

An Institutional Strategy for Improving Mountain Farming: A Study of Uttaranchal State in the Indian Himalayas

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Introduction

The need for alternative policies to provide opportunities for improving the livelihoods of the people living in mountainous areas is now increasingly understood. Generally, a technological bias has been reflected in many of the policy documents aimed at improving mountain agriculture. However, recent understanding of farming experiences emphasises the institutional dimensions of mountain agricultural development. It also emphasises that sustainable results can only be achieved if the technological aspects are kept as complementary and supporting components to the institutional approach.

The institutional approach mainly focuses on the 'insiders' viewpoints and 'their own perception' about traditionally sustainable and sedentary mountain farming that have been collected from land settlement reports and land records. The institutional cutting edge issues mainly relate to ownership of land and water resources, attitudes and perceptions, land consolidation, and capacity building, along with proper sensitisation of the development functionaries including bureaucracy. In the institutional dynamics of marginality, gender participation and empowerment are an essential part of development strategies based on an institutional approach.

This paper analyses and demonstrates the benefits of an institutional strategy that could become an integral part of alternative policy advocacy for improvement in mountain marginal farming, specifically in the context of Uttaranchal development. It analyses the institutional dimensions of agricultural development by selecting a mountain region that is still practicing traditional sedentary mountain cultivation. Other secondary sources and databases related to land use information are also reviewed. A participatory rural appraisal (PRA) was also conducted to ascertain the community's perception of various issues related to mountain farming.

Present Status of Mountain Farming in Uttaranchal

Uttaranchal is a new Indian state that earlier had been an economic region comprising a few districts in Uttar Pradesh state. Uttaranchal has diverse agro-climatic features, including a somewhat flat area called 'Tarai', mid mountains, and high land nearing the snow line. These diverse agro-climatic regions have not been utilised to complement each other in terms of farm production or providing two-way linkages. Based on the latest population estimates from the 2001 census, 8.5 million people comprising 75% of the population live in 15,024 inhabited villages, and there are 84 urban centres spread over 53,483 sq.km. A relatively high literacy rate of around 72% can be taken as one of the better indicators of social development.

The production of the main crops reflects the diversity in the agro-climatic conditions and the relative importance given to agriculture in different districts. The average productivity for the high yielding varieties like wheat and paddy is 18.4 quintal¹/ha for wheat and 19.8 quintal¹/ha for paddy, whereas for traditional non-irrigated crops like 'mandua', 'jhangora', and maize the figures are 13.1, 10.7, and 11.1 quintal¹/ha, respectively.

The land use data in Uttaranchal also show a steep rise in both the 'current fallow' and 'cultivable waste' areas, indicating a considerable decline in the net sown area. This peculiar aspect has been continuously reflected in the land use data (Pokhriyal and Bist 1988), and the process of abandoning cultivated land still continues. The net sown area was around 13% of the total geographic area in 1998, and the cultivable waste area and other fallow land were together around 7%. Similarly, water utilisation and irrigation proportion have also gone down in recent years. This has further increased the marginalisation of mountain farming communities, especially in areas of high migration. Although various government departments and other institutions support mountain farming and other related activities, attitudinal indifference, non-accountability on the part of development officials, and a non-participative approach mean that the marginal farmers, especially women, remained detached. The mountains are treated as a place for punishment posting of government officials, thus the extension officials cannot be expected to show any interest in innovation. There is a great need for attitudinal change among the government functionaries. Equally, the net potential and possible advantages from using both the net sown area and waste land for niche-based economic activities need comprehensive policy advocacy.

Learning from the Land Settlement Process

Recently, environmental sustainability, food security, and biodiversity related issues have become important in the context of mountain farming development. In the debate on the need for a better quality of life and on the relevance of bio-farming, mountain agriculture re-emerged as important. It is expected that in the future marginal mountain farming will get more attention than in the past, and that better market linkages will further improve the income opportunities for mountain farmers, especially women.

In Uttaranchal, some institutional efforts were carried out during the British rule from 1815 to 1910, but the period between 1910 and 1947 was a more inactive phase. The technological phase began in the post independence period starting from 1947. During the technology dominated phase, half-hearted efforts to improve hill farming were made. But, during this phase there was a considerable reduction in mountain farming. Intentional neglect of the potential of mountain farming was (and is) one of the major factors contributing to the sluggish growth of hill agriculture.

Much can be learnt from the various conscious efforts made in the different phases of the farming history on mountains of Uttaranchal. The last two hundred years can be divided into three broad phases. On the basis of the land settlement records and the reports on land tenures, the 'khaikari/occupancy phase' before 1790, the 'hissadari/

¹ 1 quintal = 100 lbs or 100 kg, ed

right to transfer the cultivated land' phase (1815 to 1920), and the 'post-independence phase of indifferent attitude' (post 1947). In between these three phases two transitional intervals can be seen, one from 1790 to 1815 and the other from 1920 to 1947. During the first transitional interval, some conditions were created intentionally through government intervention, and in the later transitional phase circumstances pushed down mountain farming in Uttaranchal. A normative scale was prepared on the basis of the overall efforts made through public policy and programme intervention to improve mountain farming. The trends calculated using this scale are shown in Figure 1. The normative scale also considers the kind of enthusiasm that was found and the importance given to creating a sustainable resource base for the farmers in terms of expansion of the area under sedentary cultivation and better utilisation of water resources for irrigation. The settlement of new villages was also taken as an important determinant of the slope of the trend line. The slope of the trend line was taken as an indicator of the trend in mountain development.

There was an upward movement in mountain development in the middle phase between 1815 and 1900 which was mainly due to deliberate public policy initiatives and strong support on the part of implementing government agencies. Institutional initiatives and introducing the right to private property within cultivated land were the vital institutional instruments. This innovative concept originated from an industrialised country, England, and was transplanted by the British colonial authorities into the cultivable lands in the mountains. Gradually the mountain farmers realised the significance of the occupancy right and the right to transfer, with the result that every peasant family tried to make use of the extended opportunity to own the cultivated land legally. The awareness of private ownership over land resources, and the consistent effort on the part of the government, resulted in a major transformation in mountain farming during the nineteenth century.

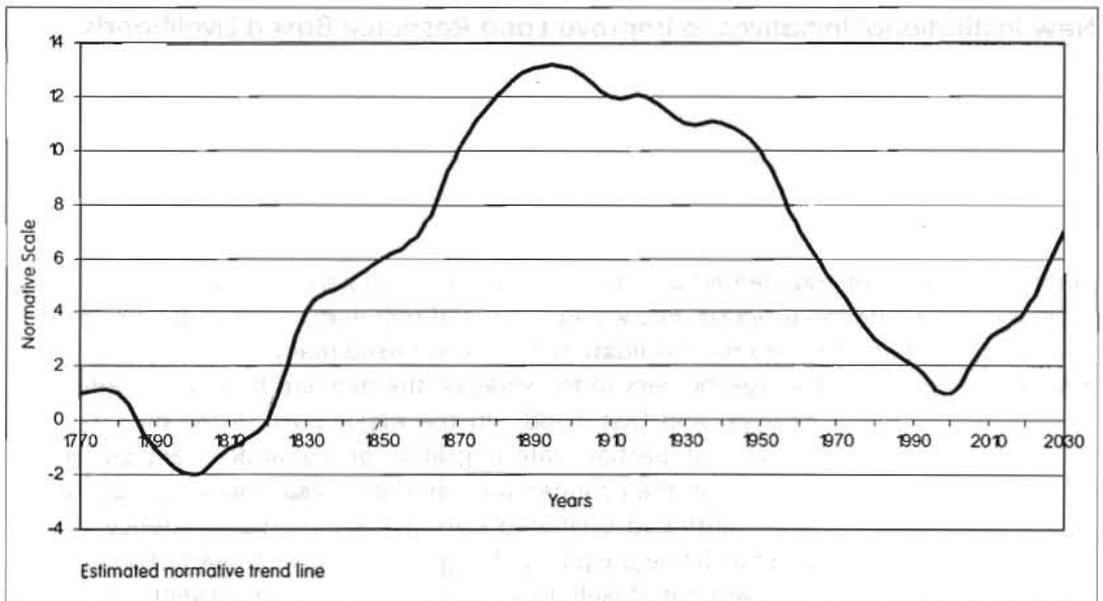


Figure1: Ups and Downs in Mountain Farming in Uttaranchal

A peculiar type of shifting cultivation known as 'katil' and 'ijran' was practised in the native phase before 1790. This was reduced considerably in the British period due to the institutional initiatives, and sedentary mountain cultivation became deeply institutionalised within the rural socioeconomic fabric of the mountain communities. These initiatives also resulted in empowerment of the people and environmental sustainability. Private property rights were limited to cultivable land, including the current cultivation and new land put under cultivation. The major portion of the common property resources, the forests, was kept out of the private property concept. This way, the nineteenth century could be seen as the golden era of mountain farming in Uttaranchal.

The twentieth century started with the independence movement against colonial rule in India. After the movement had begun but before independence was realised, the British stopped taking further initiatives to improve mountain farming. Ibotson (1931) did the last study of British land settlement in the mountains of Uttaranchal. The early twentieth century saw a degeneration of mountain farming, abandonment of cultivated fields, and reduced importance of mountain farming in mainstream mountain development. Other factors triggering deterioration in mountain farming have been identified as the opening of other economic sectors that provided employment opportunities to male migrants. Apart from military service, the service sector provided male migrants with employment opportunities in government departments in the plains.

Traditional farming is still practised in the larger mountain region of Uttaranchal, and there are many opportunities inherited within the traditional sector linked with biodiversity and the emerging demand for bio-farming based agricultural products. The future development policy of Uttaranchal needs to be seen in this perspective, and one of the inferences that can be drawn is related to the utilisation of the comparative advantages and the niches already available within the traditional farming sector.

New Institutional Initiatives to Improve Land Resource Based Livelihoods

One of the major aspects of the institutional approach is to put all the other interventions under the umbrella of institutional dynamics. Various initiatives related to ownership, land tenure consolidation, and appropriate technological interventions could be included under the institutional approach. It equally takes into consideration the demand-driven land reform process within the socio-political complexities and rural power structure.

The consolidation of fragmented and distantly located land parcels could be seen as the fundamental institutional reform needed for marginal mountain farming in Uttaranchal. The need to initiate 'mountain consolidation' has been raised many times; in focus group discussions with the real stakeholders in the villages, the demand for consolidation was raised as a priority (Pokhriyal and Bist 1988). In the major part of the mountains of Uttaranchal, the vicious cycle of partial male migration and abandonment of the net sown area, including reduction in the irrigated area and an increase in the proportion of cultivable waste area, has continued unabated during the post-independence period. Responsible factors include the deliberate policy of negligence and half-hearted programme interventions implemented without stakeholders' participation. The present scenario of

mountain farming looks dismal; its inherent potential and comparative advantages cannot be harnessed.

The initiative for land consolidation was taken around 1975, and in the last 25 years almost all the land of villagers has been included in the consolidation frame. The result has been to reduce the average distance to the field and increase the size of individual holdings consolidated at three or four places (Society for Mass Communication 1999). The success was due to local leaders who constantly motivated the people, and the demonstrated effect of the economic viability of a ploughing unit. This provided incentives to utilise the comparative advantages of mountain farming in the most sustainable manner. Women gained the most from these efforts, as they could save their hard-pressed time and devote the saved time to household activities and caring for their children. Apart from saving time, this whole process has provided a firm base for empowerment to the hill women.

Another important aspect of this institutional dimension is linked with the new legal initiatives taken through the 73rd and 74th constitutional amendments in India. In these amendments, the local governments, known as the 'panchayati raj' institutions, working at the district level and below, have been empowered to plan for village development. Major areas related to agriculture and other primary sector activities have been legally assigned to the local governments. Under the new situation, these provisions are needed to harness the inherent niches available in the mountains of Uttaranchal state.

In quantitative terms, the expansion of cultivated area within the 'revenue land' and relationship with common property resources like forests can also be associated with the consolidation process. The consolidation also maximises possibilities for making use of the vertical space available to the farmers. In such a situation, the requirement is to analyse 'their perception' of 'their problems' and 'their options' on sustainable development of mountain sedentary farming comprising tiny landholdings. In addition to qualitative issues like producing high demand traditional varieties and 'bio-food', other possibilities will open after the consolidation is complete.

Conclusion

The important inference to be drawn is the dire need for a new land settlement oriented towards the consolidation of land and recording the private rights in the consolidation process. The only post-independence land consolidation in Uttaranchal was completed during 1962 to 1967, and it was proposed that a new settlement would be carried out only 40 years after the earlier one. Such a time frame would be good in the context of plains areas. But keeping in view the need of the mountain communities for environmental sustainability, there is a dire necessity to conduct a new land settlement in the mountains.

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