

CHAPTER 3



DESCRIPTIVE ANALYSIS OF SOCIO-ECONOMIC AND HEALTH INDICATORS

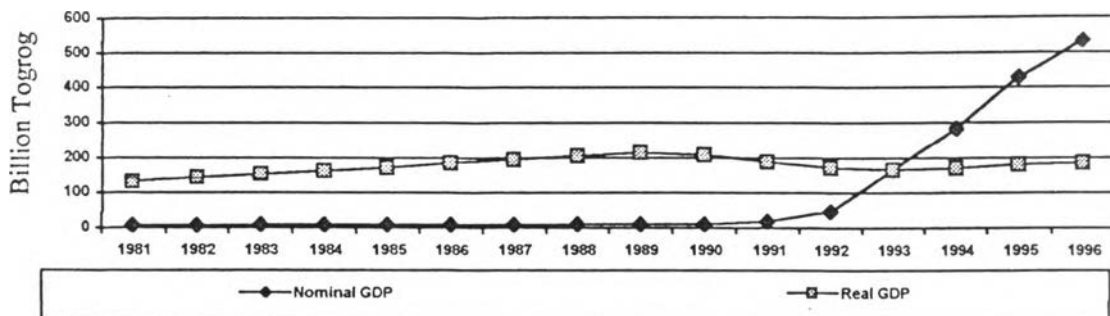
3.1. Socio-economic situation in Mongolia

3.1.1. The Economy

The government's early policy aimed to nationalize and diversify the economy. Mongolia's economic policy gave priority to expansion of the livestock sector and the creation of the agro-industrial economy. The bulk of investment was in the industrial sector, while the livestock sector was expected to expand through improvements in organization and management. The new economic policies introduced with the democratic revolution of 1990 aimed at dismantling the command system and replacing it with a market economy. The government has been giving high priority to economic stabilization and restructuring since 1990. Beginning in 1990 the government implemented a broad range of measures to transform the economy, including a privatization program, domestic price liberalization, and changes in laws and regulations. Despite this, the country's economy was severely disrupted. It is hampered by external shocks such as termination of the Soviet Union's financial and technical assistance, change in external trade. Trade with Russia and other socialist countries accounted for 89 per cent of trade in 1989; by 1993, this share had declined to about 56 per cent.

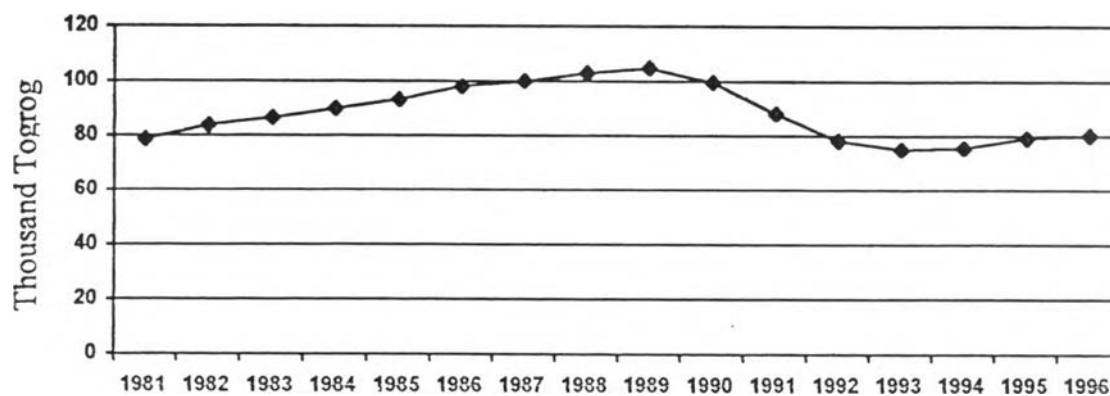
Between 1980-90 GDP per capita has increased on average by 2.7 per cent per annum. Annual GDP growth rates were consistently above 4 per cent until 1990. Real GDP fell almost 25% over the period of 1989-1992, a decline of 9.2 – 9.3% per year. Since 1994, GDP per capita has been rising at an average of 1.9 per cent per year, while inflation rates have declined. (Figure 3.1.)

Figure 3.1. Real and nominal GDP at 1993 prices, 1981-1996



Source: State Statistical Office (SSO).

Figure 3.2. GDP per capita at 1993 prices



Source: SSO.

Inflation has risen dramatically since 1990, before which it was almost nonexistent. In 1991, with the easing of price controls, prices began a rapid rise. With the lifting of controls, prices immediately rose to counter the shortage of goods. The liberalization of the exchange rate and the adverse terms of trade also exacerbated the price index through increased price of imported goods. The consequence of these combined pressures was hyperinflation at 325 per cent in 1992, falling of to 53 per cent in 1996. Since inflation drops when purchasing power of people decreases, most families' standard of living has deteriorated during the past years.

Agriculture, especially the livestock sector, has been playing an important role in the economic development. Growth in agriculture has been more stable. All of the growth in this sector derives from livestock, which has continued to perform well, especially cashmere production has risen by 80 per cent since 1995 and now makes up an important part of the export market. Between 1985-90, agriculture (livestock and crops) contributed 15 per cent of the GDP. Since 1992, percentage of agriculture in GDP is increased double as result of decline service sector share. (Table 3.1.) Livestock accounts for 88 per cent of agriculture.

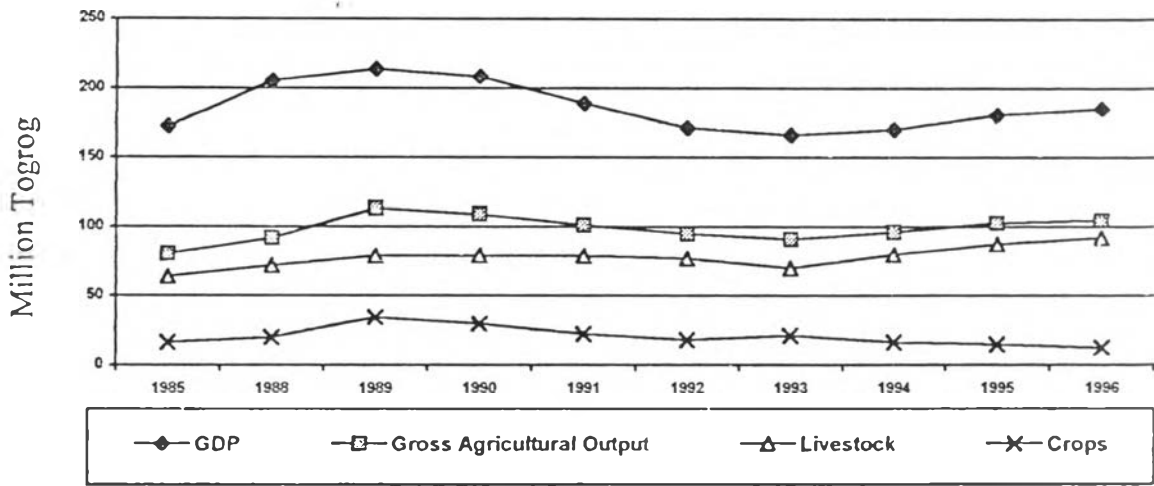
Table 3.1. Sectoral composition of GDP /at current prices, percentage/

	1985	1988	1989	1990	1991	1992	1993	1994	1995	1996
GDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1. Industry	31.8	32.2	32.7	35.6	30.2	32.0	30.9	30.5	32.4	32.1
2. Agriculture	14.3	14.6	15.5	15.2	14.1	30.2	35.1	36.9	36.7	31.0
3. Construction	4.4	6.3	6.1	5.0	4.0	1.9	1.6	2.1	2.7	4.0
4. Transport	11.5	11.4	10.4	10.2	5.4	4.5	3.2	4.6	3.4	3.5
5. Communication	1.5	1.6	1.6	1.8	1.3	1.0	1.4	1.2	1.2	1.3
6. Trade and Material/Tech. Provision	22.3	18.3	19.0	19.4	27.0	15.4	16.0	11.7	12.3	14.8
7. Service	12.9	14.6	13.4	11.5	17.1	12.9	9.5	10.5	11.2	13.2
8. Others	1.3	1.1	1.3	1.2	0.9	2.1	2.3	2.4	0.1	0.2

Source: SSO.

Livestock were reared on collective farms until 1990. Privatization of the collective farms began in September 1991. By 1993 more than 90 per cent of head of livestock were in private ownership. Livestock production fell during the privatization up to 12 per cent. In 1994 it reached the 1990 level, and continued to increase. Distribution problems seem partly to account for this reduction since livestock numbers have not changed significantly. Also it is partly explained by increased private consumption and state controlled low prices. There has been a significant fall in crop production in 1991, and further reductions in 1992-96 because of lack of fuel, spare parts and inadequate supplies of fertilizers and other necessary inputs. In 1996, crop production fell by 58 per cent as compared to 1990. Figure 3.3. presents the GDP and agricultural production including livestock and crops between 1985-1996 in order to show the trend pattern of GDP and agricultural production, because livestock will be used as a proxy of GDP in our study.

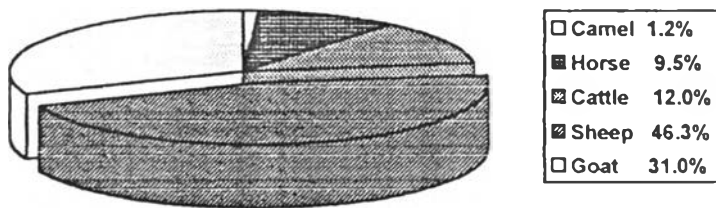
Figure 3.3. GDP and agricultural production at 1993 prices



Source: SSO

The number of livestock was stable during the early 1990's, in 1994 and 1995 it has increased on average 6.5 per cent per annum. In 1996, number of livestock increased by 2.5 per cent particularly, the number of goat has increased due to privatization and increasing interest in producing more cashmere for export.

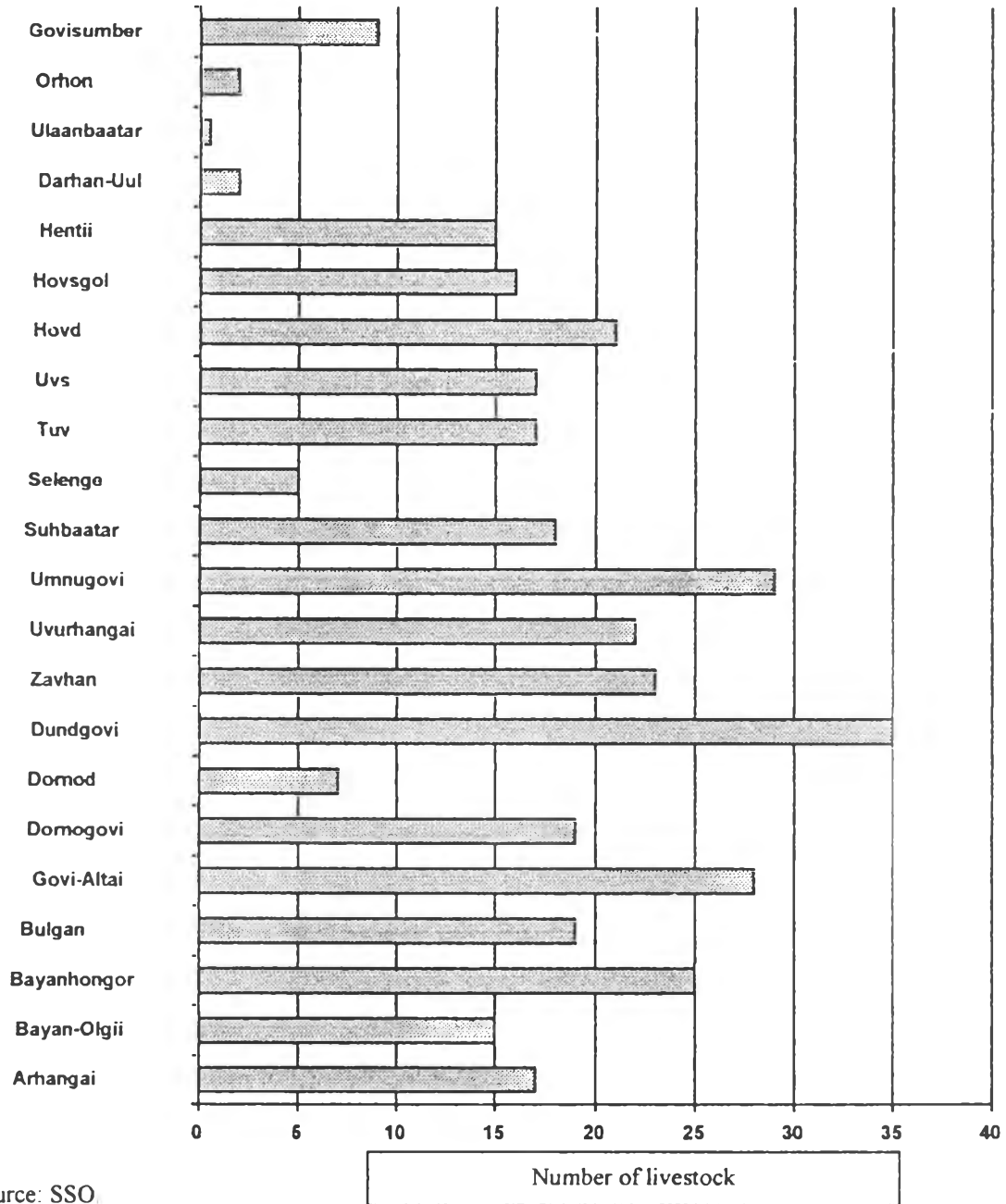
Figure 3.4. Number of livestock by kind /1996, by percentage/



Source: SSO.

Most of the major industrial and construction activities are located in or around Ulaanbaatar, Darhan and Erdenet or a handful of the larger provincial centers such as Dornod, Selenge. Livestock and cashmere production (though not processing) are generally located in the rural areas or provinces. Therefore, the number of livestock in the city and industrialized provinces is less than in other provinces. Figure 3.5. shows the distribution of livestock by provinces and city.

Figure 3.5. Livestock per capita by provinces, 1996



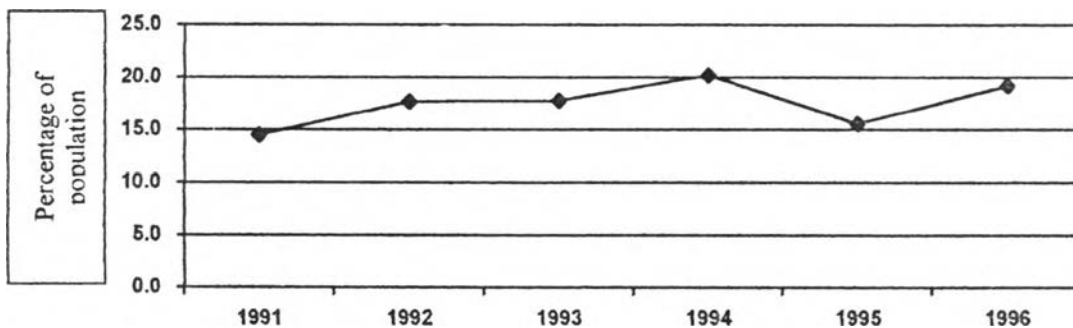
Source: SSO

3.1.2. Poverty

Poverty emerged in Mongolia during the sharp down trend in GDP between 1989 and 1993. Large scale redundancies ensued due to deterioration of trade in the early 1990s which hit industrial enterprises hard. State farms experienced a similar transformation with large numbers of people being laid off as agricultural production plunged. The government has recently been focusing on the issue of rising revenue by shifting the tax burden from investment to consumption. It could result in a net fall in revenues in the short run, causing additional hardships for households.

Since 1991, SSO's Household Budget Survey data has been used with an absolute poverty line based on a minimum basket of goods that should be available to all. The minimum basket is calculated using a physiologically adequate food calorie level plus allowances for non-food items. The harsh climate of Mongolia means non-food expenditure such as heating and clothing are vital for survival. According to Household Budget Survey data, poverty has increased in Mongolia since transition both in numbers of people and in the proportion of the total population. In 1991, 14.5 per cent of the population was living in poverty as compared to 1996, when 19.6 per cent of the population was considered poor. (Figure 3.6.)

Figure 3.6. Percentage of population under official poverty line, 1991-1996

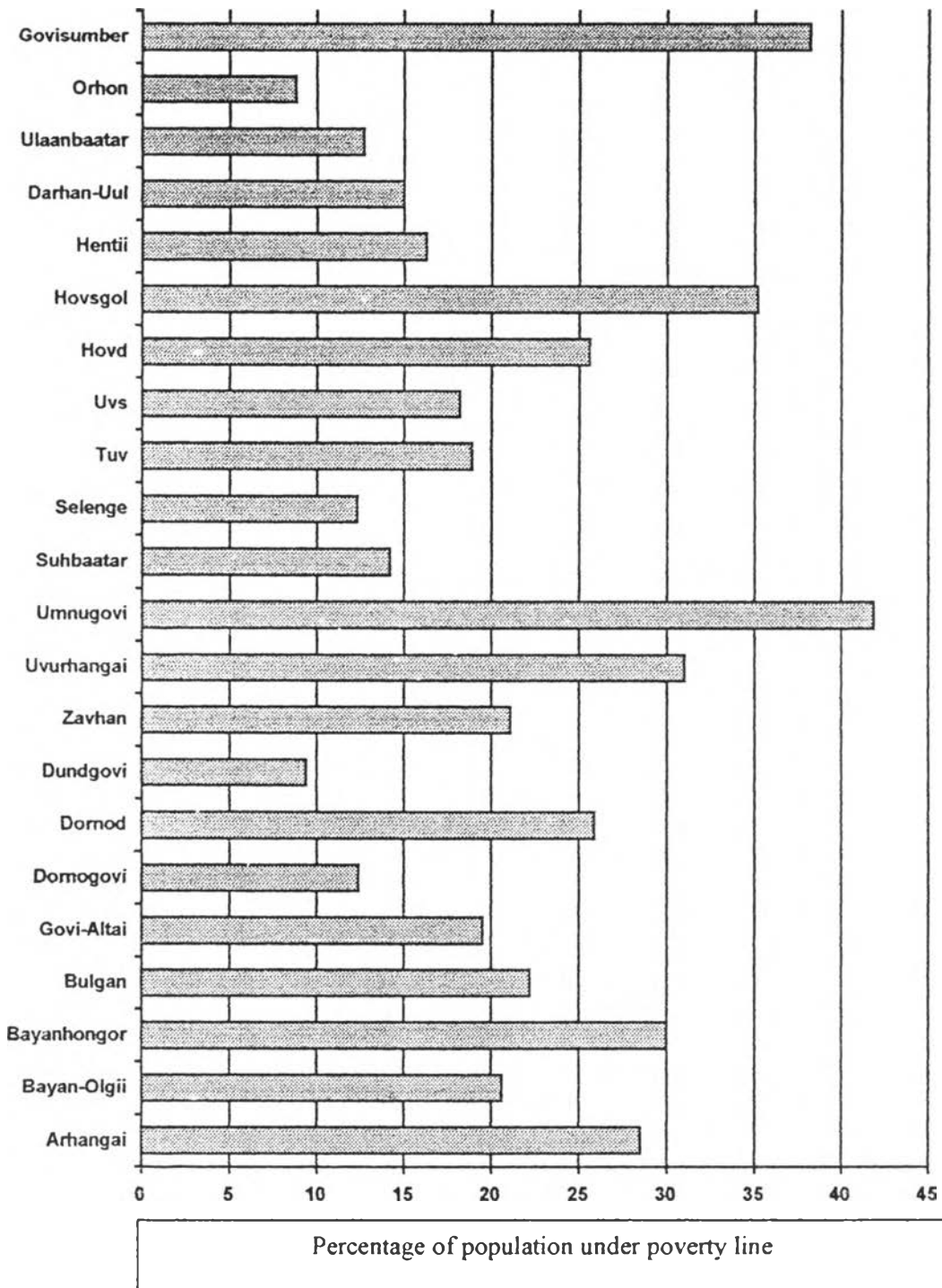


Source: Human Development Report of Mongolia, 1997

In 1996, the number of poor households reached 103,500 an increase of 28.7 per cent over the 1995 level. Of these households, 25.5 per cent were female headed and 35.6 per cent were headed by unemployed persons, 47.6 per cent were children under the age of 16, 10.6 per cent were elderly.

The incidence of poverty now in both rural and urban areas has an increasing trend. It is reflected not only in low incomes, but also in deteriorating health, declining educational achievements, declining moral standards and rising crime. Unless the rise in poverty is reversed quickly, the longer-term development potential of the country will be damaged. About 41 per cent of the very poor are in the province centers, 23 per cent in the sum centers, and 12 per cent in Ulaanbaatar. The figure 3.7. shows the distribution of poverty by provinces. The 5 provinces with highest poverty incidence in 1996 are Umnugovi, Govisumber, Huvsgul, Uvurhangai and Bayanhongor.

Figure 3.7. Population under official poverty line by provinces in 1996 /by percentage/



Source: SSO.

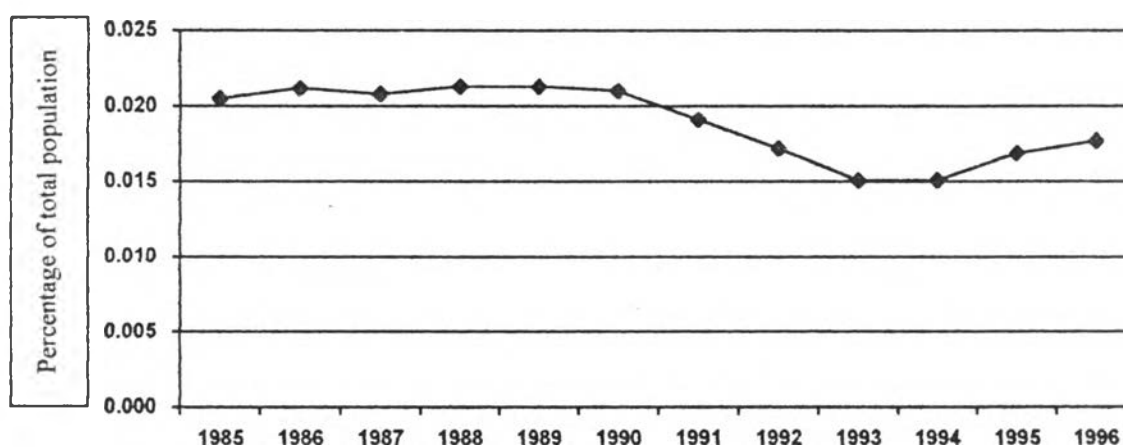
3.1.3. Education

Mongolia has made remarkable progress in basic education as other former socialist countries. The official literacy rate of 96 per cent reflects many decades of strong government commitment to providing extensive access to basic education for children in the age group 8-15 years and to literacy programs for youth and adults. The enrolment and completion rates at the primary stage of education were over 95 per cent in 1990. Over three-quarters of the young people are reported to have completed at least eight years of schooling. In fact, Mongolia's achievements in the education sector during 1950-1990 compares closely with middle-to-high income countries.

The present economic crisis and consequent shortage of financial resources for educational programs have created conditions which, at least in the short term, make it difficult for the country to sustain its past achievements in basic education. Expenditure per capita on education fell by 53% between 1991 and 1996. The cuts have been felt in reduced access to facilities and in the quality of education provided. Increased demand for labor of children at home as a result of privatization of herds, decreased family income and increased costs of textbooks lead to decline in enrolment and completion rate.

Survey conducted by Danish Development Agency and UNICEF reported that overall dropout rate in grades I to X in 1992 was estimated at 11.6%. According to the State Statistical Office data, the combined primary, secondary, the tertiary gross enrolment rate was 76 per cent in 1989, 54 per cent in 1992 and 57 per cent in 1995. The following figure (Figure 3.8.) shows the number of 8-years secondary school graduates as a percentage of total population.

Figure 3.8. Eighth-years secondary school graduates as a percentage of total population



Source: SSO.

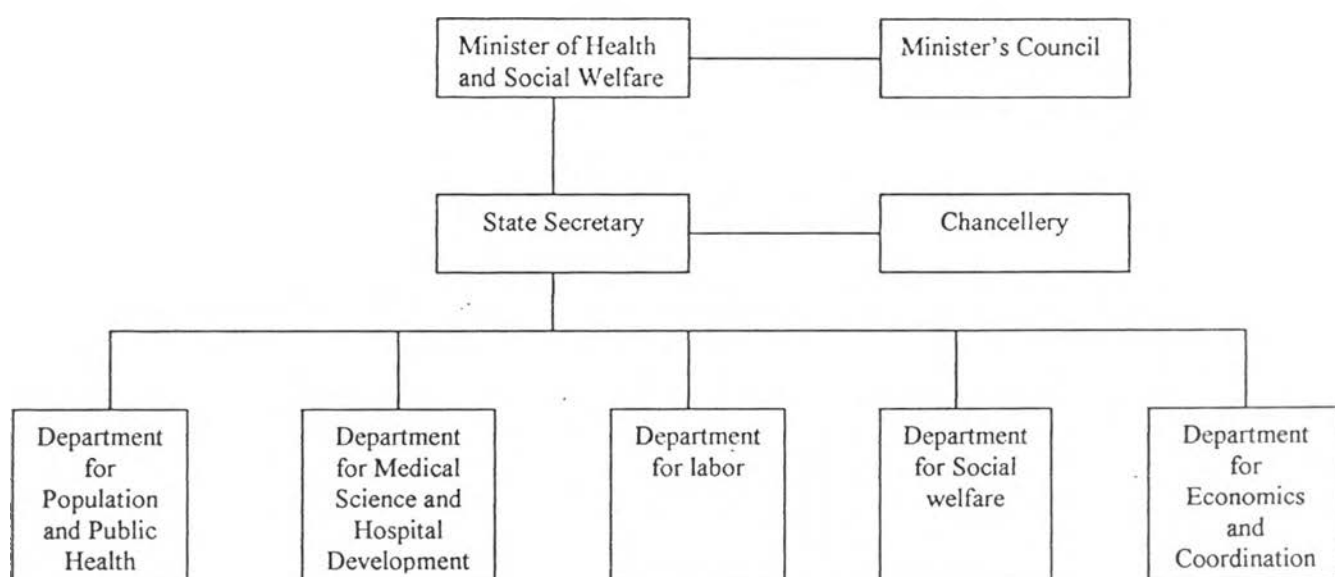
3.2. The Health Sector

3.2.1. Health care system

In Mongolia, health care is considered as a public responsibility. People's right to the protection of health, healthy and safe environment, and right to material and financial assistance in old age, disability and child care are enshrined in the Constitution. Since 1980s, the main thrust in Mongolian health policy has been gradually shift from curative oriented and dominant hospital services to the preventive and primary health care services.

The health services are provided by the Ministry of Health and Social Welfare with its various health institutions. The Ministry of Health and social Welfare is the main state executive body responsible for health care and social protection. It proposes the principal directions and priorities of public health policy, defines the health facilities network and runs health care provision. A separate service is functioning for railway workers and the armed forces. The private sector has been growing recently. In 1996, there are 231 private medical authorities.

Figure 3.9. Structure of Ministry of Health and Social Welfare



Note: Structure in 1996.

Table 3.2. Levels of medical care

Levels of medical care			Numbers (1996)
Level 1.	Bag	Feldsher posts	917
Level 2.	Sum	Sum hospital	359
Level 3.	Province & city	General hospital	38
		Province Public Health Center	22
		City Health Center	18
Level 4.	Central	Specialized hospitals	14
		Specialized dispensers	12

Source: MOHSW.

3.2.2. Health care finance and expenditure

Health sector was financed entirely by the state. Between 1970-90 from 8 to 15 per cent of government expenditure was devoted to the health sector. Since 1991, the health sector has been severely hit by the budgetary restrictions of recent years with cuts of 42 per cent in real per capita expenditure.

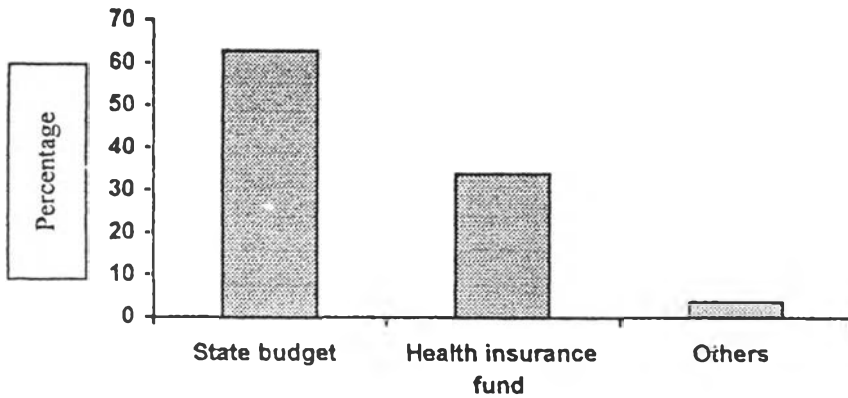
Reform of health care financing started with the introduction of health insurance in 1994. Previously, all health expenditures, with the exception of outpatient drugs, were financed directly from annual state and local budgets. Funds were supplied to each institution to meet its expected expenses. During the 1991-1993 period this system was maintained, but the high inflation rate combined with budget cuts in real terms led to severe and chronic shortages of funds for the health sector.

Starting in January 1994, a national health insurance system was introduced which provides payments on the basis of numbers of health services provided (inpatient days, outpatient visits) as well as 50% of the cost of outpatient drugs.

Health insurance is compulsory for all employed workers (either civil service and enterprises), with six per cent wage contribution. Employer should pay 50 per cent of insurance premium. Of the total 2,250,000 1993 population, 170,000 (7.6%) are not covered by insurance; 389,300 (17%) pay the six per cent of wages; 74,300 (3%) join voluntary; and 1,165,700 (72%) are covered by government contribution. In 1994, two-thirds of the health care was financed by the State budget. (Figure 3.10.) However, since the insurance system has been introduced, resource constraints remain, because, the government still pays more than two third of all insurance contributions. Therefore, interruptions in basic services such as drug supplies and heating has continued.

Additional reforms are made in 1995 and 1997 which includes decrease government share of the contribution and 10 per cent user charge of insurance premium for inpatient. Due to limitation of data collection time, here is impossible to show the implementation of the insurance law and recent source of finance.

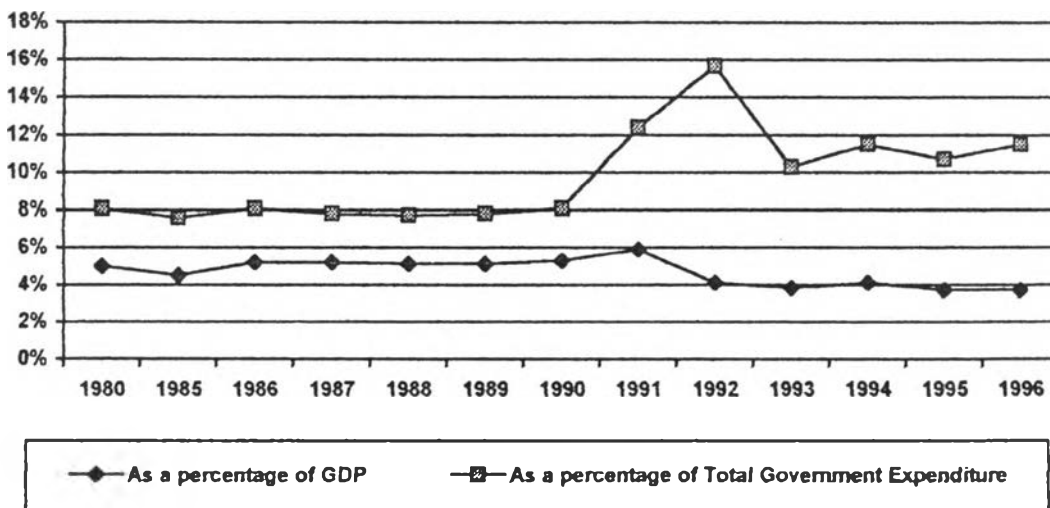
Figure 3.10. Percentage for main sources of finance in 1994



Source: MOHSW.

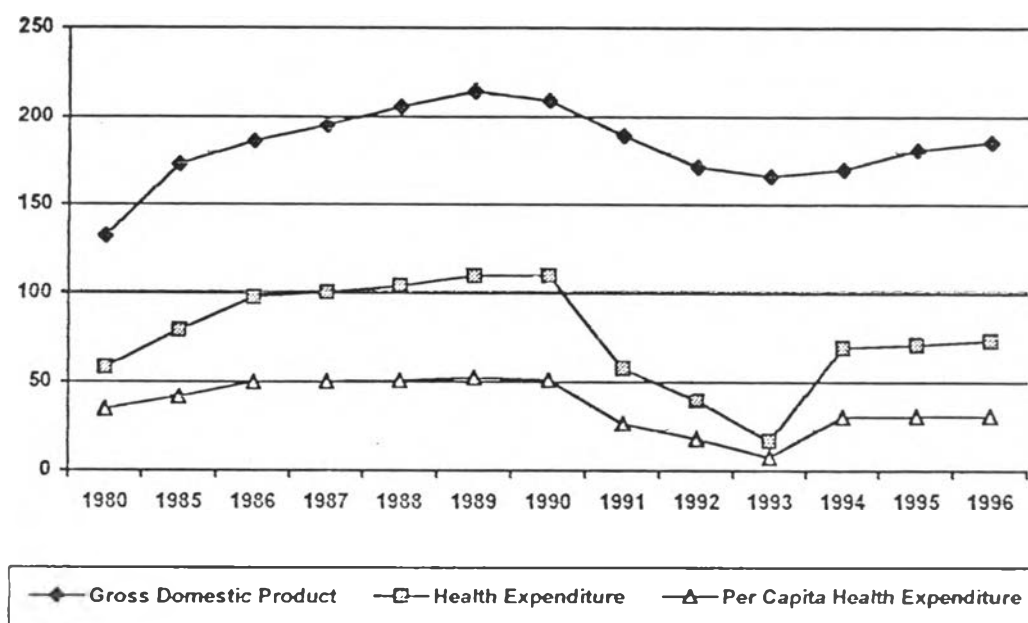
Expenditure on health by the government was around 8 per cent until 1990, after which it rose sharply as a result of one time effect of price liberalization. When measured as a share of GDP, it declined in 1992-1993 and remained at around 4 per cent. (figure 3.11.) The health expenditure fell in real terms during the period 1990-93. Since 1994, it tended to rise. As a result of this, per capita expenditure on health decreased suddenly in the 1990-93 period and rose gradually from 1994. The purpose of including GDP is to compare the trend of its growth curve with expenditure for health services.

Figure 3.11. Government health expenditure as a percentage of GDP and total government expenditure



Source: SSO.

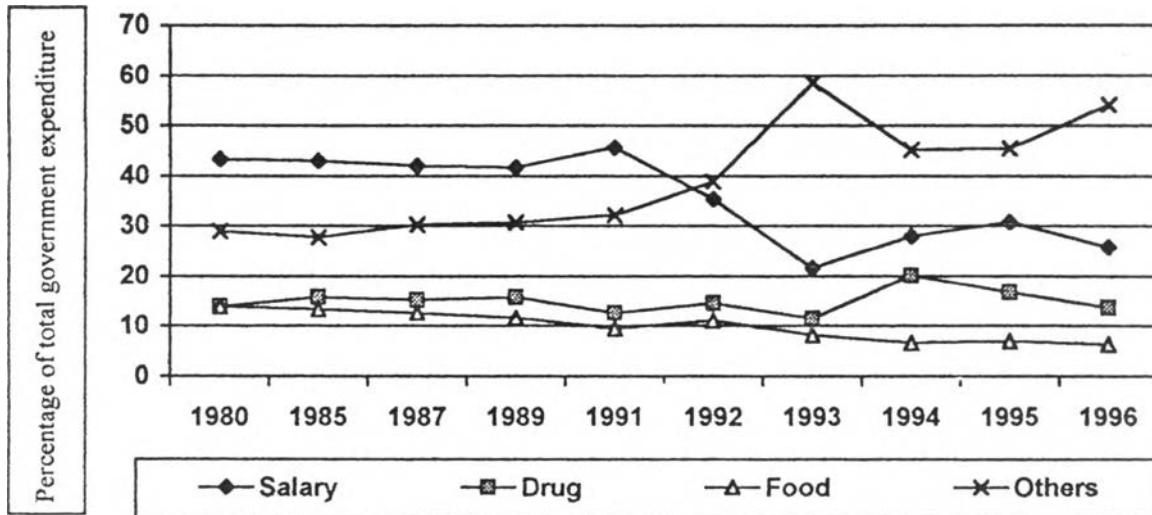
Figure 3.12. GDP, government health expenditure and per capita government health expenditure at 1993 prices



Source: SSO and MOHSW.

Figure 3.13. presents the composition of health expenditure by category in percentage terms. Salaries declined from 45 per cent to 22 per cent of the total health expenditure, partly due to an decline in overall health sector employment, but mostly due to the failure of civil service wages to match inflation. Expenditure for drugs had a steady trend, however, in 1994 it increased up to 20 per cent. Under the health insurance program, drugs are reimbursable when provided through a hospital inpatients. And also, hospitals were able to order drugs on credit from the government pharmacy system for inpatients. Since 1994, outpatients pay out of pocket 50 per cent for drugs due to the implementation of the health insurance system. Food expenditure for patients has remained roughly similar in percentage terms, but has not kept up with inflation. In part this is because of decline in total hospitalizations. On the other hand, "other expenses" rose suddenly and substantially in 1991-93, and then fell in 1994. But since 1994, it had an increasing trend due to decline in expenditure for salary, drugs and foods, the percentage of other expenses increased in the total composition of health expenditure. This consists mostly of payments for heating, electricity, fuel for vehicles and telephones.

Figure 3.13. Composition of health expenditure by category, 1980-1996.



Source: MOHSW.

3.2.3. Health status

Under central planning, significant progress was achieved in social development with high levels of investment in the health sector. The indicators of access to health services – 85 persons per hospital bed and 357 persons per physician in 1990 are good key international standards. However, health status indicators that reflect the effectiveness of the health services remain poor.

Infant and Child Mortality:

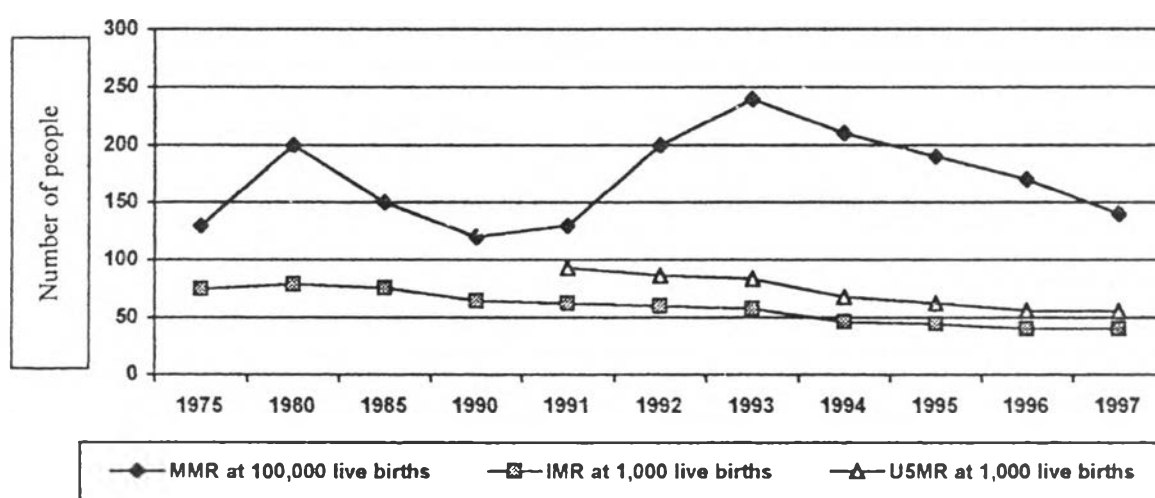
According to the 1997 *State of the World's Children*, by the UNICEF, Mongolia is presently ranked 67th out of 116 countries listed, with a child mortality comparable to that of Indonesia.

In 1997, under-five mortality rate was reported 55.5 per 1000 live births compared with 93.2 in 1991. The infant mortality rate was 40 per thousand live births in 1996. IMR gradually increased from 1965 to 1985, reaching a high of 78 per thousand live births. It then declined rapidly. (Figure 3.14.) A significant proportion of that decline can be attributed to improved levels of immunization and widespread use of oral rehydration therapy for diarrhea since the mid-80s. In recent years, the predominant causes of infant mortality are pneumonia, infectious and parasitic diseases, birth trauma and gastrointestinal illnesses. Nevertheless, countries with comparable health expenditure per capita such as Sri Lanka and Albania have a significantly lower infant mortality rate (15 and 34). Shortage of medical supplies, lack of transport, socio-economic hardship, climatic conditions and inefficient use of health services are the reasons behind the failure to address these easily treated diseases.

Maternal mortality rate:

The maternal mortality rate, averaged 140 per 100,000 live births during 1985-1989. It increased during the 1990s, despite falling birth rate over the same period. The maternal mortality rate was 177 per 100,000 live births in 1996, a decrease compared to immediately preceding years, but still higher than for 1985-89 when the rate was 1.4 per 1,000 births. Maternal mortality rates in rural areas are twice high as in urban areas. Probable contributing factors for rapid increase in maternal mortality are limited availability of fuel and vehicles, with resulting delays of transporting high-risk women to referral levels; closing of maternity rest homes previously maintained by every sum hospital to provide rural women with accommodation two weeks prior to delivery; diminished quality of medical care and vulnerability of mothers due to poverty affecting 74% of the rural women whose deaths were investigated.

Figure 3.14. Infant, child and maternal mortality rates

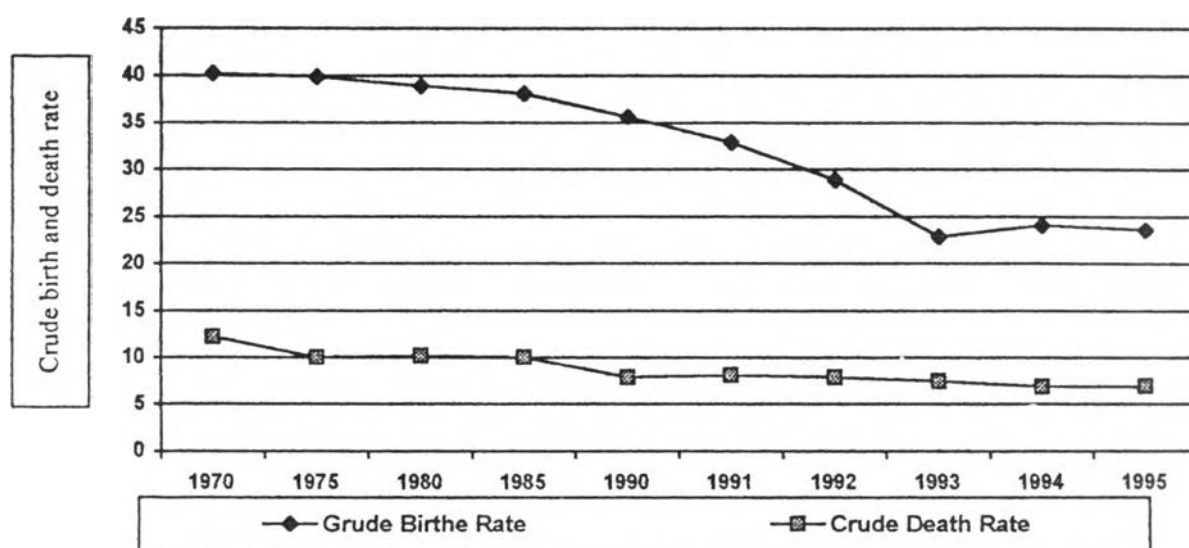


Source: MOHSW.

Crude birth and death rates:

From 1960s to 1980s, Mongolia's crude birth rate fluctuated between 36 and 40 per 1000 population, but sharply declined in the 1990s to 22.2 in 1996. These changes followed the implementation of a new family planning policy, but the changes are also probably related to the ongoing economic hardships. Between 1960-90 the crude death rate was 10 per 1000 population on average. In the 1990s it decreased to 7 in 1995.

Figure 3.15. Crude birth and death rates per 1,000 population, 1970-1995



Source: MOHSW.

Life Expectancy:

In the past 30 years, life expectancy at birth has increased by about 6 years. Much of these gains have been due to cuts in death risks during the first years of life. Since 1989, overall life expectancy has increased by just over one year. Some of this can be explained by a dramatic fall in birth rates in the early 1990s, which has served to reduce the proportion of the population that is vulnerable to early age mortality, thereby raising average life expectancy. However, the sudden fall in birth rates may be explained partly by the economic hardships. In 1997, life expectancy was 62.1 for males and 65.4 years for females.

3.2.3. Nutritional status:

As a result of economic transition, food availability in Mongolia has deteriorated. This deterioration has been more marked in the cities and has been worsened by the poor harvests of 1992 and 1995, increasing difficulties transporting agricultural products to the markets in the cities. Mongolia's per capita food production has fallen for all main food groups. (Table 1.4)

Table 3.3. Food production per capita

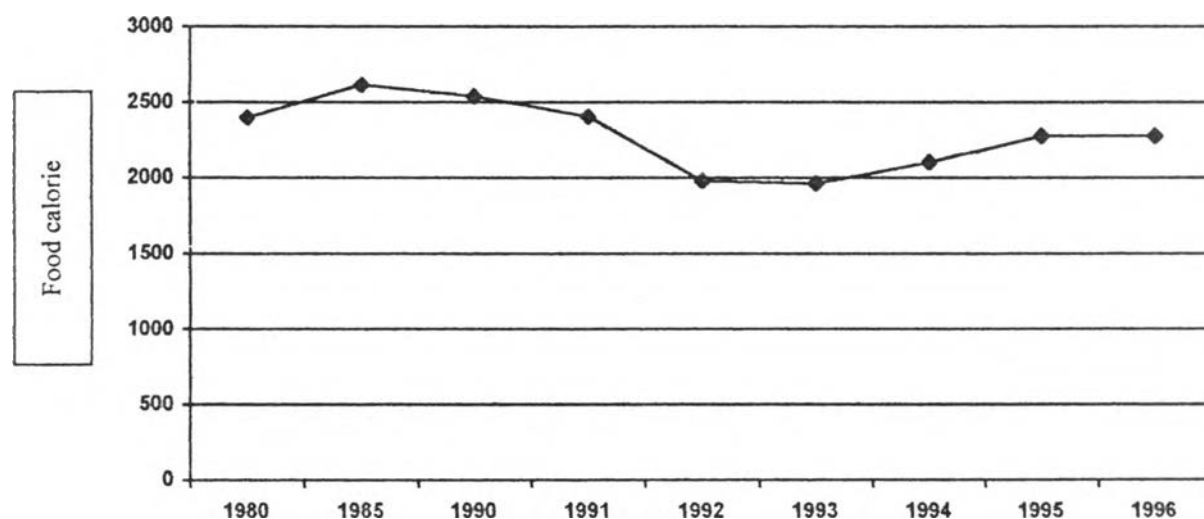
	1980	1990	1993	1996
Meat/kg	140.9	119.9	97.3	110.4
Milk/kg	140.2	152.1	128.0	156.9
Butter/kg	2.4	2.1	0.3	N/a
Eggs/pieces	13.1	17.9	4.5	2.1
Cereals/kg	178.2	346.1	215.9	94.4
Potatoes/kg	23.5	63.2	27.1	19.7
Vegetables/kg	16.3	20.1	10.2	10.2

Source: SSO

But for the last 3 years food availability increased due to food price liberalization and private trader's efforts to make money by importing more varieties of food.

Average per capita daily energy intakes have fallen dramatically in recent years, remain far short of their pre-transition levels- from 2,621 calories in 1989, to 1,963 calories in 1993, to 2,278 in 1996. (Figure 1.15). The family's ability to buy food is limited, being heavily dependent on their income. However, at this time it is not possible to comment on how households adjust to changing food availability, because no studies exist in Mongolia which look at this point.

Figure 3.16. Food Calorie Per Capita, 1980-1996



Source: SSO

In Mongolia's present economic climate, the children are likely to suffer most, since the impact of reduced income and food availability aggravate problems associated with malnutrition and micronutrient deficiencies. Child nutrition surveys conducted in 1992 and 1993 showed that 11.9% of the Mongolian children are under weight and 27.8 % of preschool children are likely to be anemic.

In conclusion, in several respects Mongolia may have faced the very worst of transition. Transition has not been without costs. Economic reforms have hit households hard and resulted in rising poverty, reductions in basic consumption, cuts in safety nets and social sector services, and the emergence of children in deprived circumstances. Health and education sectors have been badly affected, nutritional status have worsened. Most of the Mongolia's economic indicators declined dramatically during the early 1990s, only beginning to stabilize in the last three years. But how these socio-economic changes impact on health status?, how they are interrelated? Understanding and answering these questions are crucial for further decision making because, economic growth is generally a necessary condition for improvement in health, but it is not always a sufficient means of obtaining improvements in human health. Therefore, this study tried to look at these questions within its limitation, particularly data availability.