

From Zero to Sustainable Growth: Challenging Issues in Nepalese Economy

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INTRODUCTION

The strategic concept of sustainable development first appeared in 1970s and, in the decade that followed, figured prominently in the international ecology debate, a position of importance that it still occupies today. It gain a wide audience as a result of "Our Common Future" (1987) the so called "Brundtland Report", in which it plays a central role.

Put in the most simple terms, sustainability means "making things last, making them permanent and durable. What is being sustained can be an object of choice - an economy, a culture, an ethnic grouping, an industry, an eco-system or sets of eco-systems....." (Pearce,1988: 598). Under what conditions an ecosystem, such as forest or fish stock, can be used so that its long-term yield potential is not decreased or even destroyed can be a choice of sustainability. Concern with this question and the solution arising from are part of long tradition, "don't cut down more wood than is growing to replace it", is one today discussed under the heading "maximum sustainable yield."

In continuation the best known ecological publications, like:

- Spaceship Earth (Boulding 1966).
- The Club of Rome Report on the State of Mankind (Meadows et al. 1972).
- The Ecology of Man (Ehrlich/Ehrlich 1972).
- Man at the Turning Point (Mesarovic / Pestel 1974).
- We Have Only One Future (RIO Report to the Club of Rome 1976).
- Global 2000 (1980),
- Our Common Future (Brundtland Report, 1987),
- and volume published annually by the World Watch Institute: State of the World: Data for Survival of Our Planet, all widened the perspective of sustainability. It is logical realization that in the previous twenty to thirty years, an increasing number of environmental problem had proved to be international while previously, these problems had taken on with unknown dimensions both in their number and types. Today most widely discussed global problems are ozone depletion, the impending greenhouse effect and certain industrial accidents (Chernobyl nuclear accident, where radioactive cloud of emission orbited the globe six times, Bhopal gas slats,etc).

Thus the aim of sustainable development is also global in nature, including all people in the scope of its consideration and responsibility. The concept of sustainable development therefore, also includes normative elements, such as its avowal that all

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people, today and in the future, have the same right to a sustainable environment that worth living in and to an adequate standard of living. In this context, Ignacy Sachs speaks of "synchronic" solidarity with all the people living today and "diachronic" solidarity with all that of future (Sachs, 1984). Solidarity of this nature has since become something from which the rich can benefit as well: and effective elimination of poverty is the only chance we have to put an effective end to the environmental destruction and population growth caused by poverty. Both factors are eminently global in their effects and thus must also concern the rich.

Sustainable development can also be described as a pattern of social and structural economic transformation which optimizes the economic and other social benefits available in the present without jeopardizing the likely potential for similar benefits in the future. Thus the concept sustainable development as a goal presumes two things:

- goals and paths which can not endure in the longrun, because they are threaten sooner or later to destroy the earth's ecological bases,
- development by no means abandoned as a goal, this means that a different development from the pursued up to now; i.e. an ecologically and socially sustainable development is conceivable and practical.

This "other development" is seen both as urgently necessary and feasible in principle, not only for developing countries, but also for the industrialized countries, which are seen as overdeveloped or maldeveloped. In this context and respect development policies can no longer solely be applied to the Third World but have to be applied to the whole world. It is in this sense that we speak of "International Development Policy" or some times called "Earth Policy".

SUSTAINABLE INVESTMENT

Back in 1972, very few countries maintained a department of environment. Twenty years on from 1972 Stockholm Conference on Human Development and the Environment, the world is now aware of the impact of economic policies on the environment and today every country has an environment department and recognizes that non-linear linkage occurs between the environment and the economy; manages to couple ecosystem requirements to the market place and build economy that stimulates sustainable form of investment and resource use. In chasing this objective one must be mindful of the lags, because many environmental problems-ozone depletion, for example- emerged from investment decision made some 30 or more years ago. This means that, even if we take action today, existing problem could get worse for a considerable period of time.

CHALLENGE

Right into the 1970s the poor countries of the Southern Hemisphere strove to copy the consumption pattern and lifestyle of the riches industrialized countries. On the academic level some are still working on assumption that one day all the people of globe would enjoy the living standards of today's North Americans.

In order to realize this kind of "Utopia", the earth would have to be covered within network of 30,000 nuclear power stations, of which (assuming a 30 year life span) on an average, 1,000 would have to be built and as many commissioned each year. The extension of consumption and lifestyle of the western industrialized countries to the current world population is completely hopeless, for it would be impossible to have 3bn. cars, 400m. tons of meat, 40m. gigawatt hours of electricity, 12 bn. tons of oil per year; (not to mention future population development) the planet on which we live can not provide all that (WWI, 1987).

Thus challenge lies, for all existing people to enjoy lifestyle similar to North American and Western European, a five fold increase in the rate of resource consumption is necessary. For all people expected to be alive in 2050 like most western, a tenfold increase in resource consumption would be required. To achieve that ten fold increase without pollution, global waste emission would have to be reduced by 90 percent. So, if Brundtland Commission's suggestion that most people can escape poverty is true and if environmental quantity and ecological integrity are to be maintained then rapid transition to a new economic order is necessary. Amongst other things, investment will have to be coupled to ecosystem and environmental requirement and decoupled from environmental degradation.

In this context the first constraint is the need to maintain the three dimensions of environmental quality:

- ecosystem functioning, soil, water and air quality and land scape amenity. It requires government for recognition of a precautionary principle, because competitive markets do not exist for oxygen, rainfall, tolerable temperatures and so on that are essential for survival. Whilst markets can account probabilistic uncertainty, they can neither account for ignorance, nor novelty.
- the constraint is to ensure that all resource use is technically and economically efficient; simply it means: do not waste resources. If greater social value can be created for less expenditure, and/or less resource consumption, then such option should be pursued. This is the house keeping that is the basic to ecology and economics.
- the constraint is to make users pay, polluters pay, allocation and enforcement of use rights, to couple resource security with environmental security, to pursue technical efficiency and to promote recycling and product durability.

In view of this, Third World can no longer expect to become as the First World is, and in all probability the first will not be able to remain as it is. The problem of development is therefore, no longer a simple, simply concerning the developing countries, but one which has to be faced by all countries.

DEVELOPMENT AND ECOLOGICAL DILEMMA

The traditional development policy of the industrialized countries was largely conceived as development and project aid for the late development of the poor South to

bring it up to the standards of North. In contrast, today there is an urgent call for a reorientation of North-South relations and between the industrialized countries themselves as a prerequisite for sustainable development. On ecological ground alone, the course of hard industrialization taken by the industrialized nations can not be pursued for ever; it threatens to destroy the biosphere of mankind as a whole. If the great majority of those people living in developing countries (at present between 75 percent to 80 percent of the world population) were to succeed overnight in copying the example set by the industrialized nation, this would mean the immediate and irreversible ecological end of mankind as a result of resource depletion. Three problem-intensifiers further exacerbate this dilemma:

- poverty related environmental destruction;
- accompanying a poverty related demographic behaviour which keeps birth rate high;
- an ideology of growth supported by the relevant theories - which holds that continuous growth is both necessary and feasible, both for developing and industrialized countries, which are supposed to function as a "growth motor" for the Third World.

NORTH SOUTH DIMENSION

On the side of the essence of debate about the limit of natural resources and damage to global eco-systems by the exponential growth of the world population and world industrial production, the "Limits to Growth" regarded the world as a single body, without any consideration of the differences between countries and regions (Meadows et al., 1972). The specific problems of the Third World are not dealt with separately, but only indirectly touched upon exclusively from the perspective of the development of world population. As a consequences, population growth seems to be looked up firstly, as the major problem of developing countries, and secondly as a type of natural, independent variable unrelated to the socio-economic structures of these countries. Thus the Club of Rome adjourned with dividing the world between rich and poor countries.

The major problems of the developing countries were seen by others than the Limits to Growth as being poverty and underdevelopment, which were the cause of high population growth and did not accept the principle of any natural physical limits to growth which could not be overcome by political will and technological development, thus evidently underestimated the ecological changes.

Seen from the current perspective, the unresolvable dilemma is: both necessarily lead to catastrophe in a way:

- zero growth, the sense of the Meadows Model with uncalculated consequences for the poor in the developing countries and the resultant conflicts surrounding to distribution of the wealth of nations.
- and continued growth in the sense of other, with increasing over utilization and finally the destruction of the environment and resources of natural resources, will

lead in the end, in North as well as South, to an exacerbation of global destructive potential.

SCENARIO CONFLICT

Many of the enormous ecological problems found in developing countries are directly related to the fact, at the insistence of the industrialized countries, they have become integrated in the world market through the energy and chemical intensive monocultures, oriented towards the world market, tourism with its frequently disastrous ecological and social consequences, or the transfer of dangerous production plants or dumps to the Third World. Industrialized countries are responsible for disappearance of the tropical forest, at first restricted to their furniture and paper requirement, later to the space they created for their cattle farm, further lanes opened up by the chainsaws and bulldozers local landless moved in and carried the work of destruction with slash-and-burn agriculture. And then we have to ask where the "landless" come from. This is the long story of ancient or modern colonialism.

The environmental incompatibility of the first comers hard industrialization model could only be hidden or ignored for a certain period of time because the great and growing majority of the world's inhabitants have not completely adapted this model. The sustainability of "Spaceship Earth" (Boulding, 1966) would be immediately overtaxed if the developing countries were to manage to bring about overnight what they have been advised to do, and what has been described to them, for decades now: development to help them to catch up with the renowned examples of the North. But suppose it works, even if the great majority of the world's poor population were able to progress from its present per capita consumption of 0.5 tones of oil units per capita to the approximately 6.5 tones of OECD or 4.8 tones of socialist countries, this would require a manifold increase in world energy production. Among other things, this would mean the premature exhaustion of energy sources such as mineral oil and natural gas and return to coal and atomic energy with all their concomitant extra risks, green house gas, air pollution, problem of accidents and permanent disposal (World Development Report 1989). And Brundtland Report presents a computer projection for 2030 which is already regarded as "scenario with high energy consumption," even though it does not even assume that today's high level of consumption in the industrialized nations will be achieved by every country. According to this scenario, "..... 1.6 time as much oil, 3.4 times as much natural gas and almost twice as much coal would have to be produced as in 1980 the production capacity of atomic energy would have to increase by 30 times its 1980 level - this would be the equivalent of building one new gigawatt atomic power station every two to four years" (Brundtland Report 1987; 173). Scenarios as such are not only alarming, their additional burden on resources and the environmental risks and costs would be so enormous that they have to be regarded as downright unfeasible or unsustainable in the long run. This example shows that a minority of industrial first comers are claiming as their own-a standard of per capita consumption and impact within a total system that can be only maintained as long as the majority goes without. One could designate a standard of this type "Oligarchy", i.e. a standard of consumption that is not generally applicable, or that is even "undemocratic"

With this dual ecological problem of resource depletion and environmental impact, energy sector is not only example. Density of cars, common in industrialized countries, is also oligarchy in character. As average US automobile annually emits its own weight in carbon into the atmosphere (WRI 88/89; p 60). Same can be said for CO₂ and CFC emissions, for permanent disposal of nonbiodegradable "persistent stock pollutants", such as nuclear wastes, world traffic (tourism, business trips, air freight, military flight) which at present is doubling every ten years is also oligarchy in character.

The existence and tolerance of oligarchy structures of consumption and environmental impact not only contradict our ideas of justice, but also delay and impede the necessary corrective measures. As long as this situation continues it will encourage the dual illusion that industrial first come can continue as before, and that the developing countries are merely late comers, and can and should continue to make every effort to achieve the standards of the industrialized countries as quickly as possible -- standards that, in reality, are not realizable for every one; are not democratic. Indeed, this illusion is still held by people in the world who have armored themselves with practically unlimited confidence in technological solution.

Cocoyok Declaration (1974), which recorded the results of a UNEP/UNCTAD symposium on raw material use says, "persistent poverty in many developing countries has often forced people to cultivate the last inch of land, even if that bears the risk of large scale soil erosion, or to migrate to the shabby, over populated cities." Exodus of impoverished rural people some of whom may even be "environmental refugees" to rapidly growing metropolises of the Third World "runway urbanization" have to face problems, some ecological some hygienic they then involuntarily help to exacerbate. Further, overgrazing, the falling of living trees for fuels and commercial use and other excessive demands of habitats, mass slash-and-burn agriculture for which not only the landless are responsible, but also, government offices, road and dam builders, cattle ranchers to a substantial degree.

There do not seem to be any comprehensive studies of poverty - related environmental destruction in individual countries and population group, but approximately one billion people live in absolute poverty (WDR, 1990), quite apart from the fact that more than half (some 3.5 billion), of the present world population live in the worlds 42 poorest countries, with a per capita income of less than 480 US\$.

This brings us the second factor exacerbating the problem, which analogous to causal relationship of poverty related demographic behaviour. In 1798 Thomas Robert Malthus had named extreme poverty as the point at which it would no longer reproduce. Today we know poorest even relegating at the absolute minimum level of existence do not have fewer but more children, because of the reasons:

- children as a labour to lend helping hand as old-age security;
- a deliberately high birth rate in order to be sure, in view of high infant and child mortality, that enough children will in fact survive;

- besides, precisely for those people who live in absolute poverty and do not have much reason to be joyful, a child is an event which allows them to experience joy, beauty and playfulness, in spite of their wants;
- religious ideas, as well as ethnic or national ideas of prestige - great people, great nation - also play considerable role; and astonishingly women, who have to bear the burden of pregnancy and child rearing share such views and ideas. There can be no question that there is poverty-related demographic behaviour. But whether population growth in developing countries is the reason for poverty or merely a symptom of it, is relatively less discussed. Developing countries countered and counter accusation "there are too many of you?" with following reasoning:
- "every additional person in industrialized country consumes considerably more and puts for greater pressure on natural resources than every additional person in the Third World" (Brundtland Report 1987; 97). But the fact is that world population will continue to grow as long as the gravest poverty has not been eliminated, and every further increase in world population will considerably aggravate the ecological problems of environmental destruction and resource depletion.

The third factor exacerbating the problem is the axiom of modern post Keynesian growth theory and its main message:

- continuous exponential growth of per capita GNP is necessary and, implicitly; feasible.

The rationale behind this curious idea, which causes bewilderment and disbelief in any impartial non-economist who knows how compound interest works, can be found in any text book on "growth theory". Of particular significance in the present context is the demand that precisely the industrialized nations have to continue to grow strongly, since they have to act as a "engine of growth" for the underdeveloped countries.

ISSUES IN NEPALESE PERSPECTIVE

Nepal characterized as one of the poorest countries in the world with per capita income of about 180 US dollar, has social indicators also well below the average of South Asia. Life expectancy at birth at 51 years, infant mortality at 126 per 1000 live births, and adult literacy at 23 percent, it has a population of 18 million which grows at a rate of about 2.6 percent per year between 1971 and 1988. About 95 percent of the population lives in rural economy.

Population density with respect to arable land is (590 persons per sq. km.) one of the highest in the world and farmers have been forced to cultivate increasingly marginal land and forest. In addition forest has been further denuded to meet the growing household demand for fuelwood which accounts bulk of energy consumption. Soil erosion accelerated by deforestation is now raising regional concern as a cause of river silting and consequent flooding.

Agriculture accounts for over half of country's GDP and employs over 90 percent of labour force. Crop production accounts for about 60 percent of agricultural output, live stock for 30 percent and forestry for 10 percent. Besides tourism, which provides 20 percent of the country's export earnings, carpet and ready made garment now account for over half of merchandise trade.

Various factors have impeded Nepal's development: some reflect its rugged terrain, land locked position and resource endowment, some emanate from institutional weaknesses and others are consequences of inappropriate economic policies. The country's land locked position is a factor for high transportation cost and long border with India has limited its flexibility in designing economic policies. Rugged topography has restricted the arable area and created various micro climates that formed impediments to widespread application of standard cultivation technology. In addition population pressure in the hills has contributed to rapid deforestation, inter ecological region migration and emergence of landless class which pose long term threats to its development. The public investment programme has had insufficient focus and has suffered from weak implementation, stemming largely from deficiency in administrative service.

Growth during the 1970s barely kept up with population growth and during the Sixth Five Year Plan (1981-85) growing frustration with past economic performance manifested itself in surging public expenditure to accelerate the pace of development. This caused the overall budget deficit to rise from 6 percent of GDP in 1980/81 to 12.3 percent in 1982/83. Towards the beginning of Seventh Five Year Plan (1986-91) the government undertook a structural adjustment programme, and response of the economy to this structural adjustment was noticed with a real GDP growth by 9.8 percent, agriculture growing by 8.6 percent and commodity export by about 35 percent in dollar terms in FY 1988, FY 1989 and FY 1990 respectively. During this period the fiscal revenue continued to grow rapidly and domestic finance touched the benchmark of 1.5 percent of GDP, foreign reserves (with aid disbursement) and increased earnings from carpet and tourism increased to over six months worth of import of goods and services by March 1989. This occurred despite strong growth in imports associated with trade liberalization and higher level of economic activity.

On March 23, 1989 the trade and transit treaties between Nepal and India expired following a breakdown in renewal negotiations, and value added loss in FY 1989 attributed to the impasse was estimated at over 3 percent of annual GDP and real GDP growth for the year as a whole was only 1.5 percent, well below the 4.5 percent target (Eighth Five Year Plan 1992-1997).

In the third quarter of FY 1990, the country underwent a period of political current culminating in the formation of multiparty democratic system.

Economic Indicators of 1985-1990 and Sustainable Development Within the Frame of LDCs

There are ample examples of development in the past that the economy does not have any sustainable growth path. For example despite of high growth of economy then

in the past years, overall budget deficit of 6 percent of GDP in FY 1980/81 rose to the tune of 12.3 percent in FY 1982/83 and led to a doubling of the current account of the balance of payments deficit and substantial fall in international reserves.

In relation to increase in population GDP increment lagged behind; from fiscal year 1964/1965 to FY 1988/89 real increase in GDP had been only of 3.4 percent annually. Per capita income in the same period rose only by 0.8 percent which is involved in merely keeping up with population growth which grew at an average rate of 2.7 percent. Agriculture production increased by 3.3 percent on an average annually in the same period and non-agriculture sector's production recorded increase only by 3.8 percent. Seventh Five Year Plan marked expected increase in GDP, however, due to the addition of land which was left in previous land cadastral survey, this unnatural trend was observed. Agriculture share of GDP which was 65.1 percent in FY 1964/65 changed to 61 percent in the same period. Food stuff increased by 2 percent on an average annually from FY 1961/62 to 1988/89. Irrigation facility upto FY 1988-89 was available to 5,5,467 hectare which is only 21 percent of agriculture land. Manufacturing Sector (including cottage industries) contributed 5 percent in GDP, and employed only 2 percent of total labour force.

On the side of investment and saving, total consumption in the last 16 years increased from 90 percent of GDP to 93.8 percent in 1988-89, the main reason for this is an increase in government consumption from 7.8 percent of GDP in 1974/75 to 11.5 percent of GDP in FY 1988-89. Therefore, the saving had has been nil, hence foreign aid ratio in total investment rose from 4.5 percent of GDP in FY 1974/75 to 12 percent of GDP in FY 1988/89 and foreign resource component changed drastically replacing grants and aids by loans, changing 20.8 percent of loan component of total foreign resources in FY 1974/75 to 75 percent in FY 1988-89. So, the debt servicing liabilities (amortization and interest) in FY 1974/75 was 1.6 percent (17 million US dollar) of GDP which piled upto FY 1988/89 to the height of 40.5 percent (1260.03 million US dollar) of GDP. In addition to this, internal loan heighten the burden of debt to the tune of 2.0 percent of GDP in FY 1974/75 (22 million in US dollar) which rose to the height of 42.9 percent (1330.42 million US dollar) of GDP in 1988-89.

Year 1991 being the third successive year of declining out put growth in the world economy, the ability of LDCs to implement the Paris Programme of Action has been seriously impeded. Out put as a whole in developing countries rose only by 3 percent in 1990/91. Total GDP is estimated to have grown by about 2.7 percent in 1991, against 2.5 percent in 1990. Per capita growth thus in many LDCs was negative in both 1990 and 1991 year. In this Context Nepal suffered not only from trade and transit difficulties, but also from fuel shortage, affected the agriculture irrigation notably; growth slowed again in 1990 to 3.5 percent from 3.9 percent in 1989, which stood much below than already achieved rate of more than 7 percent in 1988.

In the 1980s, developing countries, as a whole experienced real GDP growth from 5.6 percent in the previous decade of 2.7 percent growth. LDCs facing the same general economic conditions, experienced the decline much more smaller, from 3.2 to 2.9 percent. Thus in this decade the LDCs achieved a rate slightly higher than that for all developing countries and slightly less than for the developed market economy

countries (3.2 percent). This translates into very low percapita growth rate for LDCs (0.2 percent).

Some Factors Affecting Long Term Sustainable Performance

Population

With rapid population growth more mouths to feed and more schools to build, the achievement of any tangible and visible results require great efforts, because there is no easy way out of the dilemma that population growth rates will almost certainly rise before they began to fall. Substantial real long term improvements in health will eventually bring down birth rates, but immediate effect would be to accelerate population growth.

The consequences of complacency about population policy are so enormous that a fundamental re-examination of the priority that should be given to effects to speed the transition to lower birth rates must be in order.

Farm Productivity

The more acute dilemma of using farm workers more effectively and raise their productivity is a major problem of Nepal. Although their share of the total labour force has been slowly declining, from 96 percent in 1970 to 95 percent in 1980 and 94 percent in 1988, and the 92 percent in 1991 the number of people dependent on the earnings of the agricultural sector has grown by from 40 percent to 43 percent from 1980 to 1990. Thus vast majority of population has to be supported by the agriculture sector where production has risen by less than the growth of total population. Indeed, the share of agriculture in combined GDP of the country declined from 65 percent in 1980 to 56 percent in 1990.

Low Profile of Agricultural Export

Agricultural products do not have any significant share in foreign exchange earnings, while poverty ridden rural mass is based on agriculture. Manufacturing exports have become a significant factor in the foreign trade with about 64 percent of goods exports in the form of manufactures. In the export of services, account 19 percent from non-factor services for foreign exchange availability including tourism and factor services plus remittances from migrant workers which account further 23 percent. Export earnings from tourism have been a dominant force for substantial support to growth.

Land Tenure and Tenancy

The use of land tenure in Nepal is one of sufficient land for bugging population rather than the egalitarian distribution of existing land (average land holding size just 1 hectare in tarai and just under 1 hectare in the hills). While there are some large land holders, the concentration of land ownership is no where near as extreme as it is in many developing countries. In tarai about 50 to 60 percent are landless or tenants and

many of the most important land tenure issues deal with the incentives governing tenancy arrangement. Land Reform Act of 1964 did not make the agrarian structure of the country much more egalitarian either. There has been no reduction in degree of inequality in the distribution of land holdings, it is probable that there has been a gradual worsening of the situation during the last three decades. When reviewing the accomplishments of reform an important point must be understood: the agrarian reform was not designed to be excessively harmful to the landowner. Expost analysis seems to show that rent was fixed so that the landowner was receiving roughly what he might have obtained from investing his capital elsewhere. At present the agrarian reform activities under the Land Reform Act 1964 lost momentum. A few tenants may have gained their land as a result of the 1964 land reform; many more were expelled by landowners. Concerned about creating permanent tenancy right in addition some landowner are shifting their tenants from plot to plot each year to prevent their gaining permanent tenancy right to the land, and there has been a sudden usurped of land transfer activities so that tenancy right can be nullified (25 percent of sale receipt given to the tenant, tenancy right can be disqualified by law). So informal tenancy become the underground and flourished.

Subsistence Activity

Nepal's labour force 1981 and 1989 shows that population economically active over age 10 in 1981 was male 4.5 million and female 2.4 million totalling 6.9 million which stood at 5.7 million male and 3.4 million female totalling 9.1 million in 1989. Estimated labour force participation rate aged 10 and over was, in 1961 male 83 percent, female 46 percent totalling 70 percent (Census, 1981. WB, 1989). It is perhaps more instructive to look at time use and the relative contribution of various activities to income. Proportion of time allocation to subsistence sector is; agriculture 53 percent, kitchen gardening and gathering 5 percent, food processing 14 percent; to wage and salary 11 percent (Acharya and Bennet, 1983). That is subsistence activities accounted for about 80 percent of economic activity and wage employment for only a bit more than 10 percent. A similar picture emerged from the occupational breakdown in the Multiple Household Budget Survey (1986) viz: self employed 29 percent; unpaid family member 44 percent, employer 1 percent; employee: government 3 percent and private 23 percent. When one starts to decompose of employment by income class, a picture emerges of the poor being relatively more dependant on wage income. The MPHBS data indict that the rural poor rely on wage employment between 23 percent and 32 percent of their income, as opposed to only 10 to 15 percent among the non-poor. Underemployment is higher in rural than urban areas; it is higher in hill than tarai; it is higher for females than for males. Underemployment of female workers is highest in the rural tarai and that of male workers is highest in the rural hills and lowest in the urban tarai (Acharya, 1987).

The relative low rate of labour force participation and high reported incidence of underemployment tend to disguise a lot of economically useful activity, specially among women in the hill. It is estimated that 10 percent of working hours in the hills is spent in collecting fuel fodder and water (Table 1).

Table 1
Rural Time Use 1984-86

(hours per day)

Head.	Hill			Tarai		
	Male	Female	Total	Male	Female	Total
Conventional Economic Activity	4.2	2.7	3.4	5.1	1.7	3.4
Agriculture	2.6	2.2	4.0	4.0	1.4	2.7
Other	1.6	0.5	1.1	1.1	0.3	0.7
Subsistence Economic Activity	1.6	2.5	2.1	1.0	1.9	1.4
Gathering fuel water etc.	1.3	2.0	1.7	0.7	1.9	0.1
Food Processing and Other ^a	0.3	0.5	0.4	0.3	0.5	0.3
Domestic Work ^b	2.1	5.4	3.9	1.8	5.8	3.8
Other Activity ^c	2.4	1.2	1.6	2.1	1.5	1.9
Self Transport	1.8	1.3	1.6	1.6	1.3	1.4
Leisure	3.9	2.9	3.4	4.4	3.8	4.1
Total	16.0	16.0	16.0	16.0	16.0	16.0

Note:- a. includes hunting and gathering, house repair. b. includes Cooking, Cleaning laundry, child care, shopping etc. c. includes education, personal care, religious and social activity.

Source: MPHBS, 1986.

The reported average work burden of 9 1/3 hours for day raises question as to whether underemployment rate is really as high as reported. However, there is substantial seasonal underemployment of males in subsistence agriculture for the poor are engaged overwhelmingly as agricultural labour, (30 percent of the economically active poor in tarai), or as casual labourer mostly in construction, (about 10 percent in the hill).

Rural Poverty and Informal Credit System

Informal rural credit system in Nepal include Sapat and Rin which is interest free and interest charged respectively. Perhaps most striking of the first reciprocal or cooperative type of informal system is the Dhikur or rotating credit and saving association. The word derived from the Tibetan term referring to 'grain rotating turn by turn' is pronounced differently in different ethnic groups and also known by the Nepali term "Dhukuti" which means "store house, barn or treasure chest." Both of these terms suggest that the practice originated with in-kind grain exchanges though most are now based on cash. Both livestock and grain-based dhikurs still exist. These rotating credit associations remain informal in the sense that they are outside both the banking and credit system. Most of the dhikur is at level well beyond the reach of households below the poverty line.

Contribution of the formal sector to poverty alleviation, which includes, manufacturing, government, construction, utilities and some portion of the trade and service subsectors, is potential however, there is lot of overlap with the informal sector; specially in the area of cottage industry, tourism and commerce. In an economy with a very small organized sector, reliance on informal sector activities for subsistence and reduction of unemployment is inevitable. The availability of economic opportunities to low income households is determined by control of physical assets; both private (land, labour livestock, implements) and public (forest and water resources); as well as of social assets (such as kinship or gender relations). Thus the informal sector activities are largely residual in nature and as a result, are treated in a residual way. Women are involved mainly as sales and production workers and in urban areas also as service workers. In some cases in informal sector women are active in as proprietors or retail outlets in rural tarai and throughout the hills. As production workers women are particularly involved in textile and garment production and as alcohol production in the rural hill. There is only fragmentary evidence of income generated from informal sector activities, yet the MPHBS provides some information on household income and figure show that rural households derive around 14 percent of their income from informal economic activities and urban households derive around 34 percent. The Table two presents the case.

Table 2
Household Informal Sector Income by Major Sources

(NRs, 1984-86 per month)

Source	Rural	Percentage	Urban	Percentage	Nepal	Percentage
Monthly total	1192	100.0	1794	100.0	1233	100.0
<u>Income from Informal Sector</u>						
Non-agricultural Enterprise in cash and kind	64	5.4	376	21.0	86	7.0
Home Production	53	4.4	69	3.8	54	4.4
Wage and Salaries cash and kind	45	3.8	162	9.0	80	6.5
Total Informal Sector	162	13.6	607	33.8	220	17.8

Source: MPHBS, 1986.

According to MPHBS figures, incidence of poverty amongst informal sector workers follows broadly the pattern of poverty amongst economically active population in the country. The only exception to this pattern is the high (73 percent) level of poverty amongst informal sector workers in the urban hills, far higher than the 15 percent overall incidence of poverty which is clear from the Table 3.

Table 3
Incidence of Poverty Amongst Informal Sector Workers
(1984-86)

Head	Poor as Percentage of Informal Sector	Poor as Percentage of Active Population
<u>Rural</u>		
Tarai	31.4	33.4
Hill	48.1	49.7
Mountain	59.8	54.7
Rural Nepal	<u>42.0</u>	<u>43.5</u>
<u>Urban</u>		
Tarai	21.5	22.1
Mountain	73.9	15.4
Urban Nepal	<u>30.2</u>	<u>15.4</u>
Nepal	37.9	37.6

Source: MPHBS, 1986.

Informal Sector employment based on the information obtained from MPHBS one can estimate the extent and type of employment in the informal sector. The MPHBS survey provides the percentage distribution of economically active persons over 62 activity groups. Using the same proportions for 1990 (on the assumption that in the absence of dramatic economic events, the pattern of employment undergoes relatively slow change overtime), the current employment of main workers in the informal sector is estimated at 1.2 millions, with around 9,00,000 (or 74 percent) rural. This represents less than 11 percent of the economically active population in rural areas and nearly 32 percent in urban Nepal. Table 4 shows the estimated informal sector employment.

Table 4
Estimated Informal Sector Employment
(1990)

Occupational group	Rural			Urban			Total	
	Percentage of Total	Workers ,000	Proportion of informal sector (Percent)	Percentage of Total	Workers ,000	Proportion of informal sector (Percent)	Workers ,000	Proportion of informal sector (Percent)
Economically active > 10 years (.000)	-	8261	-	-	918	-	9179	-
Sales workers	2.8	231	25.6	8.4	78	26.4	308	25.8
Service Workers	1.5	120	13.4	6.2	57	19.6	178	14.9
Productive Worker	3.1	254	28.2	9.6	88	30.3	243	28.7
Transport Workers	0.1	12	1.3	1.9	18	6.1	29	2.4
General Labourers	3.5	285	31.6	5.6	51	17.7	336	28.2
Total informal Sector	10.9	903	100.0	31.7	291	100.0	1194	100.0
Agricultural	82.2	6791	-	34.9	320	-	7111	-
Residual formal	6.9	568	-	33.4	307	-	874	-

Source: Author's compilation based on MPHBS, 1986.

It is interesting to note that number of main workers in the formal sector, including construction, emerging as residual after deducting the numbers of workers engaged in the agriculture sector, amount to roughly 870,00 in 1990 which is very similar to the estimate done by CBS, Census of Manufactures 1986/87. Within the informal sector, in rural Nepal, production workers account for less than 30 percent of total while sales and service workers account for 26 percent and 13 percent respectively. The catch-all category of general labour is the largest with nearly 32 percent of the main workers. This represents a pool of marginal (highly underemployed) labour not engaged sufficiently regularly in any activity to warrant classification. Urban Nepal displays roughly similar distribution amongst these categories though the share of general labour is significantly lower (18 percent).

Table 5
Sectorwise Classification of Total Labour Force
(1984-86)

Head	Rural Percentage	Urban percentage
Total Labour	100.0	100.0
Informal Sector	10.9	31.7
Agriculture	82.2	34.9
Residual (formal)	6.9	33.4

Source: MPHBS, 1986.

Details of the activities included in the broad categories contained in the table 4 and 5 show the importance of commercial activities (shopkeeper and street vendors, handloom textiles and tailoring, the production of potable alcohol and agricultural implement production and repair) in rural employment profile. The importance of domestic services and other production workers reinforces the impression of a significant floating labour force involved in marginal employment. Largely the same categories are important in urban Nepal, though here alcohol production is limited while hotel workers are relatively important. Occupational classes whose income was fairly good in rural life are shattering. Artisan households which were traditionally involved in client pattern relationship and in return of their services used to receive fixed amount of grain after harvest, broke down due to reduced capacity of farm households because of land subdivision and land reform. The result is: tailors, metal workers, cobblers all are migrated in stages, first to smaller road-side location, than to a large town and most work in urban areas as manual labourers losing substantial share of income previously commanding.

Reduced income in peasant household has forced many to turn to various non-agricultural source of income by launching small business, including sellers of house-cooked food, sweets, itinerant petty hawkers and pedlars who combine commodity production on a minute scale (engaged in textile, garments, fruits vegetable, cosmetics, tea, sweets, cigarettes and nuts, shoes, bags etc.

Poverty-Related Programmes

Evaluation of Poverty related programmes show perfect failure to reach the poor.

- Food distribution programme, targeted group being government officials in food deficit areas, more than half households in these areas are considered poor, covered so large population that real poor are missed.
- Nutritious food programme, which is supported by WFP, having several different components, aims at providing dietary support for groups that are nutritionally at risk, has no basis for judging how effective this programme has been reaching the poor. So, food reaches to those families not eligible.
- Joint nutrition support programme focused on nutritional problems that stem from a combination of inadequate income, poor health and improper hygiene. The purpose is to reduce infant and child mortality, morbidity and malnutrition, maternal anemia, iodine and vitamin A deficiency, so all beneficiaries are women and children, but there is no evidence that the programme has had any impact on the poor. Target group is so much larger and broader than the poor it benefited those who are not poor.
- Employment creation programme i.e. food for works; concentrated on infrastructure development rather than poverty alleviation. An unemployment and underemployment is highly seasonal, and this employment generation programme is not operated in dry season.
- Special public work programme is targeted in irrigation rather than employment generation, poor will tend to benefit less because most are landless or own less and small plot. And labour absorption benefit too is unevenly distributed as additional labour is supplied by members of the land holder's household.
- Integrated rural development project; (IRDP six in number) painstakingly records the lesson that have been learned in the course of implementation, most of them negative and no improvements have been taken place in household income or nutritional status. Performance of development programmes in general, sectorial or integrated has been unsatisfactory and have not effectively benefited the rural poor.
- Small farmer development programme has a core in organization of poor rural borrowers into small groups for economic and community development activities. But, in fact, there is evidence that households at the very bottom to the income distribution are not getting access to the programme and that non-poor households are being included among project beneficiaries. SFDP groups do not represent the poorest of community along with non-representation of women but are drafted from local elites who dominate such structure due to political sophistication:

Production credit for rural women was started to increase the income of rural women, enhance their status in society and improve the welfare of their families. It was designed to complement the intensive banking programme (IBP) by helping to ensure that at least some portion of commercial bank credit, directed to the poor by IBP, reaches to women. The targeted group was rural women in household below the poverty line and attention was focused on the landless, female headed household and women from disadvantaged social and ethnic group. But, on actual practice it is hard to identify the actual poor beneficiaries and due to lackness of group cohesiveness most benefits are not enjoyed by poor.

Intensive banking programme is one outcome of the directive from Nepal Rastra Bank aimed at channeling credit from Nepal's commercial banks to rural areas. Aimed at supporting community development, in practice the main emphasis of the programme undergone to the banking function. The lack of financial viability is closely related to intensive banking programme's very limited success, its broader development and poverty alleviation goals, commercial banks management has been resistant to the programme, as a result very little effort has gone into organizing the poor into groups and they do not benefit from the increased access to production support and social services and it is not on a direct front line poverty alleviation role; even if it is suggestive, there will be domination of local elite in programme. Seed of Grameen Bank has not yet germinated.

Skill training programme has many forms embodied in many cottage industry projects in Nepal. Most of the IRDPs contained one or both types of projects and many NGOs provide training particularly to women, but anecdotal evidence suggests that many people receive training which they can not use. Overall, the training programmes have not been successful in transferring skill to large number of poor, partly because unrealistic educational requirements which prevent the poor from entering the programmes and partly because of the mismatch between training and existing opportunities. There is limited demand for skilled labour in Nepal and most demand is concentrated in urban areas. Beneficiaries of training programme are supposed to be unskilled labour, among whom are most of the poor, but the documentation on this is poor and sizable proportion of trainees do not benefit from training. The basic requirement of literacy effectively excludes more than half of the poor, and those trained do not find employment. In a country with low literacy rate and rural employment level in excess of 40 percent the programme has little potential for poverty alleviation.

Training for rural gainful activities is a vocational training methodology developed by the ILO to promote employment and income generating activities for the rural poor. The intended beneficiaries were supposed to be rural poor, unemployed, women, seasonal agricultural labour, the handicapped and practicing artisan, but the total impact of the project has been limited and trainees face the problem of getting loan for new business. Thus it has no impact on poverty alleviation.

Table 6 shows the characteristic of the poor in Nepal.

Table 6
Poverty and Income 1984

Head	Rural						(NRs Per Month) Urban			
	Tarai		Hill		Mountain		Tarai		Hill	
	Poor	Non poor	Poor	Non poor	Poor	Non poor	Poor	Non poor	Poor	Non poor
Average household	7	7	6	5	6	4	7	6	6	5
Average Monthly Income	702	1,493	673	1,452	886	1,186	704	1,379	815	1,919
Average Monthly Expenditure	741	1,247	738	1,273	869	1,055	765	1,118	971	1,645
Per Capita Monthly Income	99	221	111	267	139	271	102	249	131	377
Number of persons per household	3	3	3	3	4	3	2	2	3	2
Number of persons sleeping in a room	3.8	3.0	3.8	2.8	3.5	2.6	3.6	2.8	3.5	2.4
Literacy rate (percent)	22.0	40.2	37.1	51.1	32.1	42.1	35.2	59.0	49.1	27.4
Enrollment rate per cent of primary	30.1	53.0	49.2	64.5	37.1	55.1	37.2	63.4	64.9	79.0
Percent of Secondary	13.0	29.7	10.9	29.8	17.8	21.3	22.0	42.0	29.9	48.5

Note: Survey excludes beggars that means a significant number of the very poor, particularly in urban areas are missed. The surveys used cluster sampling technique to select 23 districts twelve towns.

Source: MPHBS, 1986.

Poverty, Environment, Population and Sustainable Development: Question Marked Linkage in Nepal

The Population Explosion (Ehrlich, 1990) expressed its concern as: the planet's resources are running down very rapidly and this threatens global human survival in the not-so-distant future. Chief among the forces behind the growing environmental crisis is the unprecedented growth in human population all across the world in the last two countries.

In this context elites and western influenced scholars who gave a Malthusian diagnosis of the environmental crisis and thus advocate population control in the Third World as the only solution to environmental crisis and poverty alleviation. They reject the policy of food aid to alleviate hunger and poverty in the underdeveloped world. They constantly hammer us that when we send food to a starving population that has already grown beyond the environment's carrying capacity we become a partner in the devastation of their land. Foods from the outside, as they argued, keeps more natives afloat, these demand more food and fuel; greater demand causes the community to transgress the carrying capacity more and transgression results in lowering the caring capacity in the future. The deficit grows exponentially. Gifts of food to an overpopulated country boomerang, increasing starvation over the long run. They put choice really between letting some one die this year and letting more to die in the following years and finally chose former with version that only one thing can really help a poor country: population control.

To be source world population has grown dramatically over the last last 350 years, so the Nepalese population too, consider the figures in Table 7.

Table 7
Trends in world Population and Comparison with that of Nepal

Year	World Population (in Millions)	Nepal's Population (in Millions)
800 BC	57	-
800 AD	250	-
1650	500	-
1850	1200	-
1900	1700	-
1930	2000	-
1960	3000	9
1990	5300	19
2000 (Projected)	6300	24
2025 (Projected)	8200	35

Source: WB, World Development Report 1992, World Bank, Washington.

WRI, World Resources 1988-89, Basic Book, New York.

UN, World Demographic Estimates and Projections, 1950-20... UN.

At least since the time of the Industrial Revolution world population has been growing extremely rapidly. Interestingly enough, however, it is not just population that has been growing so fast in the period. If we take 1900 as a base year of comparison, while population has grown three times, the world economy has grown 20 times, consumption of fossil fuel 30 times and industrial production 50 times. Eighty percent of the increase in the last three items having occurred since 1950, (Macneil 1989), appears modest in comparison. Hence it is interesting to ask what proportion of the responsibility for the environmental crisis is to be laid at the door of population growth.

A noted biologist Garrett Hardin wrote "How can we help a foreign country to escape overpopulation? clearly the worst thing we can do is send food..... Atom bombs would be kinder. For a few moments the misery would be acute, but it would soon come to an end for most of the people, leaving a few survivors to suffer thereafter" (Quoted by Commoner, 1990).

Neo-Malthusian remedies for the environmental crisis, like Hardin's suggestion, are callous, but disturbingly popular. Overpopulation notion, as used by like Ehrlichs, diagnosis an area overpopulated, if the long-term carrying capacity of an area is already being degraded by its current human occupants, that area is overpopulated. By this standard the entire planet and virtually every nation is already vastly overpopulated. But there arises a serious problem with this notion. If a sparsely populated region's carrying capacity is diminishing because its resources are being exported to another part of the world, it will be considered this area overpopulated nonetheless. In other words, this notion fails to consider the possibility that the resources of one region could be used to sustain the lifestyles of another, jeopardizing the carrying capacity of any region with no change in the size of the population.

Contradictory Views on Population Growth and Food Production

It is argued that incalculable environmental damage is being inflicted upon ecosystems the world over just in order to keep growing populations fed, with belief that food will be our limiting resource. But it is far from clear that food shortages present the greatest ecological threat in the next century. Because, food production worldwide has continued to increase some what faster than the population for the last four decades, and many agricultural experts expect that yearly rise to keep on materializing, despite setbacks encountered in 1970s and 1980s; and foresee Asia as really bright spot in the food picture among developing regions. But pessimistic view encounters with that expanded food production faster than the growth of population has to pay a heavy ecological cost in terms of depleted top soils, drained aquifers, water logging, water pollution and deforestation. Such trends, as claimed, put into question of feasibility of feeding a world population which is growing too rapidly.

The belief of outstripping food supplies by population growth, is not, however, so serious concern as in a way it is presented. Figures for Nepal and world population and food production (Table 8) reveal this fact. Both rates of growth are slowing down but the rate of growth of food production continues to be well above the growth rate of population. In the last quarter century, food production has outpaced world population

growth by 16 percent (Collins and Lappe, 1988:7). In the same vein if we compare the data (Table 9) of bad years (1987 and 1988) with the recent past, food production is growing significantly faster than population, specially in the developing countries.

On the basis of such evidence, Dreze and Sen conclude: it seems unlikely that the real dangers in the near future can lie in the prospect of food output falling short of the growth of population (Dreze and Sen, 1989:32).

Table 8
Food Production and Population Growth in Nepal and world

(Percent)

Years	Nepal		World	
	Average Annual Rate of growth in population	Average Annual Rate of growth in food production	Average Annual Rate of growth in population	Average Annual Rate of growth in food production
1965-70	1.9	12.9	2.0	3.7
1975-80	2.4	9.5	1.8	2.5
1985-90	2.6	5.0	1.6	2.1

Source: Crosson and Rosenberg, 1989.

FAO (1991). Selected Indicators of Food and Agriculture Development in Asia Pacific Region 1980-90. Rome.

UN (1988). World Demographic Projection, 1950-2025, UN, New York.

Table 9
Trends in Food Output Per Head of Nepal and World

Region	1986-88 Average over 1981-83 (percent change)	1986-88 Average over 1976-78 (percent change)
Nepal	+2	+20
Developed economies	+2	-
Developing Economies	+2	+11
Europe	+5	+13
USA	+7	+7
Africa	-2	-8
South America	unchanged	+2
Asia	+8	+17

Source: Dreze and Sen, 1989.

Eighth Five Year Plan 1992-97, 1992 NPC/HMG/N.

Further Dreze and Sen also argue that statistics on malnutrition and hunger can not be treated as evidence of food shortages, because hunger is a function of people's access to food (their entitlements) rather than being dependent solely on aggregate food

availability. In principle, and in practice also, overall food supply may be plentiful and yet people starve because they do not have the money to buy food.

Population Growth, Poverty and Patriarchy

It has been customarily pointed out many undesirable consequences of over population which in turn become poverty epidemic. This poverty epidemic has many population related causes: malnutrition, contaminated water supplies, lack of adequate medical care, and lack of education. But the analysis miss to observe that all these causes of poverty are closely connected to grossly unequal access to economic and political resources. When put with the question whether over population is the cause of poverty or a symptom of it, it is labelled as counter productive against the goal for providing everyone with a decent life, so all of us should work very hard to end both poverty and population growth. But it matters, whether poverty causes population growth or the other way around.

If poverty is the cause, then the elimination of poverty should be the focus of efforts to remove overpopulation. If, on the other hand, overpopulation is the cause of poverty, then alleviation of the later is predicated upon the prior removal of the former. In the first case, the remedy would be population control. But, discussion focused on the means to control population growth, measures that might be necessary to alleviate or remove poverty, either directly or through economic development are put aside. Thus, the hurdles to population control concern much more than the political and institutional obstacles to the removal of poverty.

If producing too much children makes the self same people poor, why they produce so much. The answer is that far from making them poor, producing more children improves the socio-economic opportunities of the family. Most families in rural Nepal have either little or no saving and are unable to finance the education of any children. The poor would reduce the number of desired children if and they find adequate socio-economic opportunities.

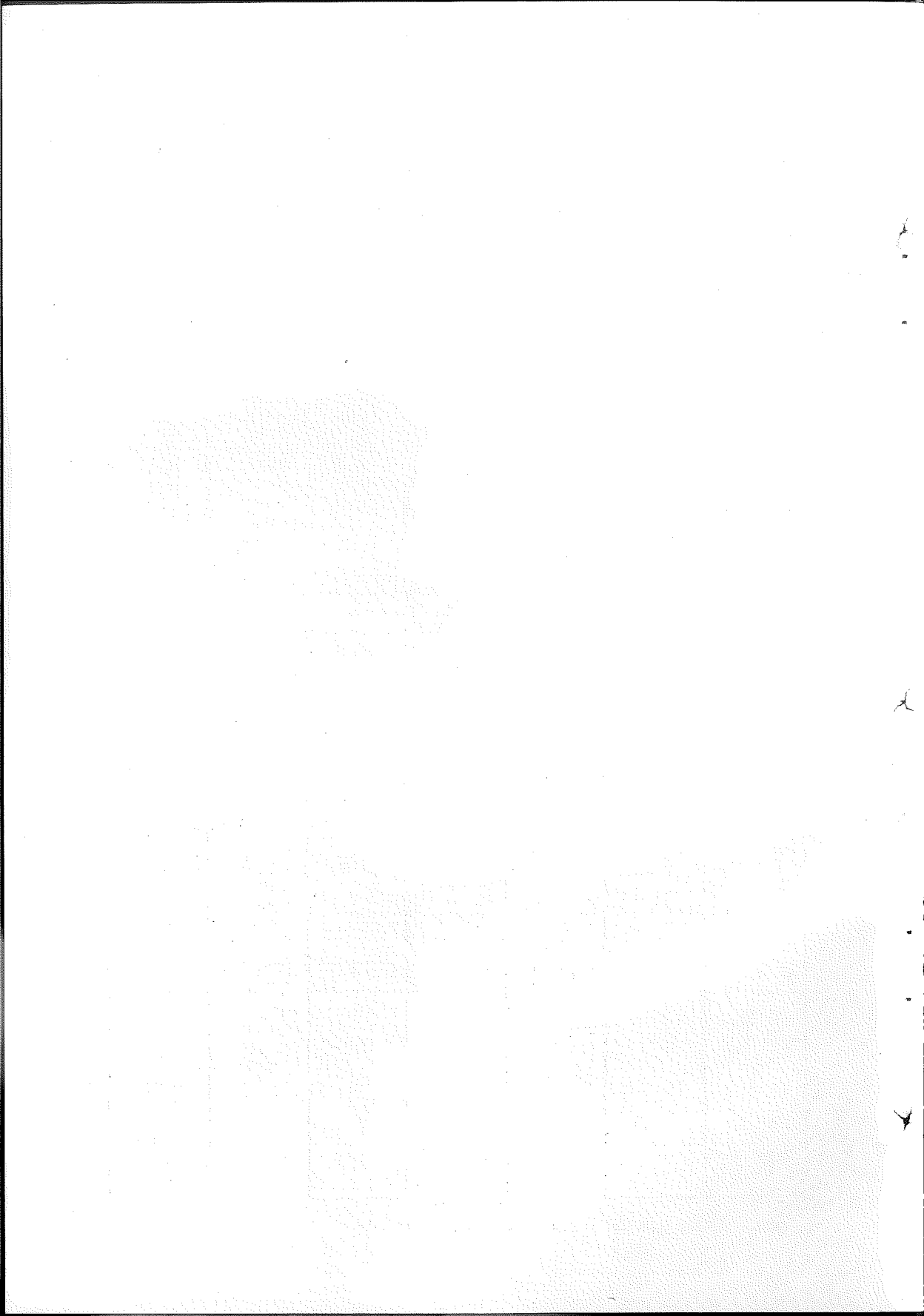
Patriarchy contributes to growth of population throughout most of the country. Preference for son frequently contributes to a large family. Son preference, combined with high infant and child mortality rate, means that parents must have many children just to insure that one or two of them survive. Moreover, in our country children are often the main source of a woman's pride and self respect. Children also serve as the chief source of insurance against an uncertain future, specially for women without husband. In such ways women's powerlessness increases their need for children. So, by the same token women with access to employment tend to want fewer children. When women have sources of status other than children, family size declines therefore, population policy should not be isolated from social and welfare policies.

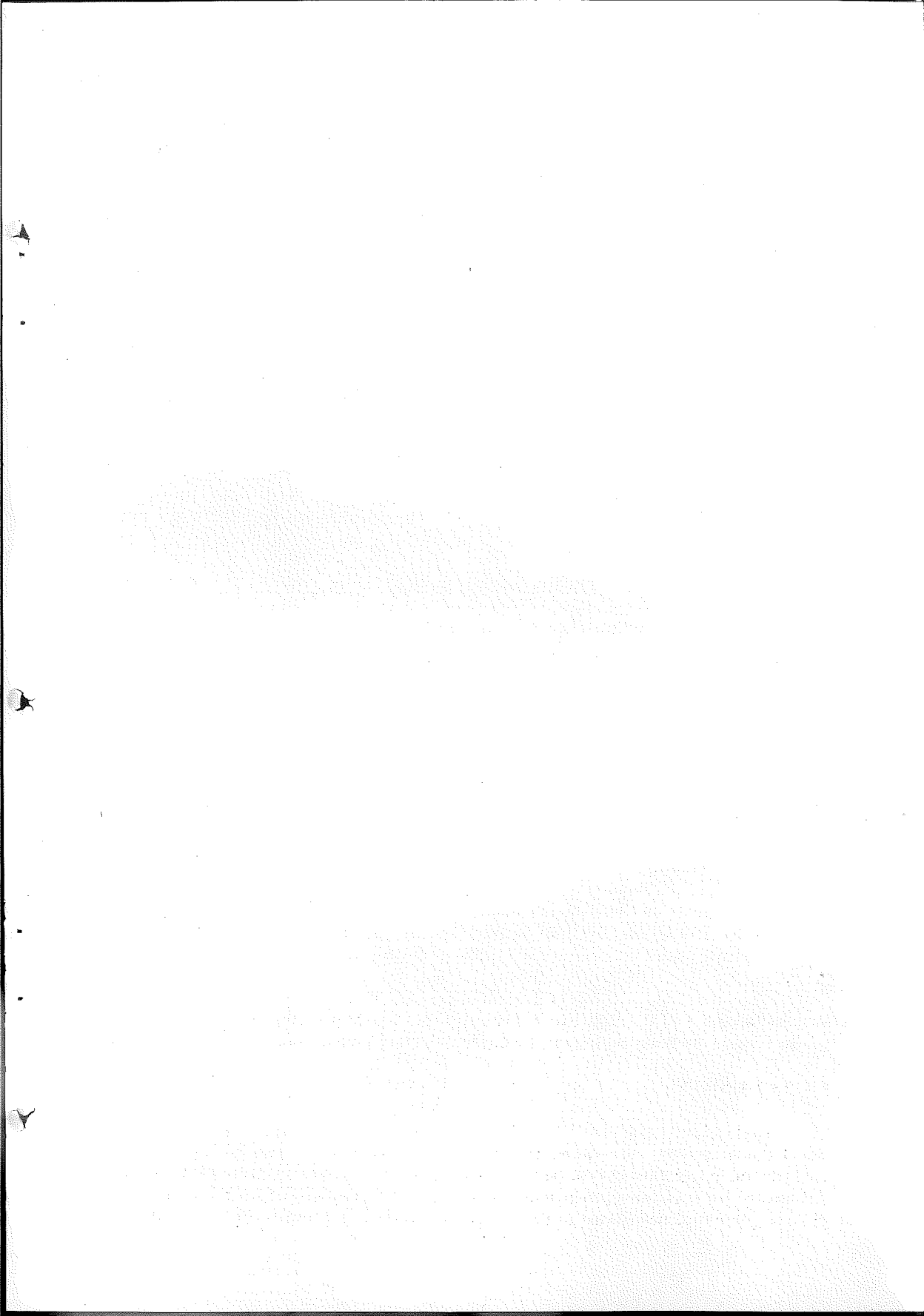
Further, rural women in the country are in essence, involved in a zero sum game, living in a close system in which time or energy devoted to any effort other then from their traditional activities results in vain. The challenge before government and institutions promoting economic development is seen with to overcome women's resource constraints that limit their participation in development process and stymie

Table 10
**Role Conflicts in the Lives of Rural Women of Nepal that Effect
 Nutrition Growth and Development**

Stages in Women's life Cycle	Biological Roles	Economic Roles	Cultural Roles	Roles promoted by International Agencies	Conflicts	Adverse effects of conflicts
Birth to 5 years	Survival growth & development	Minimal household production	Daughter Female gender identity Kinship respect of age, sex, power, status	Play	Tension between socialization and growth, female infanticide, subservience of females (access to food and health)	Malnutrition and mortality
5 years to puberty	Maturation	Agricultural Labour	Transferal of earnings, Preservation of chastity, Female learning sex roles	Education Learning to prevent teenage pregnancy	Education vs. Labour in household, on or off-farm Cognitive development vs economic and social roles	Low school enrollment, retention and achievement stunted growth of females Limited occupational options
Puberty to menopause	Pregnancy Lactation Nurturing dependent	Household production food, fuel water, child care	Wife, deference to husband's decisions sacrifice for, husbands. Obey mother-in-law	Education Employment Family Planning Leadership	Household production vs Income generation Physical labour vs Pregnancy Daughter-in-law vs Mother	Maternal malnutrition poor child growth closely spaced high parity births
Menopause to death	Senescence	Increased agricultural labour and market activities	Non-sexual Grand mother family decision control	Midwife or other health workers	Economical survival vs Widowhood Physical health vs Economic	Older women's stress, dependency and rejection exploitation of her own children due to low productivity

Source: Author's Design based on Holmboes et al. work.





Hartmann (1987), cites instances of "sterilization at starvation point" in Bangladesh, including a case in which an official told a woman, "if you have the operation you will get wheat."

The political terminus of such ideas is a neo-Malthusian prelude in which experts will unilaterally determine the population policy, thus deciding who is entitled to live and reproduce and who is not. Reproductive and other human rights are threatened by this approach to solving environmental problems.

STRATEGY FOR SUSTAINABLE DEVELOPMENT

Given that there is basic consensus on preservation of satisfactory environmental conditions the following four things have to be achieved:

- material growth (in the sense, growth to "catch up") is indispensable for the poor majority of the country's population. The aim should be to achieve at least minimum material standard ("floor") valid for all;
- maximum amount of wealth for all people has to be limited ("ceiling"), not only by the type and extent of capital stock and technical but also, significantly, by ecologically relevant determinants such as:
 - the reserves and changing reserves of non-renewable resources;
 - the reserves and changing reserves of renewable resources;
 - environmental impact;
 - population numbers and rate of increase and; because the time scale we are dealing which is by definition infinite ("all people living in the future"),- consumption of non renewable resources has to be stopped, changing to other forms of consumption and production or to substitutes and,
 - those resources which are renewable in principle agricultural land, lakes, rivers, forests and species living in them and finally, the vital layers of gases close to the earth - must not be overtaxed, let alone destroyed.

Thus the ecological modernization or ecological structural change is the only way to sustain and develop which aims to make existing production process and products more environment friendly by means of technical innovation.

CONCLUSION

Eighth Five Year Plan 1992-97 has main objectives of : sustainable economic development; poverty alleviation. To achieve these objectives the plan has prioritized for reducing population growth rate and exploiting renewal, non-renewal resources on sustainable basis, creating productive assets base and employment opportunities. In the present context of new thrust to the economy, economic reforms regardless of their

aggregate effects have distributive consequences, creating benefits for some while imposing hardship and loss on others. Any analysis of reform demands attention at stake, but institutional factors also influence the policy process, as rent seeking groups have greater influence in the present context. Model of budgeting have shown how legislators face interest group pressures to increase transfer to the better off groups of their district.

Many strategic programmes, such as fiscal adjustment and trade liberalization entail short term costs while the benefits take longer to unfold. So, there lies chance that optimal policies will be abandoned as interest groups lobbying intensify pressure. Government, therefore, has been unable to resist pressure to boost wages pursuing populist but unsustainable fiscal and monetary policies, inflation mounted and stabilization efforts derailed. It has sought to maximize the present consumption through policies enhance tax increases that inimical to growth - the *Leviathan* of Findlay and Wilson (1967). Accompanied by an increased level of political activity, provided the opportunity for groups, such as labour, to press their demand and frequently government responded with expansionary fiscal policies with higher wage settlement and changed expectation then led to higher inflation enjoying typically honeymoon period trading economic losses against political gains.

Partisan orientation has assumed that party have macro economic policy preferences that reflect the material interests of their constituencies. Government came to power with sharp social inequalities after periods of wage control and political repression. Government sought to redress these problems through macro economic and structural policies intended to shift income to the core constituencies, a broad coalition of urban middle - and working-class, the informal sector. As these heterodox experiments faced mounting inflation and external imbalance government has been forced to introduce liberalization measures at high cost to the groups it supposed to represent. But as, prospects of these measures depends on characteristics of state itself, particularly the discipline and competence of the bureaucracy, so, in many targeted programmes there is urgent need and requirement of a selective strengthening of the government's role rather than simply reduction in government intervention. Economic power influences the balance of power among and configuration of political interest by weakening some groups and strengthening others, success of policy in the distribution of income only make the success of poverty alleviation and sustainable development. Sharply unequal income distribution has created social and political division that undermined conscience of economic programmes, increased uncertainty about the actions of future and shorten time horizons of economic reforms producing such undesirable economic outcome as tax evasion, capital flight, investment strikes and unreasonable wage demands.

The external milieu also influences policy choice. As Putnam (1988) has argued more clearly, implementation of the agreement struck internationally is always contingent on domestic political negotiations. Evidence from 1980 suggests that the country by receiving substantial lending from the world Bank groups did better at sustaining consumption than environment (World Bank, 1992). On the one hand unity among creditors and their power over the flow of financial resources provided them with substantial influence and, on the other, extra external resources increased the political

sustainability allowing the country more consumption. decades of 1960s and 1970s, nonetheless, first half of 1980s in our case are examples of this. Therefore, the lack of such external support or more extreme, the demand for resources through debt repayment may not weaken the political position of the country in coming decade of 1990s, government must sought judicious balance between external loan conditionality along with the transmission of policy relevant knowledge and country's needs.

Policy makers rarely have much influence over the political structure or fundamental economic system, but they have considerable control over the design and tactics of on fragmented strategies. Therefore, government must have clear moral reasons for assisting the poor. The political argument for compensation must be based on normative terms as advanced by UNESCO study *Adjustment with a Human Face*: It should not negate the programme with counter-arguments like of a country simply has not fund to compensate poor, it undermines the objective of competitiveness or the likely recipients of politically motivated compensation may not be the poor. A programme that raises expectations, engenders domestic hostility, is worse than no programme at all and ill timed external assistance allows the government to continue misguided policies.

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