

Government Policies and the Hill Agrarian System of Nepal

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Introduction

The part of the world dealt with in this article constitutes the himalayan region of the Indian Sub-continent. This area is characterized by its remoteness and isolation. It includes sectors without great flows of exchanges between each other and showing tremendous diversity of natural and human factors. The economy of such areas is agriculture based.

Hill Agrarian Systems and their Evolution

Agricultural Production Process

Nepal belongs to this zone with its himalayan belt (hills and mountains) containing 65 percent of total population of the country.

More than 90 percent of the Nepalese population as well as nearly all the inhabitants of the himalayan belt in Nepal are farmers. The agriculture sector represents 60 percent of the GNP and 60 percent of the exports. Thus agriculture can be considered the first sector of the Nepalese economy. It is given first priority by the government within the National Development Policy.

The relevant socio-economic level to analyse the agriculture production process in the himalayan belt is the village agrarian system. It is itself composed of small family production systems of slightly more than 0.5 ha on the average. The agricultural production is first devoted to the subsistence of the family. It comprises mainly cereals (rice, wheat, corn, finger millet, barley which represent 94 percent of the cropped area.

These plants area cultivated within a great number of different cropping patterns which vary the altitude (from 500m to 3000m for the zone we are dealing with) and the irrigation facilities.

One can find crop rotations from one to three crops a year (for instance: wheat/corn/paddy; or : wheat/ paddy/paddy/ in the irrigated lowlands; corn/millet in the non-irrigated mid-hills; barley/fallow in the highlands).

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The production of cereals which is based on human labour is associated with animal breeding activities which are of first importance in the production process because manure and animal droppings are the main sources of fertilizer for the crops.¹

There is a great diversity of fertilization practices according to the types of agrarian systems.

Generally speaking, the links between agriculture and animal husbandry, through fertilization practices, are closer when the average land holdings are bigger and when the cropping patterns include longer fallow periods.

The social characteristics of human labour are conditioned by ethnical factors, in a country located at the meeting point of northern Tibetan influences and southern Indian ones, upon a local tribal setting.

The family is usually the relevant unit to analyse the working patterns in the hills of Nepal, but community work also has a great importance.

Community or group working associations which depend on economic and social equality between the participants are sometimes very sophisticated, and contribute to the social cohesion within the villages and within the different types of agrarian systems. One can observe in the case of salaried individual agricultural labour, frequent as it may be, a slow corruption of the community labour associations. The wage earning agriculture worker in the himalayan belt is often a socially marginal member of a low caste or individual of low economic status. He cannot fit into the complex pattern of human labour exchanges which is one of the main characteristics of the socio-economic life in the village.

One can find exploitation-based relationships between farmers.

Share croppers, money lenders whose aim is to usurp the lands put in warranty by borrowers, clientelism and black marketing of agricultural inputs are frequent, mainly in the lowlands agrarian systems.

The natural environment is a very strong determinant of agriculture practices. The slope and the climate make the life of the Nepalese farmer a permanent fight for survival.

The interaction between Man and Nature within such a difficult environment is very complex. Social, psychological and physiological adaptation phenomena are very numerous. They could be the subject of an infinite number of studies. These adaptation processes have been shaped by centuries of an evolution of the various communities which has not yet come to an end since the conditions of the environment are constantly changing.

An important aspect of the interaction between Man and his environment concerns communications and exchanges in this roadless country.

Communication and exchanges between populations living in different himalayan valleys have always existed.

The traditional trade between Tibet and Nepal is a good example. The complementary nature of the productions of these two countries (grain in Nepal, salt and animal products in Tibet) has been the source of a traditional flow of exchanges suddenly hampered by the closure of the Tibeto-Nepalese boarder after 1960.

The population who were involved in this trade are living in the part of Nepal bordering Tibet (Sherpas, Bhothyas, Manangi, . . .). They used to cross the high himalayan passes in long caravans of yaks. These well known and fascinating images should not overshadow other flows of exchanges between different valleys of Nepal or between different sectors of the same valley. These exchanges are of prime economic importance and were also induced by a complementarity of production (potatoes and animal products in the high altitude zones of the valleys, paddy in the low areas).

As far as the communication with the Capital town is concerned, it has been historically documented since the establishment of a strong central power in Kathmandu (1768). The main historic tie between Kathmandu and the various provinces of Nepal is the tax system. The constant presence of an administrative network though it is weak, it is related to the tax collection.

The army and the employment opportunities, it has always given, has also been an important link between Kathmandu and the provinces. Nevertheless immigration of hill people from the himalayan zone to Capital has been of a limited magnitude until very recent times. This is mainly due to the absence of industrial development in Kathmandu.

Traditionally the himalayan farmer of Nepal has always first been considered migrating to the Tarai plain, south of the country or to India rather than to Kathmandu.

There are few families in the himalayan belt without one or several members being or having been a temporary or a permanent migrant to Tarai or India where the employment opportunities are better than in Kathmandu.² With such a difficult natural environment and such a sophisticated agriculture, as it must face such multiple constraints, Nepal and its inaccessible valleys between which complex exchange patterns have evolved constitutes a very peculiar frame for the implementation of a Government Policy.

One can anticipate difficulties in that matter.

But one should not see this country as a static world locked by its high passes and abrupt slopes, protected against external influences, for Nepal is changing at a rapid pace.

Evolution

The changes affecting Nepal are quick.

With regard to numerous sectors of the economy and of the social setting these changes can be seen easily provided one compares the present situation with the one which prevailed decades ago.³

For instance in many cases the crop rotation "wheat/paddy" which is found on the paddy fields of mid-high hills agrarian systems (at about 1600m) has not been practised for more than one generation (20 to 30 years and much less sometimes). Before that only one crop of rice was harvested per year.

The same goes for corrugating iron sheet roofs. In most villages ten years ago very few glistening iron sheet roofs could be seen.⁴ The main factor explaining the transformation of agrarian systems in Nepal is undoubtedly the demographic pressure.

With an annual growth rate equal to 2.7 percent Nepal ranks among the first Asiatic countries as far as population growth is concerned.

This national average rate hides big disparities between regions. Thus in the himalayan belt the rate is equal to 1.6 percent where as it reaches 4.2 percent in the Tarai plains of the South. Nevertheless demographic pressure is one of the main factors of change in the himalayan belt where the population density per hectare of cultivated land is as high as 658 inhabitants.

This provokes an intensification of agriculture. In a context where the number of mouths to feed per hectare of cultivated land increases crop rotations become more and more intensive.

One additional crop per year is added in many cropping patterns. Fertilization practices become more and more arduous as the additional crops tend to require an increasing amount of nutrients and as the length of fallows as well as the time available for soil fertilization shortens. The yields of the main crops tend to decrease as well as the average productivity of labour.

Progressively a whole sector of the population becomes less and less able to produce enough for its own subsistence from its own land; this is a pool of potential migrants to other areas. As the resettlement prospects in Tarai are worsening⁵, this sector of the population is compelled to find an increasing part of the resources necessary for its subsistence outside the farm but within its home area.

This fact provokes deep changes in the social structures of the different communities. We have already mentioned the increasing number of marginal farmers unable to fit into the community labour exchange networks which suppose that each participant's wealth and resources are at a comparable level. Thus wage labour develops, be it agricultural or not. The same goes for clientelism, and the role of money becomes more and more important.

The changes affecting the agriculture production process have huge consequences on the natural environment of the zone in question. Deforestation is a spectacular example. Exaggerated though they may be, alarmist statements foresee a total disparition of the Nepalese forest within two decades if the present pace of deforestation is not altered.⁶

However kitchen wood as well as timber supply is becoming an increasingly preoccupying problem for the hills farmers.

Marginal land clearing for cultivation purpose along with the increasing demand for wood explains the deforestation process and justifies government concern for afforestation schemes. There is an important effort for afforestation in Nepal but it hardly reaches the level where it could compensate the pace of deforestation : 20.000 ha have been afforested between 1965 and 1980 where as 2 million hectares have been deforested during the same period.

In addition to the transformation of the agricultural production process and of the natural environment one can observe a huge transformation of the communication and economic exchange patterns throughout the country.

Even if the old traditional exchange flows between valleys survive the main trend is for

a progressive focussing of the communication and flow of economic exchange towards Kathmandu. This can be observed at two principal levels : ideology and money.

Kathmandu is by far the richest place in the country, where a considerable amount of money is concentrated contrasting with the low level monetary resources available in the country side.

This is due to the massive resource flow coming from various aid agencies into Kathmandu (foreign aid represents 60 percent of the national development budget be it in grant or in loan). Kathmandu is a focal point from where the resources coming from the international aid programs flow into the countryside (through various ways which are not all completely legal). Thus considering the increasing social importance of money (who has access to money has access to power) in the whole country one can observe the emergence of all sorts of links between Kathmandu and the districts. These links are the materialization of the hope of the populations in the districts to benefit, be it on a marginal scale, from the monetary flow coming into the Capital. On the other hand these links materialize the increasing ideological influence of the Capital.

All this makes Nepal, and the himalayan belt population, a market for products made outside of her borders and mostly in India. Exchanges between these two countries are developing at the expenses of the Nepalese trade balance. Textiles as well as other Indian products which are very cheap indeed have penetrated Nepal and far from being confined to important trade centers of the country now reached remote villages.

A case study can contribute to a more detailed knowledge of this complex process of economical and social transformation by money.

The following is a survey undertaken in *Salme* Panchayat a village in the high hills of central Nepal with 1,500 inhabitants belonging the *Tamang* ethnic and located at one day walk from an important trade center (Trisuli Bazar) which is linked by road to Kathmandu.

The sample consists of ten farmers. Weekly interviews concerning the family budget were completed for one year.

The aim of the survey was to demonstrate the importance and the nature of the role played by money in a type of village said to be isolated and the social setting of which is reputed traditional.

The first result of the survey concerns the degree of monetization of the family economies in the sample. For each family the "monetary flow" was quantified, being equal to the half sum of earned and spent money in a year.

The monetary value of the animal and vegetable goods produced on the farm was estimated.

The monetization rate is equal to the following ratio :

$$\frac{\text{monetary flow}}{\text{value of produced goods}}$$

The various monetization rates are presented in the following chart:

Table 1
Monetization Rate of Family Economies in Salme

Family No.	Monetary Flow (Rs.) (1)	Estimated value of produced goods (Rs.) (2)	Monetization rate in percent (1 : 2)
1	1,250	1,470	85
2	1,460	1,270	115
3	4,520	2,690	168
4	12,000	3,270	367
5	1,370	3,190	43
6	3,050	6,130	50
7	9,070	—	—
8	7,010	—	—
9	3,070	—	—
10	6,960	2,140	325

These figures show the dominant role of money in the family economies even in "traditional" systems as *Salme*. The proportion of the wealth of the family represented by the monetized sector is always important often overwhelmingly so.

If the monetization rate measures as we think the influence of the market economy within subsistence agrarian systems we must accept the idea that farmers in *Salme* are directly confronted with the surrounding economic forces.

The following chart shows the various uses of money among our sample. It additional precisions,

Table 2
Main Uses of Money in a Sample of 10 Families in Salme
(as percent of total cash expenditures).

Family No	Food	Clothes	Tobacco	Loans	Repayment of loans	Agriculture investment	Miscellaneous
1	55.4	16.7	8.5	0	0	1	19.4
2	73.4	8.2	8.0	0	0	0	5.3
3	12.4	27.8	4.5	28.3	0	7.6	19.4
4	15.8	17.4	7.7	34.8	4.9	7.2	12.2
5	23.4	30.2	7.0	0	23.1	11.5	4.8
6	9.8	36.2	10.4	4.0	0	10.9	28.7
7	16.4	14	5.6	24.2	1	13.4	14.3
8	25.3	18	3.2	2.0	15.0	22.2	14.3
9	16.4	2.2	1.8	0	8.2	3.6	67.3
10	20.3	13.5	1.7	3.8	0	3.9	56.8

The first use of money is food with an average of 27 percent of the total expenditures. Then comes clothing with 20 percent of the expenditures. One must notice the low level of agricultural investment (inputs, tools, animals, wages). It hardly reaches 15 percent and is often below 5 percent of the expenditures.

In some cases money lending is an important activity since 30 percent of the expenditures can be devoted to it.

As far as miscellaneous expenditures are concerned they reveal the "side aspects", i.e. the part of the expenditures which along with tobacco are devoted to the improvement of the quality of life in a context where life is difficult.

The last chart informs us about the sources of money:

Table 3

Sources of money for a sample of 10 farmers in Salme
(as percent ten total money earnings).

Family	Regular salary	Occasional occupation	Miscellaneous	loans	loans repayment	Agri. sales
1	0	67.6	0.8	29.2	0	2.3
2	0	47.8	0.6	49.5	0	2.2
3	92.1	1.5	5.1	0	0.3	1
4	63.4	20.0	10.2	0	6.2	0.1
5	0	57.1	1.1	7	0	34.8
6	0	51.6	0.1	0	0	4.8
7	59.5	0.5	4.3	9.8	10.4	15.5
8	18.3	61.7	1.7	5.8	0	12.5
9	62.2	0.1	0	37.1	0	0.7
10	0	2.5	57	25.4	2.1	13

The main sources of money on which the farmers rely are above all external to the farms themselves.

61 percent of the money on the average comes from salaries (be it permanent or occasional occupation).

In some cases this opportunity to earn money is hardly sufficient and borrowing money becomes compulsory (see farmers 1, 2, 9 and 10). Surprisingly an important part of these loans is not reimbursed. They reveal relations more of a clientelism type than traditional money lending type. We are here at the bottom of the network which leads to the ministry offices in Kathmandu as we have mentioned earlier.

As far as agriculture is concerned it is a marginal source of money (less than 9 percent on an average).

If we recall the low level of agriculture investment we must accept the idea of a village economy highly monetized but with an agricultural sector almost not monetized.

The survey shows that even in an isolated village like *Salme* money plays an important role. The surrounding economic forces have an effect even in *Salme*.

We have voluntarily chosen a somewhat extreme case where the main activity (agriculture) is minimally monetized. In that case the social prestige given by the money results in an implicit under evaluation of agriculture. So the social status of an individual in same is not directly connected to the amount of wealth he produces.

Numerous youngsters in *Salme* are reluctant to bear the centennial destiny of the generations of farmers who have preceded them but rather aspire to make money.

Therefore Kathmandu is a very attractive place indeed.

“A fortiori” in the cases where the agricultural activity is more monetized the role of money is even more crucial and the opening of such economics to the world market follows an accelerated pace.

In such a context of complicated agrarian systems settled in a very difficult natural environment but undergoing a rapid evolution where the surrounding economic forces tend to play a major role the government has decided upon a development strategy the main objective of which is the increase of agri-production at a pace which can match the population increase.

II The impact of Government Policies.

The history of development policies in Nepal (i.e. of the intervention of the Government in the agri-sector) is in fact the history of unsuccessful attempts to control or at least to orient the major trends of change that have been described above.

The last orientations of the development policy as they are expressed in the VIIth Plan (1985-86 to 1990-91) are more or less the acknowledgement of these difficulties. They are the expression of the government's will to let the surrounding world economic forces transform the himalayan agrarian system and even to support this process.

Big Public Works

Be it roads construction, mining projects, huge hydro-electricity schemes the public works often tend to integrate the local systems into the surrounding economy.

Roads facilitate communication and transports. If one considers the road network, albeit still not developed, of Nepal one must accept the idea that it can only reinforce the trend of the exchange flows to focus towards Kathmandu and India.

Besides the time needed for roads construction as well as other huge public works (dams, mining projects) undertaken a very difficult natural environment (high altitude mining sites, dams construction along unaccessible rivers) is often very long (a decade is not unfrequent for the biggest ones) and requires an abundant manpower often locally recruited.

The wages, extremely low though they may appear considering the difficulty and danger of the tasks, are very attractive to a rural population whose need of money is so urgent. Such

wages are an opportunity for the non self-sufficient farmers to complement their agricultural income or an occasion for young villagers to earn enough money to attain some prestige in their communities. These public works result in a diversion of part of the available manpower from the agricultural sector. They increase the quantity of money circulating within the villages and thus the villages demand for imported goods that can easily be found on the work sites since they are generally linked to Kathmandu by road.

Agriculture policies.

Considering now the explicit intervention of the Government in the agricultural sector is struck by the nature of its evolution during the past decades.

The Fourth plan (1970-71 to 1975-76) emphasized the concept of regional specialization according to which the mountain and high hills agrarian systems should specialize in animal breeding, the mid-low hills systems should specialize in horticulture and the Tarai plains should specialize in grain production.

Proposing to take benefit from the "comparative advantages" of each "ecological belt" of the country this strategy aimed at organizing the production and the exchanges of agricultural products in view of the welfare of the whole country.

In the hills with small land-holdings and high population density productions demanding high manpower levels and resulting in high income per hectare should be established. Horticulture has been identified as such a convenient activity. The fruits and vegetables to be sold in the markets of Tarai, Kathmandu and even in India were supposed to provide the hills farmers with sufficient incomes to purchase the grains and other goods necessary for their subsistence (thanks to the abundant grain surplus to be produced in Tarai). This production and exchange patterns could not be brought into existence because of the lack of transportation facilities and also because the reality of the production process—mainly devoted to subsistence and not to cash crops cultivation—was simply not taken into account: even in the hills, grain cultivation is the basis of agriculture.

Therefore the Fifth and Sixth Plans (1975-76 to 1985-86) emphasized the concept of integrated rural development which has been the backbone of development efforts during the past decade.

Unlike the Regional Specialization the Integrated Rural Development concept theoretically consists of a co-ordinated intervention in all the main sectors of the prevailing agrarian systems in order to reach a development level identified and planned in advance.

In fact the Integrated Rural Development Projects have not taken into account the reality of agrarian systems either. They have all tried to superimpose a uniform model of development (the main characteristics of which come from the west) on the existing different systems. The model emphasizes the use of improved varieties, chemical fertilizers and pesticides. As a consequence agrarian systems already benefitting from a favourable ecological and economic environment (low altitude, easy access, good irrigation potentials) could develop themselves at an increased pace whereas the others although outnumbering remained in a backward position.

Moreover one would think that the naturally favoured agrarian systems do not need any integrated development project - supposedly devoted to all types of systems - for their development.

The economic forces were spontaneously acting within those systems: various projects evaluation reports have shown how the technical innovations extended by the integrated development projects have been adopted on a wide scale only in agrarian systems where already in use! Besides numerous "side effects" have affected the villages: for instance huge amounts of money have been wasted in the districts supposedly for the construction of various types of buildings (schools, Panchayat houses, drinking water schemes, ...).

Integrated Rural Development Projects have been the best opportunities for the local leaders to have access to the money coming from Kathmandu and so to strengthen their political power through the constitution of client networks. This is one of the reasons why in spite of the technical failures of most Integrated Rural Development projects there is a tremendous fight among the local leaders to attract into their own districts a part of this money flow represented by each Integrated Rural Development Project.

Thus such a flow of money comes into the districts without any significant change of the quantity of wealth locally produced. This way of obtaining money and power which does not boost productive activities (and which can even compete with them: what an amount of time and energy is spent in this chase for money!) leads to results contradicting the claimed objectives of the projects which are to increase agricultural production.

The Integrated Rural Development projects still remain one of the best ways to attract foreign aid into Nepal (because it is what the aid agencies know the best). Therefore the concept of Integrated Rural Development keeps its dominant role in Kathmandu in spite of the violent criticisms which denounce its failure.

These criticisms are more and more frequent. They have brought the government to give the Seventh plan (1985-86 to 1990-91) a new priority: decentralization and local participation.

This new strategy which faces a strong resistance from the bureaucratic apparatus of the country describes itself as a bottom up strategy and intends to give back to the local people the first place as far as the planning and the implementation of projects are concerned.

The local leaders duly advised and controlled by government officials will decide upon the necessary projects to be undertaken within the limits of available resources still being distributed to the districts by the central administration (via its regional antennas).

If this reform can be brought into existence it will reinforce the power of local leaders (mainly the District Panchayat Members), who will be officially entitled to control the resources allocated to their jurisdiction.

This new orientation can be considered as the acknowledgement by some government officers who supported the promulgation of the decentralization law that the central power is hardly able to significantly boost the productive activities in the country.

At best this new development policy will facilitate the implementation of local projects.

Considering the nature of the evolution of the agrarian systems as described above these local projects will be part of the process opening these systems to the world market.

At worst this "gift" consented to the local leaders will facilitate the misappropriation of public funds and strengthen the clientelism practices already mentioned.

However it is again the same basic process: transfers of money into an environment with a limited scope for a production increase which leads to boosting the demand for imported goods.

Conclusion

The problems of Government intervention in the agriculture production process in such a difficult environment as that of Nepal are hardly surprising. On the other hand the world economic forces are beginning to reach the remote zones of the country.

A rapid monetization process of the local economies (and not always of the agricultural sector) which is often correlated to political considerations the demand for products most of which are made outside Nepal.

The government policies implicitly tend to compound this situation especially in recycling a part of the resources coming from foreign aid into the districts.

This is definitely a factor strengthening the social peace throughout the country. But it badly affects the long term development perspectives of the country. Indeed agriculture production is stagnant. The foreign countries acting in the field of rural development in Nepal support this "status quo". Foreign aid allows the maintenance and the reproduction of the administrative apparatus and of the prevailing power structure. It strengthens the spontaneous tendencies of the local economies to open themselves to the world market at the expenses of the local production of wealth.

This process leaves the national intelligentsia—embryonic though it may be unsatisfied. Intellectuals as well as a new industrial elite feel they are maintained outside the power game (for in Kathmandu as well as in the villages it is not the amount of wealth one produces which determines one's access to power).

Foot Notes

1. The place of "animal products" (milk and meat) is secondary except in the case of pastoral economy in the mountains.
2. From 1961 to 1971, 80,000 Nepalese have migrated to India each year. 60,000 have returned to Nepal after a one to five year stay in India (F. Vigny: "La demographie du Nepal" in *objets et Mondes*, Tome XIV fasc. 4 winter 74 Paris).
3. It is often because one does not consider the time factor that many attempts to understand, and a fortiori, to transform "traditional agricultures" by the means of development projects fail.
4. In Salme village located in the high hills of Central Nepal and populated with 300 families 37 new houses have been built in 1984 most of them with iron sheet roofs.
5. The competition for land in Tarai, a sector traditionally covered with forest and highly deforested by new settlements, is more and more sharp.
6. According to FAO and World Bank reports, 25 percent of the forest area (which equals 4.5 million hectares that is 30 percent of the total area of the country) has been deforested between 1970 and 1980.
7. Mountain pastoral systems where the animal products are systematically sold or lowland systems where grains (rice) constitute an important source of money allowing the buying of agri-inputs (fertilizers...).