

Chapter V

MEASURING WELFARE EFFECT OF TRADE

5.1: INTRODUCTION

Goods and services produced by a society are basically meant to feed its citizens. After fulfilling the basic domestic needs surplus produces are being exported to earn foreign exchanges from abroad. It is noticed that some citizens end up with high standard of living while others end up without enough to eat, wear and live. This is because of the fact of unequal distribution of wealth. In the discussion of distribution one should not talk about distribution of things but about the distribution of well-being. Nineteenth century economists, philosophers and thinkers used the term 'utility' as a measure of 'well-being'. People's choices depend on the quality of the good, that is, how much utility they attain while consuming the good. According to this concept every citizen acts to maximize his/her utility or satisfaction. If, for example, person x gets more

total utility than person y then it is obvious that x is well-off than y and this situation can be measured in terms of utility possibilities frontier in which every point on the curve is efficient. But this measure cannot provide the direct measure of well-being. Since utility is not observable or measurable directly, most discussions on social policy centre on the distribution of wealth as an indirect measure of well-being. But economists also consider that income and wealth are not the perfect measures of well-being. This chapter deals with the measure of welfare effect of trade. Section 5.2 analyses some measures such as consumer surplus, producer surplus, and net social welfare as well-being of people of a country. Section 5.3 deals with some measures of well-being of India undertaken by the Government of India since independence. In this context the major issues such as poverty, unemployment, Net State Domestic Product (NSDP), trade gap etc. have been considered as indirect measures of well-being.

5.2 HOW TO MEASURE SOCIAL WELL-BEING

In 1991 structural reforms were introduced in India. In order to increase the standard of living or to increase social wellbeing, various measures have been undertaken. Trade liberalisation has an opposite effect on domestic producers and consumers. Due to liberalisation, a decline in price enables consumers to pay less and does not allow producers to earn more. In this situation of trade off, net social welfare to a country due to policy change is computed by comparing changes in consumer surplus and producer surplus. Consumer surplus is the difference between what a consumer would be willing to pay for a bundle of goods and the amount consumer actually has to pay. Suppose an individual has been walking through the desert all day without water and buys a bottle with Rs. 10/- unless he is very poor, he would be willing to pay

much more than Rs.10 for the bottle. So the surplus associated with that transaction is the difference between what the individual would have been willing to pay and what he did pay. From the demand curve he obtains information on how much he would pay. So the consumer surplus associated with consuming q^* units of a commodity for a consumer with demand $Q(p)$ is the area between the demand curve and the horizontal axis and between the vertical lines $q=0$ and $q=q^*$.

On the other hand producer surplus is the difference between revenue received for sale of q^* units of a commodity and the cost of providing that commodity, $C(q^*)$. The difference is generally equal to the area between the supply curve and a horizontal line through the price, and between the vertical line $q=0$ and $q=q^*$.

In fig. (1) These concepts are shown. It is a representation of supply and demand curve for clothes. The figure shows consumer surplus, producer surplus and total welfare gain (the sum of producer and consumer surplus). To welfare at q^* is the area under the demand curve plus the area under supply curve measured between $q=0$ and $q=q^*$. This is the shaded area.

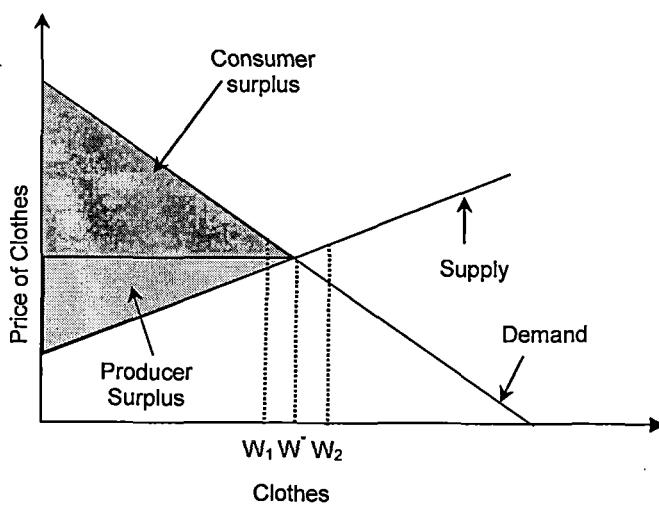


Fig. 1 : Consumer and Producer Surplus

Therefore, we can say that total welfare gain = consumer surplus + producer surplus. But when we produce some goods, these goods associated with some amount of marginal social cost i.e pollution. So, net Social Welfare = (Consumer Surplus + Producer Surplus) – Marginal Social Cost. Underdeveloped countries are mainly based on agriculture and give less emphasis to industrial sector. So, in underdeveloped countries or in developing countries marginal social cost (pollution) is less than the developed countries. So, developing countries have greater potentiality to maximize social welfare.

Consumer gets satisfied by consuming different amounts of different commodities services. Their purchasing power related to (a) their level of income (b) prices of commodities and services and (c) the satisfaction level. Purchases and hence total expenditure relates to some specified level of satisfaction in a given price. If we consider the ordinal utility function the equilibrium level of satisfaction and the commodity bundle are satisfied at the point where the slope of the budget line is equal to the slope of the indifference curve. So we can say that, at a given price every actual expenditure is associated with some level of satisfaction and more the amount of expenditure, more the level of satisfaction. This lead to the concept of money metric indirect utility, which is level by the amount of money require to attain it, given the set of prices (Varian 1992). Thus expenditure is considered as a measure of wellbeing.

Expenditure is taken as an indicator of living in micro sense and aggregate expenditure (i.e. per capita expenditure) may be considered as an indicator of living (welfare) in the macro sense (i.e. social welfare level).

Social welfare (living) function of n individual in the society with Y_i expenditure of the i -th individual may be written as $W=W(Y_1, Y_2, \dots, Y_n)$ (i). Where W is symmetric and non-decreasing in

Y_i . It satisfies Pigou-Dalton's principal of transfer. W becomes maximum when each individual spends equal amount of money $u = \sum Y_i / n$. But in practice income distribution and hence expenditure distribution possess some amount of inequality which is equal to deviation of actual social welfare (W) from its maximum value (μ). So actual social welfare is defined (Atkinson, 1970, Sen 1973) $W = \mu I^*$, where $I^* = 1 - I$(ii). Here I is a measure of inequality in the expenditure distribution. Thus standard of living depends on: (1) per capital expenditure and (2) degree of inequality in the expenditure distribution. The level of living will change, as a result of change of these two components.

In (ii) W is the money metric measures of welfare. It is equal to per capita expenditure net of expenditure inequality. If 't' is the time, which is a variable, welfare during 't' to $(t + 1)$ improves if

$$\frac{\mu_{t+1}}{\mu_t} - \frac{I^*_{t+1}}{I^*_t} > 1$$

Which requires.

$$\frac{\mu_{t+1}}{\mu_t} > \frac{I^*_t}{I^{*t}} = \frac{1-I_t}{1-I_{t=1}} \dots \dots \dots \quad (3)$$

Condition (3) in some form, equals to Shorrocks (1983) condition for improvement in social welfare.

Where $L_t(P)$ Lorenz curve for distribution at time t and p is proportion of persons such that

$$0 \leq P \leq 1$$

Others things remaining same over time per capita expenditure changes due to changes in amounts or prices of consumption items.

Not only expenditure, per capita income is also a partial index of economic wellbeing because the question of economic welfare involves a judgment about the desirability of income distribution. Therefore, it is not possible to say confidently even if per capita income has risen economic welfare has not increased unless we are satisfied about the desirability of the present distribution of income. Economic welfare involves the question of composition of output and how this output is being valued. It may also involve the questions that this output has been produced at what social cost. In this connection Colin Clark argues that promotion of economic welfare through increase in real income and per capita income though necessary, but is by no means a sufficient condition for promoting economic wellbeing.

5.3 SOME MEASURE OF ECONOMIC WELLBEING OF INDIA

5.3 A) ECONOMIC REFORMS AND REDUCTION OF POVERTY

There has been some impact of economic reforms initiated since 1991 on poverty reduction. In his article "Has Poverty Declined since Economic Reforms?" Dr. Gaurav Datt of the World Bank has drawn the following conclusions:-

- (1) Both rural and urban poverty rates in between 1973-74 and 1986-87 were declined but thereafter there is no sign of anything comparable.
- (2) For the period 1973-74 and 1990-91 in the rural sector, headcount index of poverty declined at the annual rate of 2.7percent, the rate of decline thereafter is not significantly different from zero.

- (3) For the urban sector, headcount index of poverty declined at the rate of 2.2 percent per annum for the period 1973-74 and 1990-91 and in the post reform period the same trend continued at the annual average rate of 2.2percent.
- (4) Rural poverty reduction was choked off by the lack of growth but urban sector have continued its march of poverty reduction in the process of growth.

Table 5.1 : Poverty in India 1973 – 97

NSS Round	Survey Period	Head Count Index		Poverty Gap Index		Squared Poverty Gap Index	
		Rural	Urban	Rural	Urban	Rural	Urban
28	Oct'73 - Jun'74	55.72	47.96	17.175	13.602	7.128	5.219
32	Jul'74 - Jun'78	50.60	40.50	15.025	11.687	6.057	4.526
38	Jan'83 - Dec'83	45.31	35.65	12.649	9.517	4.841	3.557
42	Jul'86 - Jun'87	38.81	34.29	10.013	9.100	3.700	3.395
43	Jul'87 - Jun'88	39.23	36.20	9.275	9.121	2.983	3.056
44	Jul'88 - Jun'89	39.06	36.60	9.504	9.537	3.291	3.293
45	Jul'89 - Jun'90	34.30	33.40	7.799	8.505	2.575	3.038
46	Jul'90 - Jun'91	36.43	32.76	8.644	8.509	2.926	3.121
Post-Reform	Jul'89 - Jun'91	35.37	33.08	8.222	8.507	2.751	3.080
47	Jul'91 - Dec'91	37.42	33.23	8.288	8.244	2.680	2.902
48	Jan'92 - Dec'92	43.47	33.73	10.881	8.824	3.810	3.191
50	Jul'93 - Jun'94	36.66	30.51	8.387	7.405	2.792	2.417
51	Jul'94 - Jun'95	41.02	33.5	9.285	8.382	2.995	2.799
52	Jul'95 - Jul'96	37.15	28.04	8.098	6.781	2.527	2.222
53	Jan'97 - Dec'97	35.78	29.99	8.312	7.762	2.757	2.750
Post-Reform	Jul'95 - Dec'97	36.47	29.02	8.205	7.273	2.642	2.473

Source : Gaurav Dutt, Has Poverty Declined since Economic Reforms, Economic and political weekly, December 11 – 17, 1999.

- (5) A large sample during July 1999 to June 2000 the National Sample Survey completed the 55th round. In

economic survey (2000-01) published the figure, NSS 55th round shows “ *a significant decline in poverty to 26 percent based on 30 day recall and 23.3 percent on a seven day recall day methodology.*”

The reference period has essentially been uniform after the 50th round of NSS - the schedules were filled by asking the respondents about their consumption for the past 30 days. During 55th round, the question on consumption of clothing, footwear, health, education and durable goods were asked only by past 365 days and for intoxicants, food and tobacco all sample households were put both 30 days and one week question.

Table 5.2. : Estimates of Poverty

Year	All India	Rural	Urban
1973-74	54.9	56.4	49.0
1977-78	51.3	53.14	45.2
1983	44.5	45.7	40.8
1987-88	38.9	39.1	38.2
1993-94	36.0	37.3	32.4
1999-2000			
30 day recall	26.1	27.1	23.6
7 day recall	23.3	24.0	21.6

Source: Ministry of Finance Government of India, Economic Survey (2000-2001).

Table 5.3: Poverty Ratios of the State Level (Selected State Percent)

	Rural		Urban	
	1993-94	1999-00	1993-94	1999-00
Andhra Pradesh	15.9	11.2	38.3	26.6
Arunachal Pradesh	45.0	40.0	7.7	7.5
Assam	45.0	40.0	7.7	7.5
Bihar	58.2	44.3	34.5	32.9
Gujrat	22.2	13.2	27.9	15.6
Haryana	28.0	8.3	16.4	10.0
Himachal Pradesh	30.1	7.9	9.2	4.6
Jammu & Kashmir	30.3	4.0	9.2	2.0
Karnataka	29.9	17.4	40.1	25.3
Kerala	25.8	9.4	24.5	20.3
Madhya Pradesh	40.6	37.1	48.4	38.4
Maharashtra	37.9	23.7	35.2	26.8
Meghalaya	45.0	40.0	7.7	7.5
Nagaland	45.0	40.0	7.7	7.5
Orrissa	49.7	48.0	41.6	42.8
Punjab	11.9	6.4	11.4	5.8
Rajasthan	26.5	13.7	30.4	19.8
Tamil Nadu	32.5	20.6	39.8	22.1
Uttar Pradesh	42.3	31.2	35.4	30.9
West Bengal	40.8	31.9	22.4	14.9
Delhi	1.9	0.4	16.0	9.4
All India	37.3	21.7	32.4	23.6

Source: Planning Commission, 2000.

In the reduction of poverty, wide variation may be noticed among the states. During 1993-94, and 1999-00 rural poverty has been reduced from 30.3percent to 40percent in Jammu and Kashmir. It is beyond the imagination that being a highly troubled state like Jammu and Kashmir could bring about reduction of poverty by 26.3 points in the short span of 6 years. Similarly, in this period, Himachal Pradesh brought about 22.4 percent points reduction in rural poverty. Seven states, namely Maharashtra, Uttar Pradesh, Madhya Pradesh, Bihar, Orissa, Tamil Nadu and West Bengal accounts for 199.5 million poor which is 76.7percent of the total 260 million poor estimated for 1999-00. In these states the rate of poverty reduction is slower than the relatively better off state. As a result, as compared with 1993-94, these seven states show greater concentration of poor in 1999-00.

The chairman of NSSO Governing Council Pravin Visaria prefers ‘one week recall’ but he agrees that this shall make these estimates non-comparable with the earlier estimates. His opinion is that “*overstatement of the level of poverty has thus quite likely been a consequence of a long reference period for the collection of data on food consumption by our people*” (Pravin Visaria, July 2000).

The view of Visaria was questioned by Abhijit Sen. He writes. “*Moreover, the limited results now available from the 55th round show clearly that the answers to both one week and 30 day question have been contaminated by the presence of the other. Quite possibly, exclusive reliance on the 365 day question in case of clothing etc. has also altered responses. As a result, consumption estimates from this round are not comparable to those from previous NSS round and will probably be virtually useless for any assessment of changes in consumer demand.*” The planning commission also takes the same position and did not accept the poverty figure of NSS in its mid-term appraisal of the ninth plan because with the change of methodology non- comparability arises. In order to maintain the integrity of the India’s statistical system, Abhijit Sen concludes that, it would be necessary to conduct another large Consumer Expenditure Survey as soon as possible during 30-day reference period (Sen, 2000).

In his paper ‘Adjusted Indian Poverty Estimates for 1999-2000’, Angus Deaton at Princeton University has worked out the adjusted poverty rates based on 16 major states in India. After his study he concluded: “*The adjusted rural poverty estimates are somewhat higher than the official estimates of 27.1 percent is replaced by 30.2 percent. Instead of there a drop in rural poverty since 1993-94 of 10.2 percent points, the adjusted figures show a reduction of only 7.0 percent points, so that a little more than two-thirds of the official reduction appears to be real.... For all India urban, the official*

estimates of 23.6 percent is raised only to 24.7 percent, so that I estimate that 7.9 percent points of the official reduction at 9.1 percent points is real". Deaton's view is that 30-day recall is more reliable and that 7-day recall is less accurate.

Gaurav Dutt, Valerie Kozel and Martin Ravallion of the World Bank in their paper 'A model based assessment of India's progress in reducing poverty in 1990s' suggest that the agricultural production, growth of non-farm sector, development spending and inflation are the main determinants of the rate of reduction of poverty in the state level, the findings of the model has been given below:-

- 1) As compared to 1980s the rate of poverty reduction in 1990s was slightly lower. National: 0.8 percent points against 1 percent point
Rural: 0.9 percent points against 0.7 percent points.
- 2) In the 1990s poverty reduction is slower than expected from pre reform national elasticity of poverty with respect to average consumption. In 1990s it was 0.8 percent point as against 1.6 percent in the earlier period..

The pattern of growth which was promoted by following the policies of liberalisation, privatisation and globalisation is the main reason for the slow decline in poverty. For the decades of 1990s most of the research studies conclude that all India level rural poverty did not show any decreasing trend but the 55th round result of NSS suddenly indicate a sharp decline in rural poverty on the basis of 30-day recall from 37.3 percent in 1993-94 to 27.1 percent in 1999-2000 and on the basis of 7-day recall it declined to 24.0 percent.

Tenth plan accept that in 1999-2000 260 million persons i.e 26 percent of the population are below the poverty

line. Out of these, in rural areas there were 75 percent (195 million) people and in urban areas there were 25 percent (65 million) people. 22 percent world's poor are in India. The tenth plan targets to reduce poverty by about 7 percent points, from 26.1 percent in 1999-2000 to 19.3 percent in 2006-07. National Sample Survey completed the 61st round of the year 2004-05. NSS 61st round shows a decline in poverty to 27.8 percent at uniform recall period and 22 percent at mixed recall period. (Economic Survey 2006-07).

5.3 B) NET STATE DOMESTIC PRODUCTION AND PER CAPITA NSDP.

Due to severe balance of payments crisis in 1991, the Government of India adopted a series of reform in order to restore the economic stability of the country. Now, India has record in the 1990s of successful policies of economic stabilisation and structural adjustment. The government have achieved a rapid economic recovery due to the adoption of reform and opened up the economy and created attractive investment prospects. Until now, emphasis has been given to trade and industrial reform. Agriculture not directly but indirectly has benefited from improvement in its terms of trade by reform.

The overall growth performance has been accompanied by substantial regional variation in growth. There are major differences in socio-economic dimension of development at the state level of India. These are size of economy, population, physical infrastructure, agro climatic conditions, politics and culture.

Table 5.4: Annual Rate of Growth of Net State Domestic Product and Population of 14 major States.

States	Population in Million according to 2001 census	NSDP (percent) 1993 - 94	NSDP (percent) 2003 - 04
Andhra Pradesh	75.7	8.9	9.7
Bihar	82.9	3.6	2.7
Gujrat	50.6	7.4	8.2
Hariyana	21.1	3.3	3.8
Karnataka	52.7	6.4	6.7
Kerla	31.8	4.15	4.7
Madhya Pradesh	60.4	5.9	5.1
Maharastra	96.7	17.72	16.9
Orissa	36.7	2.8	2.8
Punjab	24.3	4.7	4.2
Rajasthan	56.5	5.04	5.5
Tamil Nadu	62.1	8.9	8.7
Uttar Pradesh	166.0	12.35	10.9
West Bengal	80.2	8.4	9.9
Total	1,027.0	7.1	7.2

Source: Economic Survey, Govt. of India, 2006-07

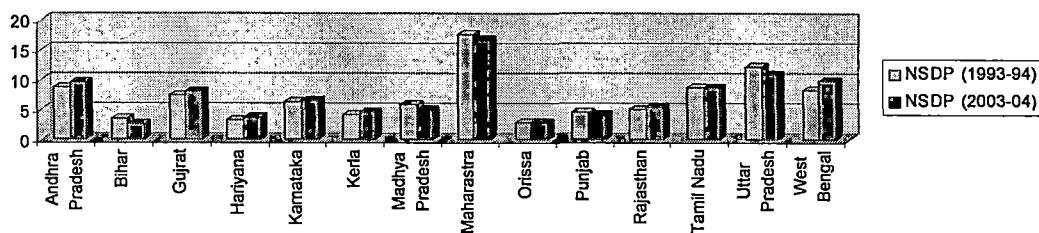


Fig.2: Annual Rate of Growth of NSDP of 14 major States

Table 5.5: Annual Rates of Growth of per Capital NSDP

States	1993 - 94	2003 - 04
Andhra Pradesh	4.1	7.5
Bihar	1.6	1.8
Gujarat	5.4	9.4
Haryana	6.1	10.4
Karnataka	4.3	7.5
Kerala	4.4	8.7
Madhya Pradesh	3.6	4.8
Maharashtra	6.7	10.2
Orissa	2.7	4.5
Punjab	7.0	10.1
Rajasthan	3.4	5.6
Tamil Nadu	4.9	8.3
Uttar Pradesh	2.8	3.8
West Bengal	3.7	7.3

Source: Economic Survey, Govt. of India, 2006 – 07.

From table 5.4, it was evident that Maharashtra contributing highest share (17 percent) of the NSDP of the 14 major states in 2003-2004. It is the second most populous state with almost 96.7 million people. Uttar Pradesh with 11percent share of NSDP secure the second position but with largest population of 166.0 million or 16.16 percent in total. West Bengal was in third position (10 percent). Andhra Pradesh (9.7 percent) and Tamil Nadu (8.7 percent) were in fourth and fifth position. These five states together contributed 56.1percent of the 14 states NSDP in 2004-05. Bihar is the third most populous state, but its share of NDPS was only 2.7 percent.

There is a considerable variation in the performance of individual states, with some states growing faster than the average and others slower. The degree of dispersion in growth rates across states increased very significantly in the 1990s. The range of

variation in the growth rate of NSDP in 1993-94 was from a low of 2.8 percent in Orissa to a high of 17.72 percent in Maharashtra, a factor of more than 6. In 2003-2004 the range of variation in the growth rate of NSDP was from a low of 2.7 percent in Bihar to a high of 16.9 percent in Maharashtra, a factor of more than 6. So from 1993-94 to 2003-04 the range of variation was more or less same.

The differences in performance across states become even more marked when we allow for the differences for the rate of growth of population and evaluate the performance in terms of growth rate of per capita NSDP (5.2 percent). The variation in growth rates in 1993-94 ranged from a low of 1.6percent in Bihar to a high of 6.7 percent for Maharashtra, a factor of 1:6. In 2003-04 it ranged from a low of 1.8 percent in Bihar to high of 10.2 percent in Maharashtra, a factor of 1:10. The increased variation in growth performance across states in the 1990s reflects the fact that whereas growth accelerated for the economy as a whole, it actually decelerated sharply in Bihar and Orissa, all of which had relatively low rates of growth to begin with and were also poorest states. There was also a deceleration in Madhya Pradesh and Punjab.

Eight states showed acceleration in growth of NSDP in the 2000. The acceleration particularly marked on Maharashtra and Gujarat, both of which were among the richer states, but there was also acceleration in Haryana, Kerala, Tamil Nadu, Karnataka, Punjab and West Bengal, all belonging to the middle group of states in terms of per capita NSDP.

The high growth performers in the 1990s and 2000s were not concentrated in one part of the country. The seven states with growth rates of NSDP in 1993-94 and 2003-04 above 6percent are fairly well distributed regionally, i.e. Maharashtra (17.72percent, 16.9percent), Uttar Pradesh (12.32percent, 10.9percent), West

Bengal (8.4 percent, 9.9 percent), Andhra Pradesh (8.9 percent, 9.7 percent), Tamil Nadu (8.9 percent, 8.7 percent), Gujarat (7.4 percent, 8.2 percent) and Karnataka (6.4 percent, 6.7 percent).

In the post reform period an interesting feature of the performance is that the popular characterisation of so called BIMARU states (Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh) as a same group of poor performers, a grouping originally proposed in the context of observed commonalities in demographic behaviour. Bihar and U.P growing much more slowly than the average, but Rajasthan and MP have performed reasonably well.

In the period of liberalisation, the perception that it is only the coastal states or the southern states have performed well is not valid. Orissa's growth performance is very poor though it is a coastal state but MP and Rajasthan have performed reasonably well though they are both heartland states. The best-performers are Maharashtra, Haryana, Punjab, Tamil Nadu, West Bengal and Madhya Pradesh.

The performance of Kerala deserves special attention. Kerala's economic growth is low, but its human development index is high. Its performance during post reform period showed a marked improvement. Due to low growth of population, its performance in per capita NSDP growth in the liberalised period is actually much better than the average (table 5.2).

The difference in per capita income and other indicators of social development across states have long attracted attention. Punjab, the richest state has a per capita NSDP which is five times that of Bihar at the end of 2003-04. There has always been an unstated assumption that inter-state difference would narrow with development. This can happen only when the poorer states actually grown faster than richer state. But during the post reform period,

regional inequality increases with the poorer state being left further behind.

It is not entirely accurate that the rich states got richer and the poor states got poorer. From table 5.2 we can conclude that it is not true that all the richest states got richer relative to the poorer states. In 2003-04, Punjab, Haryana, Maharashtra and Gujarat were the richest states in terms of per capita income level and grew at rates much higher than the national average. Bihar, Uttar Pradesh and Orissa, which together account for over a third of the population of the country, did perform very poorly in the post reform period. They do not actually become poorer on average, their per capita NSDP has positive growth but these rates are very low.

The states grow at different rates should not be viewed as a failure of policy. Given our size and diversity, different states will grow at different rates. Some may grow faster than others at certain times as they may be particularly well placed to exploit some new opportunity that arises. The new agricultural strategy was well suited to condition in Punjab and Haryana, which led to a spurt of growth in the 1970s in these states. Coastal states may have a location advantage in a globalising world due to their water transport facilities. Finally, differences in growth may arise due to better management and therefore able to create favourable environment, which generates higher growth.

The differences in growth performances of different states do not mean that we should passively accept the low rates of growth witnessed in U.P, Bihar, and Orissa. For a group of states into the future continuation of such low growth rates representing almost a third of the total population, while the other states of the country enjoys strong growth has alarming implication. It means that interstate inequality would continue to increase and poverty would become even more regionally concentrated that it is today.

So it is necessary to increase the rate of growth of per capital NSDP in these states from around 1.5percent to somewhat between 3.5percent to 4percent, because inequality will increase if the poorer states do not grow at least as first as national average. The problem of poverty of these states is tackle by the acceleration in growth.

The foregoing analysis provides some useful perspective. The most important perspective is that there were high growth rate states from 1993-94 to 2003-04 that performed well above average. At least two of these were consistently top performers throughout the whole period.

The association of a number of other policies related variables with high growth rates of NSDP also provides guidance. The association of high growth rates of NSDP with low rate of growth of population, higher life expectancy and literacy rates provides support for policies of population control, and enhanced programs of public health and primary education.

5.3 c) HUMAN RESOURCES

Another critical determinant of growth is the quality of human resource development and one would expect to find faster growing states to be the status with superior availability of human skills. Unfortunately, there are no reliable measures of the educational attainment and skill level of labour force in different states and therefore, literacy rate of population is commonly used as a proxy for the quality of human resource. This is clearly an unsatisfactory measure of labour skill.

Literacy levels in the slow growing states are distinctly lower than the average for all states. There is no statistical correlation between NSDP and literacy rate. The literacy rate of U.P, Bihar and Orissa was very poor. In the 1990s the performance of Madhya

Pradesh, Rajasthan and Andhra Pradesh showed much better. The low levels of literacy, which must contain growth performance.

Literacy rates have risen over time in all states including the slow growing state of U.P, Bihar and Orissa. In 1997 literacy in Bihar is significantly higher than it was in Madhya Pradesh and Andhra Pradesh in 1991. Similarly, in 1997 the literacy rate of U.P is about the same as in Karnataka or west Bengal in 1991. These improvements were in absolute term but in relative term the states were in much worse position because other states have also moved ahead. In these states the absolute improvement in literacy should help improve the efficiency of resource use but that poorer states will continue to find it difficult to compete with the more advanced states.

The lack of any statistical correlation between literacy and growth reflects the fact that literacy is a poor measure of labour skill. It is evident from the fact that economic growth is affected by education. So poor performing states must create special efforts to develop the quality of human resources.

5.3 D) TRADE GAP AND ECONOMIC WELFARE

Globalisers advocated the acceptance of the new strategy of liberalisation and globalisation on the plea that India will be able to access foreign markets more effectively. It is interesting to examine this claim using data from table 5.6

Table 5.6: Export -Import and Trade Balance (US\$ Million)

Table	Export	Import	Trade Balance
1990 – 91	18143	24075	-5932
1991 – 92	17865	19411	-1546
1992 – 93	18537	21882	-3346
1993 – 94	22238	23306	-1068
1994 – 95	26330	28654	-2324
1995 – 96	31797	36678	-4881
1996 – 97	33470	39133	-5663
1997 – 98	35006	41484	-6478
1998 -99	33218	42389	-9171
1999 – 2000	36822	49671	-12849
2000 - 01	44560	50536	-5976
2001 - 02	43827	51413	-7586
2002 - 03	52719	61412	-8693
2003 - 04	63843	78150	-14307
2004 - 05	83536	11518	-27982
2005 - 06	103091	149166	-46075

Source: DGCI and S, Kolkata.

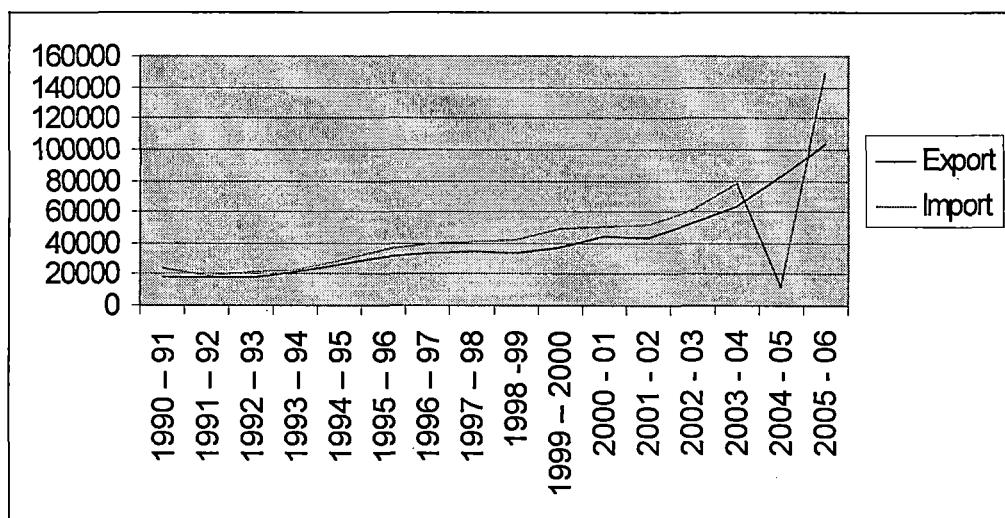


Fig. 3: Trade Balance in India from 1990-91 to 2005-06

Exports rose from \$17865 million in 1991-92 to \$ 35006 million in 1997-98. In 1998-99 it declined to \$ 33218 million. Thereafter it continuously increased from \$ 36822 million in 1999-2000 to \$ 10, 3091 million in 2005-06. Increase in export increases the wellbeing of a country. But if we examine the trend of imports, we can see that it continuously increased from \$19411 million in 1991-92 to \$ 149166 million in 2005-06. As a result, India's trade deficit increased continuously from 1996-97 to 1999-2000. The situation has slightly improved during 2000-01 and 2001-02 and thereafter again increased continuously and in 2005-06 trade deficits was \$ 203991 million.

So, as a result of trade liberalisation and globalisation India's exports have been increased but at the same time imports have also been increased and the increase in imports are more than the increase in exports. As a result the trade deficit or the trade gap is increasing. The increase in trade gap is not a true measure of well being of a nation. But the main items of our imports are petroleum, oil and lubricants (\$ 43963 million in 2005-06) and capital goods (\$ 23522 million in 2005-06) which includes a) manufactures of metals (\$ 1211 million in 2005-06), b) Non-electrical machinery apparatus and appliances including machine tools (\$ 11086 million in 2005-06), c) electrical machinery apparatus and appliances (\$ 1504 million in 2005-06) and d) Transport equipment (\$ 8838 million in 2005-06). They are necessary for the establishment of heavy industries and self- sufficiency of a country. So, increase of imports can help the development of our country indirectly and hence improve the wellbeing of India. The principal imports of India in 2005-06 have shown in Table 5.7.

Table 5:7 Principal Imports 2005-06 (\$ Million)

I	Food and live animals chiefly for food.	
1.1	Cereals and cereals preparation	36
II	Raw Materials and Intermediate Manufactures	
II.1	Cashew	472
II.2	Crude Rubber	414
II.3	Fibres	
II.3.1	Synthetic and regenerated fibers	78
II.3.2	Raw Wool	204
II.3.3	Raw Cotton	159
II.3.4	Raw Jute	21
II.4	Petroleum, Oil and Lubricants	43963
II.5	Animal and Vegetable Oils and fat of which	
II.5.1	Edible Oils	2024
II.6	Fertilizers Chemical Products of which	
II.6.1	Fertilizers and Fertilizers Mfg.	1991
II.6.2	Chemical Elements and Compounds	8037
II.6.3	Dyeing, Tanning and Colouring Material	503
II.6.4	Medical and Pharmaceutical Products	1028
II.6.5	Plastic Material, Regenerated Cellulose and artificial resins	2268
II.7	Pulp and waste paper	573
II.8	Paper, Paper Board and Manufactures there of	944
II.9	Non- Metallic Mineral Manufactures of which:	
II.9.1	Pearls, Precious and semi-precious stones, unworked or worked	9134
II.10	Iron and Steel	4572
II.11	Non-ferrous metals include Gold & silver	13162
III.	Capital Goods	23522
III.1	Manufactures of metals	1211
III.2	Non-Electrical machinery apparatus and appliances including machine tools	11086
III.3	Electrical Machinery apparatus and appliances	1504
III.4	Transport equipment	8838
Total		149166

Source Economic survey Government of India, 2006-07.

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