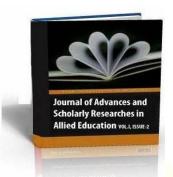
TO STUDY OF MACRO ECONOMICS TO REDUCE POVERTY RATE IN VARIOUS STATES IN INDIA



PKPATHAK.*

Research Scholar, Jodhpur National University, Jodhpur, INDIA

ABSTRACT

INTRODUCTION

India, located in South Asia is a large country that ranks second in the world in terms of population and seventh in terms of geographical area. Its civilization is very old dating back to at least 5000 years. Its greatly diversified land includes various types of forests, broad plains, large coastlines, tallest mountains and deserts. India has a democratic and federal system of government with 29 states and 6 union territories. Like most other colonies, India greatly lagged behind economically and socially compared to the developed world. Periodic estimates of national income available since mid-nineteenth century indicate that the per capita income virtually stagnated in India till independence when world income grew several fold due to industrial and technological revolution. A large mass of the population was living in abysmal conditions. The national government formed after independence placed priority on 'economic growth with social justice'. A mixed economy model with a major role for the state in industrial production was adopted with an emphasis on import substitution strategy.

While this policy helped to lay the foundation for industrialization and technological change, national income growth remained low at about 3-4 per cent per annum for several decades. The outward oriented Asian countries grew much faster during this period by taking advantage of post-war expansion in international trade and investment flows.

Indian Economy: Key Current Statistics

Some key current statistics of India are given in Table 1.1 by way of introduction. India's population crossed one billion when the last century ended and another 8 million have been added by 2004. A large part of India is very densely populated with an average of 363 persons per square kilometer. The annual income generation in the country is valued at US\$ 675 billion using prevailing exchange rate in 2004 and per capita income stands at \$620 compared to world average of \$6280. When adjusted for purchasing power parity (PPP) to reflect command over commodities, per capita income works out to \$PPP 3100. The level of living as reflected in purchasing power of an average Indian is roughly one third of world average and one tenth of the developed high-income countries.

An Overview of Shift in Policy Regimes

We now turn to a brief discussion of policy changes brought about in India in recent decades. As stated earlier, India followed a mixed economy model after its independence. While both public and private sectors coexisted, a central role was assigned to the state's planning machinery for resource allocation across sectors. The stated primary objectives of the planning process have been economic growth, social justice and self-reliance. The Five-Year Plans initiated since 1951 provided the basic framework for the economic development strategy of the country. Accounting for about half of the capital formation in the economy, the government sector directly played a major role in the production process of the country for several decades. In

the agricultural sector, production decisions were by and large taken by private producers with government's role limited to infrastructure development such as irrigation, extension services and trade in some major commodities. In the manufacturing and service sectors, state played a commanding role by owning and operating many industries on its own and by regulating private investment through the licensing instrument for establishment of new industries. The industrial development strategy based on the logic underlying Feldman-Mahalanobis type model stressed on development of capital goods in the early phases of industrialization. Under the assumption of a closed economy (due to limited possibility of imports of capital goods) and non-shiftability of capital between consumer goods and capital goods, the model showed that a higher proportion of investment in the capital goods sector leads to higher long term growth of an economy.

Issues in Macroeconomic Policy and Poverty

The gradual but steady reform process since 1991 in a large democracy with high incidence of poverty naturally led to a wide debate on the effects of liberalisation. There is consensus that trend growth in GDP has improved to about 6 per cent per annum. But, attempts to quantify change of poverty in the post reform period have not led to general agreement on magnitude of poverty reduction. Some major macroeconomic policy issues emerging in the context of poverty reduction relate to:

- Effects of changing structure of production and income generation process on poverty and inequality.
- Adequacy of social sector expenditure by the state governments who have primary responsibility for education and health sectors.
 - Changing labour market conditions and casualisation of labour.
 - Role of public investment in infrastructure and irrigation.

- Effectiveness of credit delivery system to underdeveloped regions after liberalization of the financial sector.
- Whether macro policies affect poverty primarily through growth or they play additional role in addition to the growth effects.
- Some states have made substantial progress in poverty reduction while others continue to stay on almost where they were a decade ago. Which forces have contributed to this situation: structural factors, inadequacy of resources or governance issues?

APPROACH OF THIS STUDY

In this case study of India on 'Macroeconomics of Poverty Reduction', we have attempted to analyse some of the above issues. Given India's size, diversity and federal structure, experiences at the state level are as important as those at the national level. The state governments in particular have major responsibility for agricultural development and provision of services in the social sectors like health and education. The India Report consists of two parts: (a) national level overall report and (b) study of four selected states. The selected states are: (i) Tamil Nadu in southern part of the country which has low incidence of poverty compared to the national average and has undertaken effective social sector programmes in the past, (ii) two poorest states Bihar and Orissa in the eastern part, and (iii) Rajasthan in the north which is emerging out of high poverty during the last decade.

Trends in Incidence of Poverty and Related Variables

Some Concepts in Measurement of Poverty

Poverty line: It is the income or consumption expenditure level that is considered to represent

the minimum desirable level of living in a society for all its citizens. This minimum level may be defined in absolute or relative terms. The absolute poverty line is often defined as the threshold income that just meets food expenditure corresponding to minimum energy (calorie) need of an average person and makes a small allowance for nonfood expenditure.

Head count ratio (HCR): It is the proportion (or percentage) of persons in a society whose income or expenditure falls below the poverty line. It is the most commonly used measure of poverty.

Poverty gap (**PG**): It refers to the proportionate shortfall of income of all the poor from the poverty line and expressed in per capita terms of the entire population. It tells us whether the poor are more or less poor and thus reflects the average depth of poverty. If the numbers of poor and total population are the same in two societies but the poor have less income in the second society than the first, PG index would be higher for the second society even though HCR is the same for the two.

Squared poverty gap (SPG): It is a normalized weighted sum of the squares of the poverty gaps of the population and reflects the intensity of poverty. For a given value of the PG, a regressive transfer among the poor would indicate a higher SPG value. HCR, PG and SPG are special cases of a measure suggested by Foster, Greer and Thorbecke (1984).

Lorenz curve: It is a curve that represents the relationship between the cumulative proportion of income and cumulative proportion of the population in income distribution, beginning with the lowest income group. If there were perfect income equality, the Lorenz curve would be a 45-degree line.

Gini coefficient: It is the area between the Lorenz curve and the 45-degree line, expressed as a

percentage of the area under the 45-degree line. It is a commonly used measure of inequality. With perfect income equality, the Gini coefficient would be equal to zero; with perfect inequality, it would equal one. Gini coefficient normally ranges from 0.3 to 0.7 in cross-country data.

\$1 a-day poverty line: It is used by several international organizations for comparison of poverty across countries and actually refers to an income or consumption level of \$1.08 per person per day based on 1993 dollars adjusted for purchasing power parity (PPP). The Millennium Development Goal sets its poverty target in terms of this poverty line.

Source: Based on ADB (2004)

SUMMARY AND FUTURE DIRECTION

From the preceding discussion, it is evident that the same policies have different impacts on different states because of initial conditions, ability to adapt to changes, structural rigidity and the institutional regimes and their way of functioning. In Tamil Nadu, in sharp contrast to Bihar, the institutional functioning is more democratic and hence it is able to respond to liberalization. In Bihar exploitative agrarian relations, poor governance and adverse external factors are the main factors that inhibit growth and poverty reduction. Whereas in Orissa, in view of large proportion of ST communities, social exclusion of tribals from mainstream activities is the major factor responsible for dismal performance of poverty reduction. Rajasthan's progress mainly lay in their ability to develop diversified activities in rural sector. By expanding the rural non-farm sector, it has been able to protect the poor from vulnerability caused by various shocks. This state has achieved significant reduction in rural inequality.

In Bihar and Orissa some drastic measures and steps are called for to bring down poverty level. In Bihar, rural poverty is traced to lack of land access with a large proportion of population being left landless or with very marginal and poor land. Increasing the access to land for the landless

is certainly an important way of reducing poverty among agricultural labour. Land redistribution could be a method of asset based poverty reduction in Bihar. It is imperative to overcome structural rigidities and hence structural reforms should be the priority. Bihar's human development indicators such as education and health care are also lower than in other states. Its growth performance is below par as compared to other states. Agriculture, which is the backbone of the economy, has been languishing for a long period. Adding to the natural calamities like flooding, there are also additional factors in the form of poor transport and marketing infrastructure, low investment scenario and drastic fragmentation of holdings, all contribute to poor agricultural growth, inspite of the state's very rich base of land and water resources. To protect the poor from vulnerability, and to reduce the dependence of poor farmers from rainfed cultivation, strengthening of irrigation facilities is required. Fortunately, substantial irrigation potential remains untapped.

Fiscal situation in Bihar is far from satisfactory and is suffering not only from failure to generate adequate funds but also from mismanagement. Social sector delivery system is fraught with proper monitoring and enforcement mechanism. problems due lack of many Institutional weakness is quite evident in the poverty alleviation programs and leakages as high as 50 % to 80% are reported in many programs. Of late, diversification to non-crop sector, which yields high value-added products, has made a beginning. Potential of horticulture has to be tapped further. Preservation of fruits and vegetables for longer periods needs better infrastructure. Cooperative institutional set up for processing and marketing of fruits and vegetables would promote growth. Rural infrastructure is very poor because of low investment levels. Bihar's problem is compounded after the state's bifurcation in 2000. As a result, Bihar has lost very productive industrial and mineral resources. Increasing investment and plugging the loopholes in the administration and the overall governance would help Bihar initially to move in the right direction. It is not mere increase in investment in rural infrastructure, but also revival of rural institutions to promote public participation that is needed.

Orissa's problem is low agricultural yield, lower growth in net state domestic product and poor management of resources. Traditional methods of cultivation have led to low agricultural growth. But farmers face many constraints in adopting new technologies. This state also suffers from structural rigidity. Poverty is the worst in the drought affected dry and upland areas and it is seen more among agricultural labour. Due to mounting losses of PSUs, the state has initiated many reform measures. Industrial scenario in the state is gloomy. Casualisation of employment is widespread. This increases labour market fluctuations and exposes the poor to more labour market risks. As regards education, access to even elementary education is low in backward districts though overall literacy rate is impressive. The social sector is suffering from poor allocation of resources. In Orissa, non-farm sector in the rural areas needs to be well developed to supplement farm income. The poor fiscal situation calls for more private investment to raise resources to finance infrastructural and social programs. Institutional reforms to remove the functional obstacles for development must be taken up in a full-fledged manner in Orissa.

Given the uneven sectoral distribution of NSDP and skewed resource endowments of various regions of Orissa, sector specific and region specific policies are called for to reduce poverty. To rejuvenate agricultural growth, the irrigation infrastructure needs to be extended to dry regions. Diversified employment opportunities need to be explored. A vibrant non-farm sector would immensely help poverty reduction. Agro based and food- processing industries have potential to generate productive employment. Linking informal sector with large-scale industries will increase employment generating potential of the industrial sector. There is a need for development of irrigation, healthcare and educational facilities in the tribal and backward districts to increase the capability of the poor. The large proportion of tribal population, who are spatially concentrated, do not benefit from the mainstream developmental activities. Integrating their activities with the mainstream is the need of the hour.

Rajasthan has emerged from being a slow growing to reasonably better growing state. Even

though health and agriculture sectors have been neglected, the progress in rural non-farm activities has been helping reduction in poverty. Efforts are needed to promote crops that suit agro-climatic conditions of the state are needed. Policies that promote diversification of farm sector could be further strengthened to augment rural income. Some of the financial sector institutional reforms have been successful in Rajasthan. Widespread growth of both farm and non-farm income coupled with rapid development of rural infrastructure facilitating mobility even from the remote areas, have made a significant impact on poverty reduction. Income poverty is of little concern for Rajasthan; the issues that are of more concern are human development; specifically health and elementary education. Even though average nutrient intake is higher, large incidence of malnutrition is reported due to poor health delivery. Other of concern are degradation of natural resource base in environmentally fragile areas owing to population pressure and depletion of ground water tables. They call for policy attention. Agriculture in Tamil Nadu has been proving highly productive, due to technological change and extension of irrigation to more areas. Strong agricultural research and extension programs, good road infrastructure, and a relatively more rural literate population are helping agriculture. The problems facing the agriculture sector are, the severe water scarcity and land degradation. These problems are being addressed by establishing 'water shed development' units in many identified areas, which in the process of soil conservation also help in integrating rural livelihood activities.

CONCLUSION

To conclude, given the low agricultural growth rate after liberalisation, it is overall income growth rather than agricultural growth that has helped observed poverty reduction in recent decades. The increasing divergence between sectoral composition of income and that of occupation noted earlier is a major area of concern. The increasing concentration of poverty among some socio-economic groups would lead to persistence of exclusion of certain

areas and groups from the development process. Increase in agricultural productivity through expansion of irrigation facilities and development of rural non-farm sector would facilitate to make the growth process inclusive.

Expansion of government development expenditure as well as that of bank credit has a pro-poor effect independent of income. Fiscal and credit policies thus need to be geared accordingly. Trade expansion, however, does not seem to have a significant effect on incidence of poverty once we control for income. Labour market policies, which have a bearing on agricultural wages, could have considerable effect on rural poverty. Similarly, traditional wisdom of close monitoring of wage goods prices continues to be relevant for the welfare of the poor.

REFERENCES

- → Acharya, Shankar (2001): India's Macroeconomic Management in the Nineties", Indian Council For Research on International Economic Relations, New Delhi.
- → Ahluwalia, Montek S. (1978): "Rural Poverty and Agricultural Performance in India", Journal of Development Studies, Vol. 14, April. ¬
- → Ahluwalia, Montek. S. (2002), 'India's Vulnerability to External Crisis: An assessment', in M.S. Ahluwalia, Y.V. Reddy and S.S. Tarapore (ed.): "Macroeconomics and Monetary Policy Issues for a Reforming Economy", Oxford University Press.
- → Asian Development Bank (2004): "Key Indicators 2004", Asian Development Bank, Manila.
- → Banga, R (2005): "Liberalisation and Wage Inequality in India", Working Paper No. 156 Indian Council for Research on International Economic Relations, New Delhi.

- → Bayliss, K. (2002): "Privatisation and Poverty: The Distributional Impact of Utility Privatisation", Public Services International Research Unit (PSIRU), University of Greenwich.
- → Bernanke, Ben S. (1993): 'Credit in the Macroeconomy', *FRBNY Quarterly Review/Spring 1992-93*, Federal Reserve Bank of New York.
- → Bhagawati, Jagadish and Sukhamoy Chakravarty (1969): "Contributions to Indian economic Analysis: A Survey", *American economic Review*, Vol. 59, Supplement to No.4.
- → Bhalla G.S. and Peter B.R Hazell (2003): "Rural Employment and Poverty: strategies to Eliminate Rural Poverty", *Economic and Political Weekly*, Vol. 38, No. 33.
- → Bouche Nathalie et. al. (2004): "The Macroeconomics of Poverty Reduction: The Case of China", UNDP, The Asia-Pacific Regional Programme on Macroeconomics of Poverty Reduction.
- → Brooks, Douglas and Hal Hill (ed.) (2004): *Managing FDI in a Globalizing Economy: Asian Experiences*, Palgrave Macmillan, New York.
- → Chadha, G.K. (2003): "Indian Agriculture in the New Millennium", *Indian Journal of Agricultural Economics*, Vol. 58, No.1.
- → Chadha, G. K. and Sahu (2002): "Post_reform Setbacks in Rural Employment: issues that Need Further Scrutiny", *Economic and Political Weekly*, Vol. 37, No. 21.
- → Chadha Rajesh, Drushilla K. Brown, Alan V. Deardorff and Robert stern (2003): "Computational Analysis of the Impact on India of Uruguay Round the Doha Development agenda Negotiations", in Aditya Mattoo and Robert M. Stern (ed.): *India and*

the WTO, The World Bank and Oxford University Press, 2003.

- → Chand, Ramesh (2001): Emerging Trends and Issues in Public and Private Investment in Indian Agriculture, *Indian Journal of Agricultural Economics*, Vol. 56, No.2
- → Chen, Shaohua and Martin Ravallion (2004): "How Have the World's Poorest Fared Since the Early 1980s?", Development Research Group, World Bank.
- → Cline, William R. (2004): *Trade Policy and Global Poverty*, Center for Global Development, Institute for International Economics, Washington, D.C.
- → Dagdeviren, H. et. al. (2002): "Poverty Reduction with Growth and Redistribution", Development and Change, Vol. 33, No. 3.
- → Dandekar V.M. and N. Rath (1971): Poverty in India, Indian School of political Economy, Pune.
- → Das, Satya P. (2003): "An Indian Perspective on WTO Rules on Foreign Direct Investment", in Aditya Mattoo and Robert M. Stern (ed.): *India and the WTO*, The World Bank and Oxford University Press, 2003.
- → Datt Gaurav and Martin Ravallion (1998): "Farm Productivity and Rural Poverty in India", Journal of Development Studies, Vol. 34, No.4.
- → De Haan, A. and A. Dubey (2003): "Extreme Deprivation in Remote Areas of India: Social Exclusion as Explanatory Concept", Paper for Manchester Conference on "Chronic Poverty", April.

- → De Haan, A. and A. Dubey (2005): "Poverty, Disparities or the Development of Underdevelopment in Orissa", *Economic and Political Weekly*, May 28-June 4.
- → Deaton Angus and Jean Dreze (2002): "Poverty and Inequality in India: A reexamination", *Economic and Political Weekly*, Vol. 37, No. 36.
- → Deaton Angus and Jean Dreze (2002): "Poverty and Inequality in India: A reexamination", *Economic and Political Weekly*, Vol. 37, No. 36.
- → Deaton, Angus and Valerie Kozel (ed), "The Great Indian Poverty Debate", Macmillan India, Delhi.
- → Dev, Mahendra S. and Jos Mooij (2005): Patterns in Social Sector Expenditure: Pre- and Potreform Periods", in Kirit S. Parikh and R. Radhakrishna ed., *India Development Report 2004-05*, Oxford University Press.
- → Dollar, David and Aart Kraay (2002): "Growth is Good for the Poor", *Journal of Economic Growth*, Vol.7.
- → EPW Research Foundation (2003): "Domestic Product of States of India 1960-61 to 2000-01", EPW Research Foundation, Mumbai.
- → Fan Shenggen, Peter Hazell and Sukhadeo Thorat (2000): "Government Spending, Growth and Poverty in Rural India", *American Journal of Agricultural Economics*, Vol. 82, No.4.
- → Foster, J., J. Greer and E. Thorbecke, 1984. "A Class of Decomposable Poverty Measures", *Econometrica*, Vol.52, No.3.

→ Ganesh-Kumar A., Manoj Panda and Marry Burfisher (2005): "Reforms in Indian Agroprocessing and Agriculture Sectors in the context of Unilateral and Multilateral Trade Agreements", paper presented at 8th Annual Conference on Global Economic Analysis, Lubeck, Germany, June 2005.

