

# **CONTEMPORARY ISSUES ON POPULATION POVERTY AND ENVIRONMENTAL CRISIS IN NEPAL**

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## **INTRODUCTION**

In the recent years, population pressure has created a number of alarming problems especially, in the developing and least developed countries. Despite the tremendous efforts to check population explosion, the rate of population growth is still appalling. Various measures such as population, education family planning etc., taken in this regard have proven insignificant for improve in the overall population crisis in the world.

The contemporary issues of the population problem are not only concerned with population control but also with encompassing correct use of manpower, primary health network, awareness at the grass root level, alternative energy resources and poverty alleviation. Since the beginning of the modern era it took nearly 4600 years to increase human population up to 1 billion, but it didn't have taken even 400 years to increase to 4 billion population (ESCAP 1989). If the present rate of the population, growth 250000 people per day, continues, the population of the world will reach 6.2 billion by the year 2000 AD (The Kathmandu Post).

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Now, Nepal has 0.342 percent population of the world (Jha, 1992). The population growth scenario in Nepal is also not much different from the overall picture of the world population. The present population of Nepal is 18-46 million, which is increasing at the rate of 2.08 percent annually. It is clear that population growth has brought in a number of problems in Nepal. It has caused to the degradation of environment, low productivity, poverty, pollution, desertification and deterioration of health conditions, etc. standard of living and awareness have positive relationship in this context. Extension of education economic growth directly and raise up the social awareness which could ultimately control population growth and maintain a balance between population and resources.

The major poverty indicator is percapita GNP or GDP. Percapita GNP indicator is often criticized not being sufficient. An inefficient account of informal economic activities of the households account does not include in the real figures of millions of families for the under developed countries. However, GNP is still a commonly used indicator to analyze poverty. Each country differs to different level of living Standard and percapita income . Most under-developed countries are poor because of their low percapita GNP. For example, 335110 Dollars in Switzerland and 180 dollars in Nepal. Both are landlocked and mountainous in character (CBS 1991). Nepal's interval disparity appears greater than that of other countries due to underdeveloped nature of Nepalese economy likewise the distribution of cultivated land area between ecological regions in Nepal is very unequal. In the hilly region, cultivated land is less than that of Terai whereas population is higher. So, people are abolized to encroach into the marginal land. Which has enforced to deteriorate the environment. Therefore, population, and poverty are major factors which have gradual effects to deteriorate overall environment in Nepal.

#### POPULATION CHARACTERISTICS

When we talk about the population of Nepal we always consider the size and growth rate of human population and its effect on biosphere. Before 1911 the record of population was totally based on the estimation of the scholars. The estimated number of population was found to be 5638749 at that time and then, population census were repeated every subsequent decade up to 1991. However, the population census of 1952-1954 is considered as scientific and systematic. The number of population in different censuses in Nepal are recorded to be 5.63 million, 5.57 million, 5.53 million, 6.28 million, 8.25 million, 19.41 million, 11.55, million 15.02

million and 18.46 million in the year 1911, 1920, 1930, 1941, 1952, 1961, 1971, 1981 and 1991 respectively (Table 1).

Table 1: Population size and its growth in Nepal (1911-1991).

Year	Population	Geometric growth rate (%)
1911	5638749	-
1920	5573788	-0.13
1930	5532574	-0.07
1941	683649	1.16
1952/54	8256625	2.27
1961	9412996	1.64
1971	1,1555983	2.05
1981	1,5022839	2.62
1991	1,8491097	2.08

Source:- NPC, CBS, 1991.

The growth rate is relatively much higher excluding the year 1911 to 1930. If this rate continues, it is likely to reach 37 million within the period of next 34 years. Nepal was able to feed her population till 1961. After 1963 the rapid growth of population resulted extreme exploitation of natural resources that deteriorate the existing environment. The total population of Nepal in the year 1963 was approximately 9 million and now it is doubled, that means the doubling time is 28 years. Where as it was more than fifty years (to be doubled) before 1963. To support this increment the forest resources of Nepal was cleared for fire wood, timbers and more land on the cultivation. In this way the major forest resources of Nepal have been depleted through rapid population growth. The number of poor house-holds are oftenly rely on the marginal environment for their survival. It has brought a cyclic trend on the poverty.

## POVERTY

The estimation of Worlds' absolute poverty is 800 million people hence it is a global problem (Puttas Wamaiah 1989).

The globally production systems has created a large quantity of food grains in some countries whereas a unimaginable lack in the others. Thus, it is resulted a world of cruel paradox. In the year 1985, the world produced over 1800 million tonnes of cereal, 582 million tonnes of root crops, 148 million tonnes of meat and 507.5 million tonnes of milk to feed 4.8 billion people (Balugurna, 1992). It is very interesting to note that in the same year, 15 to 18 million people died of starvation. More over 50 percent of the worlds hungry and starvation people are found strike in Asian and African countries. undoubtedly Nepal is one of them.

There is a vicious cycle of poverty in Nepal. This is one of the least developed countries of the world. More than 90 percent of the total population is still in the rural areas and most of them are not yet getting minimum physical facilities that are necessary for human beings. Poverty is deeply rooted in Nepalese society and more severely in rural areas.

The final goal of governmental & non governmental and slogans are always diverted to overcome the problem of poverty. These all efforts are meaningby are the problem is more severing every year. The failure of our developmental plans, policies and programmes are directly responsible factors that has been increased poverty in Nepal. Percapita U.S. \$ dollar income was 161 in the year 1987, average annual growth rate percent was 91 in 1965-1986, rural population percent was 19 in 1987, agricultural population percent was 92 in 1987 and population below absolute poverty level was 61 percent. Likewise ESCAP 1990 has indicated an absolute poverty income level percapita US dollar was 95.00 and population below poverty income level was 55 percent. Poudel states that in Nepal 49 percent population is still below poverty line whereas 10 Lakh people are living in semi-employment situation and 6.50 Lakh people suffering from unemployment problems due to excessive pressure on the agricultural land. Very large portion of the population of Nepal depends on agriculture as a livelihood. Out of total land, 18 percent has been carried out for agricultural purposes where percapita land holding are found to be 0.09, 0.12 and 0.20 hectares in Himalayan, Hilly and Teari region, respectively (Poudel 2051). Thus, the spatial disparity between regions and class disparity between people are causing the poverty.

In this regard, the hill region has only 26 percent of the total area under cultivation but supports over 53 percent of the population and plain region on the other hand has 72 percent cultivated area and supports just about 40 percent of the total population (Hartshorn, 1988). The regional disparity in land distribution is

aggravated by social inequality in the distribution of land among different classes. When we utilize the agricultural census data of Nepal the Nepalese peasantry can be classified into five categories i.e. landless and almost landless (0-.5 hectare), subsistence (.5-1ha), small (1-3 ha) medium (3-5 ha) and more than 5 hectares are grouped into the large group (Table 2).

Table: 2 Distributing patterns of land holdings in percentage(1981).

<u>Land-holdings in hectares per household total</u>							
	LL and NL	Subsistence	Small	Medium	Large		Actual
	0-.5ha	5-1 ha	1-3ha	3-5 ha	5 ha	%	(ha)
Teari (H)	45.6%	13.0%	27.6%	8.0%	5.8%	100	951158
(L)	2.7	6.5	33.1%	20.6	37.1	100	1401426
Hill (H)	51.9	18.6	23.9	4.0	1.6	100,	1045220
(L)	10.5	15.5	39.9	16.7	17.4	100,	939704
Mt. (H)	66.7	19.1	11.8	1.3	1.1	100,	197578
(L)	20.0	22.7	25.6	8.0	23.7	100,	122587
Nepal (H)	50.5	16.2	24.4	5.5	3.4	100,	2193956
(L)	6.6	10.7	35.3	18.5	28.9	100,	2463717

LL. Landless, NL:Nearly landless

H: Number of households, L: Area of lands holding

(Data: N. Shrestha 1990 and Kobayashi masao 1992).

Table 2: shows that at the national level 51 percent of the households are landless and more or less landless and they altogether control scarcely 7% of the total cultivated land. The largest land sowing classes on the other hand constitutes less than 4% of the households but controls 29% of land at the regional level. Thus, uneven distribution and improper use of cultivated land are creating the poverty. In this regard, a great challenge arises to the nation for the elimination or massive poverty of the country. Hence, education, the key factor of human resource development, should be kept on the top priority. Awareness raises peoples participation to conserve the natural resources and utilize them properly.

## ENVIRONMENTAL CONDITIONS

Population increase and deterioration of the environment are coexisted by exploiting and interfering with nature. It disturbs the dynamic equilibrium of nature. Now a days deforestation and land degradation have brought the severe problems in Nepal. Forests both in the Terai and the hills are depleting steadily. Between 1963/64 and 1978/79 about 18 percent of all the Terai forests were destroyed (Gurung, 1989: 104). Conversion of forest and grazing lands into terraced lands as argued by Ives and Messerli (1989), could be conducive to soil conservation, provided these resources were in degraded condition. The majore proportion of the terrace land accounts for dry land. This land is more vulnerable to accelerated soil erosion.

At the micro scale, deforestation and land degradation might have played a minor role in sediment yield or in causing floods. They have, however, severely affected the local microenvirons (Thapa 1993). Land is one of the most important components of our environment as the soil is vital for life. Forest supplies energy in the form of wood and timber for construction purposes. We all know that forest makes the climate milder, help to ensure a continuous flow of clean water, reduce soil erosion and reduces changes of floods and droughts. Now, forests resource is gradually on the devastation.

The next vital resource land is largely exploited in the last few years. Construction works, settlements, deforestation and mining have played an important role in shaping the environment of the five ecological zones of Nepal. Men themselves have brought changes into nature by utilizing the resources. It is an open fact that Nepal is well known all over the world because of its natural beauties and cultural heritage.

However, for the last decades, the natural as well as cultural resources are depleting due to higher population pressure, excessive exploitation of land resources, slow economic development, poverty, unplanned urbanization, lack of environmental education and conservation policy and programs. the natural environmental flora and fauna have significantly declined because of rapid forest depletion. The picture and its percentage of land use in Nepal is still not clear. Land Resource Management Project (LRMP, 1986) has indicated that forest (plantation and burned) area is 38.1

percent, Whereas the National Planning Commission Publication (statistical pocket book, 1990) has considered 37.6 percent. Again, ESCAP report 1990 cites 17 percent (Jha, 1992). Land erosion, Loss of bio-diversity, deterioration of the soil fertility and desertification are other environmental issues. The quality of soil has been affected directly by the use of chemical fertilizers and pesticides. It is also responsible to mount up the soil and water related environmental problems.

There is tremendous pressure on forest land for the fulfillment of fuel, fodder, timber and other forest products. So that, the ecology of hill and Chure region has been badly affected by soil erosion and land slides. The result of soil erosion and flood from the gradual degradation of this vulnerable region has reduced the fertility of land in the terai too. The soil erosion in Chure hills which occupies 13 percent of the countries total area has passed itself as a major national problem (8th Plan 1992:635). The process of natural erosion has been accelerated by man made factor. It is generally believed that cultivation slopes greater than 30 degree, ploughing up and down the slopes, constructing terraces without proper consolidation and drainage are the causes for soil erosion in Nepal.

An estimation made by Fleming for the middle mountain region indicates that the annual soil erosion rate in tons per hectare is eight for forest covered land, fifteen for shrub land, thirty for grazing land and ten for terraced land (Pant, 1992:5). The loss of soil about ten tons/hectare per year is deposited which caused river beds dams and irrigation canals of Terai region. The extension of agriculture cultivation through deforestation in Bhabar and Churia ranges has led to the deterioration in the ecosystem in the related areas and occur frequent floods in the rainy season. Out of total forest land in Nepal, 25 percent forests are depleted for last 14 years (Panday 2041:187) this indicates the depletion rate of 2.1% per annum. Deforestation and Changes of land use pattern is an important source of environment degradation which releases carbon and ultimately pollutes atmosphere. Beside this, the three major sources of pollution (domestic, industrial and agricultural) are more active elements to generate pollution. Consequently, population growth ultimately creates lopsided crises i.e. poverty and environmental degradation. The incremental rate of human population, the percentage of poverty is increasing in one hand and the environment is degrading on the other .

## **CONCLUSION**

The nation is facing a triangular problem of excessive population growth, poverty and environmental degradation. We have very bitter experiences of the rural inhabitants that they labour hard throughout the whole year but always fail to be better for their hand to mouth problem. The popularisation of contraceptive among adult men and women through news media seems less effective to solve the population problem in Nepal. Instead of conducting the symposia and talk programme in capital city, population education and family planning campaign should be placed effectively from door to door for better awareness. Rapid population growth has destroyed and destroying the forests for farming, housing, road construction, electrical living purposes.

The population explosion has accelerated the demand for timber, fire wood, fodder plants, herbs and shrubs. Extension for priving, quarring, irrigation and agriculture are other causes of forest destruction. Deforestation and land degradation both are the leading issues in rural environment which need proper management for sustainable development policies & programmes. For the preservation of top soil erosion and soil fertility, cultivation of cereal crops in vulnerable areas covering by fruit trees and legumes are desirable. Hence, Man is an important component of environment destruction that uses any kind of environment and destroy it. So, man himself should be careful towards conservation and protection of forests, pasture lands, agricultural lands and even marginal lands. This does not mean that the governmental side could be silent on it .



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