



UNIVERSITI PUTRA MALAYSIA

**FACTORS RELATED TO COMMUNITY
FOREST MANAGEMENT PRACTICES IN
TWO RURAL VILLAGES IN NEPAL**

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FACTORS RELATED TO COMMUNITY
FOREST MANAGEMENT PRACTICES IN
TWO RURAL VILLAGES IN NEPAL

By

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Implementation has been referred to as the achilles heel of reform in developing countries. The inability to implement policies and plans is the main cause of programme failure. The community forestry programmes in Nepal is a case which has encountered difficulty in implementation.

With the general purpose of determining the factors that were related to community forest management practices, a comparative case study was conducted in two villages. One of the villages had good implementation of forest management practices and the other poor.

The study was conducted in Hanspur and Dangsimarang Villages in Nepal. Using the stratified random sampling technique, a sample of 100 household heads (who were forest



users) were chosen. An interview schedule was used to obtain the data.

The findings of the study reported that there is a significant difference in forest management practices implemented in the study villages. The focus of the difference was the control exercised in limiting usage of forests in Hanspur Village. While in Dangsimarang Village, uncontrolled usage of forest had caused degradation. In addition, there were significant differences in participation in decisions and leadership functions, but there was no difference in physical variables.

Participation in decisions and leadership functions emerged as variables that were more important than others in contributing towards collective implementation of forest management practices. Variation in physical variables were related to demand for forest products, but did not, in itself, contribute toward the collective implementation in the village.

It was recommended that action should be taken to acknowledge and strengthen the forest management efforts undertaken by the forest users in the villages. Finally, additional research on forest management in Nepal is needed with less emphasis on trees and more on people who use, control, own, conserve and destroy forests.



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FACTOR-FACTOR YANG BERKAITAN DENGAN PENGURUSAN HUTAN
OLEH KUMMUNITI DI DUA BUAH KAMPUNG PEDALAMAN DI NEPAL

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Perlaksanaan telah dianggap sebagai satu halangan dalam memperbaiki negara-negara membangun. Ketidakbolehan untuk melaksanakan polisi dan rancangan adalah sebab utama yang menyebabkan kegagalan program. Program perhutanan komuniti di Nepal adalah salah satu kes yang menghadapi kesulitan di dalam pelaksanaan.

Tujuan umum kajian ini adalah untuk mengenalpasti faktor-faktor yang berkaitan dengan komuniti pengurusan hutan. Satu kajian kes secara perbandingan telah dijalankan di dua buah kampung. Satu daripada kampung itu mempunyai pelaksanaan amalan pengurusan hutan yang sempurna dan sebuah kampung lagi tidak sempurna.



Kajian ini telah dijalankan di kampung Hanspur dan Dangsimarang di Nepal. Dengan menggunakan teknik persampelan rawak berperingkat, seramai 100 orang sampel ketua keluarga pengguna hutan telah dipilih. Jadual temuduga telah digunakan untuk mengumpul data.

Kajian ini telah mendapati bahawa terdapat perbezaan secara signifikan di dalam melaksanakan amalan-amalan pengurusan hutan di kampung-kampung tersebut. Fokus perbezaan itu adalah kawalan yang telah dipraktikkan di dalam mengawal penggunaan hutan di kampung Hanspur. Manakala, di kampung Dangsimarang, penggunaan hutan yang tidak dikawal telah menyebabkan kemerosotan hutan. Terdapat juga perbezaan signifikan di dalam penyertaan membuat keputusan dan kepimpinan, tetapi tiada perbezaan di dalam angkubah fizikal.

Penyertaan di dalam fungsi membuat keputusan dan kepimpinan telah menjadi angkubah yang lebih mustahak daripada lain-lain angkubah di dalam menyumbangkan terhadap perkaitan komuniti secara kolektif untuk amalan-amalan pengurusan hutan.

Kepelbagaian di dalam angkubah fizikal telah mempengaruhi permintaan untuk pengurusan hutan, tetapi ianya tidak menyumbangkan ke arah pelaksanaan secara kolektif di kampung.

Adalah dicadangkan supaya tindakan diambil untuk memperakui dan mengukuhkan usaha-usaha pengurusan yang dibuat oleh peneroka-peneroka hutan. Akhir sekali, kajian mengenai pentadbiran hutan di Nepal adalah perlu dengan mengurangkan penekanan kepada pokok dan memberi lebih penekanan yang lebih wajar ke atas orang yang mengguna, mengawal, mempunyai, menyimpan dan memusnahkan hutan.



CHAPTER I

INTRODUCTION

Community forestry is forest management by the local community. These "forests" are usually small woodlots which produce firewood, timber, fodder, herbs, medicinal plants, fruits and vegetables. Generally, the community who resides within close vicinity of the forest harvests these products for local consumption. The community makes all decisions and implements all actions concerning forestry practices. These practices include the harvesting, distribution, protection (access control) of forests and the planting of trees.

In Nepal, community forestry practices are part of the hill farming system. The hill farming system comprises soil, water, crops, livestock and the forest, which is managed by the farm family (Mahat, 1987). Forests provide 87% of fuelwood, which in a majority of cases is the only source of household heat and light. The forests provide 25% of the fodder for livestock and all (100%) domestic need for timber, wood for making farm implements and other needs for construction. Forests play an integral role in the daily lives of approximately 90% of the population of Nepal who reside in rural communities (Nepal, 1982).



Historically in Nepal, the government exercised little control over forests before 1957. The government's indifference to matters of the forest and forestry was reflected in the lack of any significant legislation. There were no survey records or land ownership documents which mentioned forest lands. In fact, the forest was not even considered as a resource (Mahat, Griffin and Shepherd, 1986).

The government continued the traditional policy of agricultural land extension by clearing forests. But on the other hand, local farmers considered forests and trees necessary for their hill farming systems. After the mid-nineteenth century, there developed among the rural communities a sense of local responsibility and tradition for the conservation of the forest and for using the forest resources judiciously. It can be said that community forestry in Nepal originated from among the rural community and was practiced by them without government intervention (Mahat, Griffin and Shepherd, 1986).

The first forest legislation of any consequence was the 'Forest Nationalization Act of 1957'. This legislation introduced various measures regarding ownership, management and conservation of forests. The 1957 Forest Nationalization Act brought all forest lands under government control, with a view to preserve, protect and control usage of this important natural resource. However, due to the government's inability



to communicate the implications of this act to the common man, misunderstandings arose. Therefore, the common man felt that the state had alienated him from his right to use the forest.

The impact of the common man's misunderstanding of the 1957 Act was disastrous. The rate of deforestation accelerated. In the last 20 years Nepal's forest decreased from 6.4 million ha to 3.8 million ha (International Institute for Environment and Development and World Resource Institute, 1987). Due to the mountainous and fragile topography, deforestation triggered a major problem of soil erosion. Annually, 240 million tonnes (International Institute for Environment and Development, 1987) of soil is eroded and carried by rivers out to the sea. The amount of soil movement through erosion that occurs within the country itself, from mountain slope to valley bottom, is not known. The importance of forests is not only in fulfilling the needs for consumable products, but also in contributing to environmental stability.

The government, has now realised (Nepal, 1985; Mahat et al., 1986; Wallace 1988) that the only solution to some of the major problems in the hills of Nepal is community forestry. It is also agreed that, in essence, community forestry is the transfer of responsibility from the government to the users. In actuality, it is the re-establishment of community forestry among the rural people, which is the focus of the Community Forestry Policy of the government of Nepal.



The government recognition of the adverse impact of deforestation, which in turn led to the realization of the need for community participation in forestry practices, resulted in the amendment of the Forestry Act of 1957 in 1977. Under the 1977 Community Forestry legislation, community forestry came into legal existence through the provision for forest and forest land being handed over to the rural community to manage.

By 1986/87, the government had initiated community forestry programmes covering 29 hill districts (Karmacharya, 1987). The Seventh Plan Report indicated that, during 1980-85 approximately 52,000 ha of land were planted with trees and 41,000 ha of community forests were established (Wallace, 1988). It is estimated that another 1,835,000 ha of forest and forest lands will be handed over to the communities for management in the future (Karmacharya, 1987).

Statement of the Problem

The major problem in some communities is the accelerated rate of deforestation of forest lands. Demands for forestry products can no longer be met from the net forest growth. Improving the management of the forest has been identified as one of the solutions to providing forest products to meet the community's needs, as well as to maintain environmental stability.

The majority of forest land is government and/or community owned. In Nepal, community forests are common property; and because they are common property they are often poorly managed (Wallace, 1988). In order for community forestry to be re-established, there is a need for collective decisions, collective adoption of measures, and collective implementation of forest practices by the community as a whole. The success of community forest management lies in the community's collective decision and implementation of collective action that simultaneously maintains survival of forests, and facilitates fulfilment of the needs for forest products of the community.

In the majority of communities, the re-establishment of community forestry is needed to counter deforestation. However, there are communities who have continued to implement collective forestry practices over the decades without government intervention. Despite adverse legislation and change in political and economic spheres, these communities continue to support their collective decisions and collectively manage their forests.

Increased pressure on forests by rapid growth of human and livestock population, conversion of forest land to farm land, and inappropriate policy have been noted as factors contributing to the degradation of forests and forest management practices. What factors were related to

collective forest management practices in the study villages? Do differences exist in factors that are related to forest management practices in the study villages? Are there difference in forest management practices in the study villages?

The problem addressed by this study was to try to determine the relationship between variables that were associated with the community's ability (or lack of ability) to successfully manage communal forest lands. In order to do this, two neighbouring villages in Kaski District were selected for examination; one (Hanspur) with a relatively well maintained communal forest and another (Dangsimarang) with a degraded communal forest land.

Objectives of the Study

The general objective of this study was to determine the relationship between selected independent variables and forest management practices. Specifically, the objectives of this study were;

1. To describe forest management practices in Hanspur and Dangsimarang Villages.
2. To determine the differences in forest management practices in Hanspur and Dangsimarang Villages.

3. To determine the differences in participation in decisions, undertaking of leadership functions, farm size, family size, fodder trees and livestock between the study villages.
4. To determine the relationship between forest management practices and independent variables in the study villages.

Limitations

This research was a case study and hence the findings were only applicable to the study area. The limitation was that the findings could not be generalized to account for other villages. In addition, the research only studied the implementation aspect of collective forest management practices. The planning and evaluation aspects were not a focus of the research.

The study did not take into consideration cultural, psychological, and political variables that could be related to forest management practices. Cultural and psychological factors were difficult to identify, define and measure, and were generally integrated with a multitude of other factors. The task of extricating cultural and psychological factors that specifically related to forest management practices was thought to be too complicated and time consuming. Cultural and psychological factors, it was felt, were better suited to an in-depth study which had less time and financial constraints.

It was also felt that political factors that could be related to forest management practices were too difficult to determine and measure. In many instances, the study of political factors would have covered highly sensitive grounds. In order to avoid confrontation with sensitive political issues, political factors were not included in the study.

List of Terms

Agriculture Slack Season	The time of the agriculture work cycle when agriculture related work is relatively less. It refers to the period after harvesting of paddy and before planting of maize.
Agriculture Waste	Useless remains, refuse scrap, any part of a product that is not put to use.
Bhari	A word in the Nepali language which refers to bundles/load.
Caste	The caste system is a rigid stratification of society, according to the division of labour and/or occupation, along a vertical axis. The Brahmin caste is at the top, followed by Chhetri, Vaisya and Shudra castes.

	<p>Upward mobility, from lower to higher caste (strata) is impossible, but downward mobility, from higher to lower caste is possible. Each of the stratum in the system is a caste.</p>
Community	<p>Small, territorial groups that have a close and durable relationship amongst their members.</p>
Conservation	<p>The control and maintenance of natural resources for present and future use.</p>
Crop Residue	<p>That part of the plant left in the field after harvest, such as leaves, stubble, roots, etc.</p>
Cropping System	<p>Order in which crops are cultivated on a piece of land over a fixed period.</p>
Crown	<p>The upper part of a tree, including the branches with their foliage.</p>
Crown Density	<p>The compactness of the crown cover of the forest, dependent upon the distance apart and the compactness of the individual crowns.</p>
Deforest	<p>To remove the tree crop from a piece of land without the intention of reforesting.</p>

Erosion	The wearing away of soil by water or wind.
Forest	A tract of land covered by plant association predominantly composed of trees and other woody vegetation.
Forest Floor	The covering of the soil of a forest consisting of humus, duff and litter under forest growth.
Firewood	Stem and branches of trees harvested from the forest, that is burned and the energy used for cooking and other domestic purposes.
Fodder	All green and dry biomass consumed by domestic livestock.
Grazing	The eating of any kind of standing vegetation by domestic livestock.
Hardwood	Generally one of the botanical group of trees that have broad leaves; wood produced by broadleaved trees, regardless of texture or density.
Harvest	The practice of cutting a standing tree or parts of it in a forest.
Land System	The geographic division of land based on nature or different soils and their extent and relief.

Land Utilization	A geographic division of land based on natural factors such as soil, relief, climate, vegetation and the use to which it is put, such as agriculture, forest, grazing etc.
Litter	The uppermost layer of the forest floor, composed of freshly fallen or slightly decomposed organic materials.
Occupational Caste	A word which is used as a synonym for the lowest caste in the caste system. It consist of people whose occupation involves manual labor, such as black smiths, carpenters, tailors, shoe makers, mason and so on.
Overgrazing	Grazing so heavy as to impair future forage production and cause range deterioration through consequential damage to plants, soil or to both.
Panchayat	The lowest level of political administrative unit in Nepal. It is also one of the geo-political sub-units that make up a district.
Planting	The artificial restocking of a concerned area by sowing or planting of trees.

Poles	Stems and branches of trees that are 8 to 10 cm in diameter that are harvested and used for construction.
Protection	The controlled usage of an area of forest by a given organization which has assumed a degree of responsibility.
Ranger	An administrative officer in charge of a unit of forest land.
Reforest	Re-establishment of a tree crop by natural and/or artificial means on forest land.
Rotation	Planned period of years between tree establishment and final harvest.
Timber	Categories of wood other than firewood that is suitable for heavy construction e.g. building of house.
Tree	A large woody perennial plant having a single well defined stem and a more or less definite crown.
Village	Geographic location of groups of households within the geopolitical boundary of a Ward.
Ward	One of the nine geopolitical sub-units of a Panchayat.