

# Evolution of Land Use Policy in Nepal

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## Abstract

*Land use is one of the priority sectors of Government of Nepal which can be visualized from the different official documents of the Government. In each of these documents, short term policy is introduced and most of the times it succeeded with partial implementation of the said policy. Therefore, this paper tried to review how the land use policies have been evolved from the period of eighth five year plan to date. Recently the council of ministers, Government of Nepal approved the Land Use Policy. The progress so far made in the preparation of land use data and maps have been briefly mentioned. Some of the key issues have been identified for not achieving the targeted goals of land use policy and proposed some suggestions to overcome the shortcomings. After the adoption of land use policy, it will effectively support in execution of land use implementation plan.*

## 1. Introduction

Land use has been an integral part of human existence and livelihood from the early period of civilization as human need water, shelter and food for which they depend on land. So, knowingly or unknowingly, human have been making the best use of the land for their survival. For instance, despite of not having the land use plan in early days, human select relatively safe area (from hazards and environment) for the settlement, agriculture land closer to the settlement and forest land at appropriate places. While developing settlement area also, people have allocated land to preserve water, open land for recreation, and so on. In Nepalese context as well, old settlement areas have open spaces such as bahal, chowk, market areas, et cetera within their surroundings. Such systematic layout of the settlements can be considered as land use plan and were influenced by the local tradition, environment factors, social structure, terrain and physiography of the area and livelihood such as agriculture, animal, trade and craft et cetera. However, due to increase in population attributing to the increased

demand of land resources, the traditional practices of land use simply cannot sustain the demand. This has resulted in over exploitation of land resources causing severe environmental deterioration and decrease in productivity of lands. The impact of such over exploitation is evidently seen and felt in the forms of increasing frequency and scale of hazards (including floods, erosion, land slide, et cetera), loss of productive agriculture land as a result of urbanization and desertification, loss of forest cover due to deforestation, loss of water resources and other negative environmental impacts. All these factors have resulted in food insecurity, insecurity of land tenure, loss of habitat and biodiversity and impacting the livelihoods of people.

Therefore, we are in the stage that we need a better and scientific land use plan and that must be implemented for sustainability of our land which supports our livelihood. Furthermore, the global context of sustainable land use and to meet UN MDG (United Nations Millennium Development Goals) 7: Ensuring Environmental Sustainability by 2015, Nepal should now have a Land Use Policy and land use plans for implementation in order to ensure sustainable use of our land to conserve environment and biodiversity, eradicate poverty, promote economic growth and preserve cultural and national harmony. Fortunately on Baishak 4, 2069 the council of ministers Government of Nepal approved the Land Use Policy. So based on this policy a sustainable land use plan need to be design and implement for uplifting the life of the people.

If we analyze the situation scientifically, we can clearly present the picture of the current situation in the country. In the context of agriculture sector, only 27% of the total land of the country is potentially arable and less than 20% is actually being cultivated (LRMP, 1986) and almost 66% of the active population are employed in the agriculture sector (DOA, 2011) and it contributes to about 32% of GDP (UNIDO, 2009). Furthermore, it is most evident that there will be extension of urban area in the suburbs of municipalities across the country because of high tendency of migration from rural areas and availability of different facilities in urban areas. So, the arable land will be highly utilised to build housings and to expand urban areas which is happening in the country. Due

to which the food production is falling. So, if this trend is not addressed in time, the nation will face a great economical and social disaster in near future.

The next important sector is the forest land. Because the forest plays an important role in the lives of Nepalese people as they collect fuel wood for energy, leafy material for fodder, harvest timber for construction of furniture and house, et cetera. According to the land utilization report (LRMP, 1986; DFRS, 2002), about 40% of land of Nepal is covered by the forest but it is estimated that about 1.7% forest and 0.5% of shrub land get encroached every year (MoFSC, 2002). Furthermore, the forest land being used in one hand to distribute to Sukumbasis (landless people) and Kamaiyas (bonded labours). Secondly, forest land encroachment by the local people in recent days is increasing for their personal uses such as agricultural, housing or small scale industry purposes. So the forest is claimed to be shrinking.

The overall scenario from the existing issues such as increasing size of population, low investment, improper land utilization, depending on water intensive crops, changing land utilization by expanding settlements in the agricultural land shows that Nepal has turned into the food-importing country and at the same time larger group of the Nepalese fell under the poverty line. The report of the Third Nepal Standards Survey (NLSS-III) released by Central Bureau of Statistics in 2011 shows that almost 25% of Nepalese are still living below the absolute poverty line. The reason is evident that in one hand a larger group of population is dependent on the land resources and on the other hand there is a lack of proper planning on land resource management.

In order to optimize the uses of land resources, efficient land use planning and land utilization is essential. Land use plan should be prepared by considering environmental perspective to maintain its ecological balance and to focus on economic perspectives to fulfill the basic needs of the people. A comprehensive land use plan can only be prepared when an up-to-date information system of the land resources is available and the plan can be implemented systematically when there exist appropriate law and policy of land use. So if the past history is reviewed, Government of Nepal always tried to formulate policies on land use and attempted to create a land resource information system. This paper tries to study the evolution of land use policy in Nepal.

## 2. Review on Policy Related with Land Use

Government of Nepal realized the necessity of land use policy for making best use of land resources for the upliftment of the people in Nepal. Therefore, the document related with policy matters always includes short term policy related with land use. In the following paragraphs, such policies are reviewed:

### 2.1 Eighth Five Year Plan (049-053 BS)

The eighth five year plan (049-053 BS) identified the land use plan as a long term basis programme so in order to address this sector, the policy adopted for the plan was as follows:

- To give priority to increase employment using land resources
- To connect agriculture research with environment based on the differences of land form and climate
- To preserve environment, control landslides and control river inundation
- To implement land use for extension of urbanization
- To formulate land use policy for local level and to increase coordination
- To attempt to prepare master plan for establishment of coordination between land, forest, environment and development
- To create awareness of land use in district and central level
- To amend the existing land use policy and to formulate new act and regulations and to implement

### 2.2 Ninth Five Year Plan(054-058 BS)

The ninth five year plan (054-058 BS) was focused for sustainable development for preservation and extension of ecological sectors of Himal, Mountain and Tarai using land and other natural resources. The policy adopted for addressing this aspect is as follows:

- To formulate land use plan and to implement by establishment of relationship and coordination amongst the land use related organizations which exist in district level and central level
- To create public awareness on importance and role of land use plan based on the land form, climate, soil et cetera as well as in agricultural production, environment preservation and other sectoral development
- To develop technical and institutional capability for identification of national problems like landslides and land erosion
- To implement the land use plan based on the maps prepared at national and district level by identifying and classifying the land of entire country for agriculture, forest, grazing, settlement, urbanization, industrialization purpose
- To increase land productivity by discouraging the intention of keeping the arable land in non productive state

### 2.3 Tenth Five Year Plan (059-063 BS)

The objective of land use sector for the tenth five year plan (059-063 BS) was to create land administration work as service oriented and informative by development of sustainable land use management for increasing land productivity. The policy adopted to support the objective is as follows:

- In order to address all land related activities, a national land policy will be formulated and will be implemented. Furthermore, an integrated land related act will be formulated and implemented.
- In order to discourage the use of arable land to other non-agricultural purposes, a land use working policy will be formulated and activated.
- Land resources maps and data will be updated by studying changes in land use. National Geographic Information System will be developed for disseminating the geographical information in an effective manner.

### 2.4 Three Year Interim Plan (064-066 BS)

Due to unavailability of appropriate land use policy and at the same time there is an increasing trend in fragmentation of plot, the three year interim plan (064-066) prioritize to concentrate for preparation of land use plan and to implement by including development of proper land management and settlement management. In order to address the issues, the policy adopted for this period is as follows:

- Land ownership, land use and land resource data system will be strengthened through Geographical Information Infrastructure.
- Among the areas where land use data are available, land use plan will be implemented through local or user's community in certain areas.

### 2.5 Fiscal Year Budget 2067-68 BS

The policies adopted in connection to land use by the Government of Nepal for the fiscal year 2067-68 BS are as follows:

- From this fiscal year, it is proposed to change land management system for balancing economic growth, industrial system and environment, by abolishing inter-conflict and weakness in our traditional land management.
- Now onwards, the existing land classification system will be amended. Accordingly, the land system will be classified into six classes namely: agriculture, industrial, forest, commercial, housing and public land. On this basis, the land ownership certificates will be issued.
- An individual or a company who wishes to develop housing plan in a plot, has to fulfill all the formalities and the construction work should be completed and should sold the houses within five years of time.

Again on Chaitra 29, 2067, Deputy Prime Minister and Minister of Finance made public a white paper of Government of Nepal on Economic Status and Policy Concept. In the document, the related policy for the land use sector is as follows:

“An appropriate act will be formulated to discourage to use potentially arable land for real estate and other unproductive activities by promoting to use arable land for increasing agro based products.”

### 2.6 Fiscal Year Budget 2068-69 BS

The policies adopted in connection to land use by the Government of Nepal for the fiscal year 2068-69 BS are as follows:

- Land classification will be done on the basis of its utilization and scientific land reform program will be carried out for increasing productivity of land. The recommendations made by previous land reform commission will be gradually implemented.
- Land use policy will be formulated within mid-October of 2011. Cadastral mapping master plan will be prepared to carry forward the cadastral work in a planned way. The draft of new land reform bill will be formulated to introduce fundamental changes in the land management and to complete the current reforms.

### 2.7 Policy Formulation

All of these efforts mentioned above could not materialize to formulate land use policy so on Magh 14, 2066, one of the Committees of Legislative Parliament, Committee on Natural Resource and Means gave directive to Ministry of Land Reform and Management to prepare a draft on Land Use Policy within three months of time by coordinating the Ministry of Land Reform and Management, Ministry of Agriculture and Cooperatives and Ministry of Physical Planning and Works. In order to accomplish the assignment, Ministry of Land Reform and Management formulated a draft policy working committee whose composition is as follows:

1. Joint Secretary, Ministry of Land Reform and Management: Co-ordinator
2. Representative, Under Secretary: Ministry of Agriculture and Cooperatives: Member
3. Representative, Under Secretary: Ministry of Forest and Soil Conservation: Member
4. Representative, Under Secretary: Ministry of Physical Planning and Works: Member
5. Representative, Under Secretary: Ministry of Land Reform and Management: Member
6. Representative, Under Secretary: Survey Department: Member

7. Under Secretary, Law Section, Ministry of Land Reform and Management: Member
8. Project Chief, National Land Use Project: Member Secretary

The committee collected relevant information for drafting land use policy through series of discussion with individuals and experts from the concern organizations by organizing workshops. The workshops were organized in different parts of Nepal to represent all the districts. They also collected information from individuals at local level by development of a questionnaire. The present status prevails that the draft policy working committee had prepared a draft of land use policy. So, on Magh 4, 2068, Ministry of Land Reform and Management organized a workshop to give final shape of Land Use Policy in Kathmandu for validation and collecting final suggestions and comments on the draft. Based on the deliberations on the draft policy, the drafting committee incorporated the relevant recommendations and submitted the final draft to Ministry of Land Reform and Management. The final draft was forwarded to council of ministers Government of Nepal through proper channel and the policy was approved by the cabinet on Baishak 4, 2069. The complete document of Land Use Policy can be downloaded from the website [www.molrm.gov.np](http://www.molrm.gov.np)

### 3. Progress in Land Use Sector

The progress so far made in land use sector can be reviewed as follows:

#### 3.1 Land Resources Mapping Project (LRMP)

Realizing the importance of proper land use, Land Resources Mapping Project was commenced in 1977 AD to prepare land resources maps of the country which is a basis for the preparation of land use plan. The project was funded by Government of Canada and the project was jointly implemented by Survey Department, Nepal and Canadian International Development Agency (CIDA), Canada. The project successfully terminated in 2034 B.S with the publication of the following products:

1. Aerial Photographs at the scale of 1:20 000 covering areas of Mid western and Far western Development Regions below 15 000 feet altitude
2. Aerial Photographs at the scale of 1:50 000 covering areas of entire Nepal below 15 000 feet altitude
3. Land System Maps at the scale of 1:50 000
4. Land Utilization Maps at the scale of 1:50 000
5. Land Capability Maps at the scale of 1:50 000
6. Geological Maps at the scale of 1:125 000
7. Climatological Maps at the scale of 1:250 000
8. Related Project Reports

These products were extensively used by the user's community and are still in use.

#### 3.2 National Land Use Project (NLUP)

Then in 2058 B.S, Ministry of Land Reform and Management established National Land Use Project. A Land Use council was also formed to guide and identify the programme for the project and to monitor and evaluate the work progress of the project. The constitution of the Land use Council as per the Land Related Act 2021 is as follows:

1. Vice Chairman, National Planning commission: Chairman
2. Secretary, Ministry of Defence: Member
3. Secretary, Ministry of Forest and Soil Conservation: Member
4. Secretary, Ministry of Agriculture and Cooperatives: Member
5. Secretary, Ministry of Physical Planning and Works: Member
6. Three Experts from Land Use Sector nominated by the Government of Nepal: Member
7. Secretary, Ministry of Land Reform and Management: Member Secretary

On Falgun 13, 2064, the Sixth Meeting of Land Use Council decided to constitute a Land Use Technical Committee for supporting the works of Land Use Council with the composition of the following officials:

1. Project Chief, National Land Use Project: Co-ordinator
2. Representative, Ministry of Land Reform and Management: Member
3. Representative, Ministry of Forest and Soil Conservation: Member
4. Representative, Ministry of Agriculture and Cooperatives: Member
5. Representative, Ministry of Physical Planning and Works: Member
6. Representative, Central Bureau of Statistics: Member
7. Representative, Survey Department: Member Secretary

Again, on Kartic 29, 2067, in the Ninth meeting of the Land Use Council, the Committee is expanded with the additional members of representative of at least Under Secretary level from Ministry of Irrigation, Ministry of Environment and Ministry of Local Development.

The scope of work for the project is to update the Land Use maps of Land Resources Mapping Project (1986 AD) and to prepare Land Use data for the municipalities and Village Development Committees of Nepal. But, in the

sixth meeting of Land Use Council, the preparation of land use data for Municipalities was assigned to Ministry of Physical Planning and Works. The project started the updating the land use maps using outsourcing option to implement the jobs. The data prepared are based on the soil classification and mapping standards of US System of Soil Taxonomy (USDA, 2003). Furthermore, each category of soil types is also compared with FAO System (FAO, 1998). This system was adopted to establish linkage with the universal soil classification system. The achievements of the project so far are as follows:

1. Completed updating of Land Use maps of District level data which is at the scale of 1:50 000
2. Prepared Land Use data including Land Capability Data, Soil Data, Land Use Zoning and Profile for Lekhnath Municipality of Kaski District and Kirtipur, Bhaktapur and Madhyapur Thimi municipalities of Kathmandu Valley at the scale of 1:10 000
3. Prepared Land Use data including Land Capability Data, Soil Data, Land Use Zoning and Profile for few Village Development Committees at the scale of 1:10 000

Land resources data and information are collected, integrated, analyzed and extracted under digital environment using Geographical Information System (GIS) and Remote Sensing (RS) technology with the help of appropriate Satellite Image Data.

### 3.3 Other Activities

As per the prevailing Local Self Governance Act 2055, the Municipalities and Village Development Committees has authority to prepare Land use map to allocate land for commercial, settlement, agriculture, entertainment sites, et cetera. In spite of having such authority, the Municipalities and Village Development Committees did not activate the act. However, Ministry of Physical Planning and Works is undertaking the preparation of present and proposed land use plans of some of the municipalities through Department of Urban Development and Housing Construction and concerned municipalities. Some municipalities are doing the similar jobs under the directives of Ministry of Local Development as well.

There exists some other Acts related with Land Use sector in the domain of Agriculture, Forest, Irrigation, Environment, Industry, et cetera which are being exercised by the corresponding ministries.

## 4. Issues in Land Use Sector

If we review the progress of the policies mentioned in the above paragraphs, it is not fully materialized but partially implemented. The reasons could be due to existence of certain issues related with land use sector which can be listed as follows:

- Lack of an appropriate organizational and institutional framework
- Lack of national level coordination for uniformity and compatibility
- Lack of systematization of GIS-based land resources information systems
- Insufficient human resources
- Insufficient financial and technical resources to develop the system

Land use programme is a multi-disciplinary approach so if there is a lack of appropriate organizational structure and lack of specifications; it is obvious that there will be lack of coordination, uniformity and compatibility in the preparation of data. Due to availability of insufficient financial and technical resources it will be difficult to produce proper and sufficient human resources and will be rather difficult to develop an efficient system.

## 5. Actions Need to be Taken

In order to address the issues mentioned in the aforementioned paragraph, the following actions need to be taken:

- Strengthening organizational and institutional set-ups
- Implementation of Land Use policy and related Act
- Preparation of specifications and standards for the land use data
- Preparation of Human resources development plan
- Develop mechanism to update the land use data and to disseminate
- Seek for technological and financial support from bilateral and/or multilateral aid agencies

Ministry of Land Reform and Management should take initiatives to conduct Organization and Management (O/M) Survey for the establishment of a separate organization for carrying out the land use programmes and also should seek for the donor agency for supporting the activities related to land use. In the mean time, National Land Use Project should finalize the standards, norms and the specifications for the preparation of land use database and should identify the necessary human resources and prepare a human resource development plan. However the project has taken the initiation to prepare national level land use specification and expect to finalized before the end of fiscal year 2068-69. Since the land use policy is released, the formulation of related land use act should also be initiated as soon as possible

## 6. Conclusion

From the study it prevails that every document related with land use clearly stated its intention for the betterment of the Nepalese people but every attempt seems to be

partially succeeded to implement the plan. Because there are some deficiencies such as lack of proper institution, resources, coordination between related organizations, et cetera. However, Land resources data and information are prepared which will help for supporting the planning of land resources management. Efficient utilization of these data and information is necessary to achieve sustainable and rational use of land which will definitely leads to alleviate existing poverty of the Nepalese people. Recently Government of Nepal released the land use policy, so immediate action need to be taken to formulate related act. This will support to develop efficient land use plan and to implement the plan effectively. The land use act should address issues related to updating mechanism data sharing policy and data disseminate process. In order to materialize the plan, it is necessary to establish a separate organization with necessary infrastructures including proper and appropriate human resources.

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