a few local elites. Benefits designed for the masses too can go astray when popular accountability is absent. For example, there was only one person who benefitted from subsidy on fruit farming at Tulashi, just because he had a good connection with DADO. Such attitudes are not helpful for the marginalized communities.

Second, there are two basic concerns of the people living in Chure Region and both are at odds with each other: they want their developmental aspirations

45

Where influential political leaders belong, including Members of Parliament of the respective constituencies.

addressed and that they be protected from natural disasters. The country has recently settled a 10 year long armed conflict by promulgating a new constitution. Therefore, the developmental aspirations of the people in general have increased. Regarding Chure, the region is highly fragile and is facing natural disasters every year. Even though investment in infrastructures and means of protecting the people from disasters is bound to increase, longer term investments may be more difficult to come by due to resource crunch. On the other hand, the pressing concerns of the vulnerable local communities- farming and indigenous - in the region require immediate attention. These concerns have to do with conservation of natural and biological resources and protection of the rights of the poorer sections of the communities. This resource constraint, on the one hand, and the immediate needs of the people, on the other, may create conflict between the communities and the government agencies.

Interviewees from Sindhuli, Dhanusha and Bara said that the respective DADOs allocate a large share of the budget in expanding irrigation facilities and promoting commercialization of agriculture. However, no budget is allocated to support the activities of custodian farmers and conservation of local plant varieties. The promise of the policies/strategies to create an informed farming community is equally elusive. So, when disasters like crop failure occur, the conflict between the government and the farming community emerges. Mr. Bhagawan Pokharel, Ranibas, thinks that if public research institutions and crop development programmes had incorporated the farmers' knowledge and innovation and legally ensured the farmers' rights, such conflicts would not have emerged in 2009.

People in Chure Region were found to be sensitive about the importance of their ethnicity and traditional practices. This was a result of ethnic movements and greater access to information. The awareness of the Danuwars of Harshai has led them to argue that their community has been contributing to biological through their traditional practices and lifestyle. However, they are unhappy with the government's apathy towards protecting their traditional practices, establishing their right to continue such practices and documenting their relevant knowledge for biological conservation. Mr. Maheshi Kumar Tharu, Nijgadh, saiud that the authorities do not have the willingness to spend money in such areas.

Third, there are also conceptual differences among stakeholders. These differences could easily mislead the spirit, create mistrust and thereby reduce the capacity of the agencies to fulfill their promises. For example, there is no consensus on the definition of "indigenous community". Mr. Ram Avatar Adhikari (Danuwar), Harshai, argues that the Danuwars must be taken as the primary stakeholder in Chure Region. Similarly, Mr. Ram Hari Pokharel, citing the contribution made by the people of Ranibas, said that the local community, other than the so-called indigenous community, has made no less a contribution in the conservation of natural and biological resources in Chure. Such differences could cause to reduce the capacity of the authorities. This would be a hindrance to conserving the resources, ensuring community participation in the decision making process and establishing their rights over the benefits arising from the resource utilization.

Mistrust is another factor responsible for lowering the working capacity of the authorities. Mr. Rajan Shrestha, former vice chairman of Sundari Community Forestry Users Committee, Tulashi, agreed that intervention was urgently required in the region to stem its rapid degradation. Past mistakes in trying to address the problem have not helped either. Had the government consulted the stakeholders—the forest users groups, landless people, ethnic organizations—properly, the government decision to conserve the Chure would not have been as contentious as it is now.

There is still a debate regarding the actual right holders of Chure resources. From ancient times, lower riparian people had been withdrawing the resources from the region. Moreover, the region is critical to them for it plays an important role in their ground and river water supply. However, Mr. Maheshi Kumar Tharu, Nijgadh, said that the current Forest Act, 1992 places the later migrante in the driving seat. It does not recognize the concerns of the lower riparian areas on forest resource management. Not only this, people living downstream have to pay the costs of all the ill-deeds of the migrants. This is an inter-riparian conflict.

Fourth, the complexity of the regime involved in Chure Region is another issue. There are a number of laws and regulations that give rights to different kinds of organizations over Chure's resources. Conflict may occur among the agencies hindering their ability to do anything they were supposed to. There are many government line agencies at the district level. They include DADO,

DFO, DSC and DDC. They are accountable to their respective ministries through their zonal and regional offices. They operate under different laws and regulations. However, DDC has the powers to coordinate the activities of other district level line agencies. Moreover, according to Local Selfgovernance Act, 1999, other line agencies should follow the directives of DDC. This has created possibilities for conflict among the agencies regarding their jurisdiction. Such conflict would ultimately hinder them from implementing their commitments. Fights can occur between the local bodies in extracting resources or sharing revenues. Mr. Lekhnath Bakhrel, Ranibas, illustrated the conflict between Sindhuli DDC and Ranibas VDC when the former decided to sell stones and sand from Kamala River to Hazama and Ando Corporation in 2000.

The civil society organizations that emerged in Nepal in the late 80s include community forestry users groups, irrigation water users groups, seed producing groups, cooperatives and ethnic organizations, among others. For example, Forest Act, 1992 allows the local communities to be organized in groups to manage forests handed over to them. Today such groups consider themselves as primary stakeholders regarding the resources. Mr. Bhagawan Pokharel, Ranibas, said that they do not accept any impositions, like PCTMCDC, because they were not consulted while setting up the committee. However, he urged the government to support and collaborate with community initiatives for conservation. When such mistrust persist, between government and the stakeholders, it becomes difficult for the realization of the goals of the effective management and use of natural and biological resources.

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