Book Reviews

Agricultural Diversification, Anna Kaka Patil, Serials Publications, New Delhi, 2014. Pp xi + 194. Rs. 800.00.

Realising irrigation potential in India has been one of the most challenging aspects of Indian agriculture since independence. The benefits of expanding irrigated land are known to almost everybody working in this area. The study titled “Agricultural Diversification” is an attempt to assess the diversification that has happened in Panhala and Shahuwadi taluka of Kolhapur district, Maharashtra after 1977 the year in which the Kasari Medium Irrigation project (KMP) was built. The author has analysed agricultural, social and economic diversification to weigh the impact of KMP. In this district, 66.92 per cent of total geographical area is under cultivation out of which 37.37 per cent and 18.96 per cent goes to food grains and sugarcane cultivation respectively. However, only 23 per cent of the total cultivable area in the district was irrigated in 1999-2000 and probably due to this reason the author has tried to bring out the benefits (mainly in the form of diversification) of KMP.

The beneficiaries of KMP are selected to study the impact of KMP on agricultural diversification by systematic random sampling (on the basis of their location and settlement from head command of the dam to tail command of the dam) from 41 villages of Panhala and 20 villages of Shahuwadi taluka. All the households of the two talukas are grouped on the basis of their land holding (like agricultural labourers, marginal farmers, small farmers, semi medium farmers, and medium farmers). Exact number of representations from each of the above group is not mentioned in the study. However it is mentioned that 260 beneficiary farmers are interviewed out of the total 15982 families. Diversification Index which is equal ‘1-Herfindahl Index (HI)’ is calculated to measure the degree of agricultural diversification in cropping pattern. The entire study is divided into nine chapters out of which some of the chapters are general in nature (like chapter7 describing the role of irrigation in development and Chapter 3 presenting profile of the KMP). Chapters 4 to 7 contains the main work of the study. In chapter 4, we can find that Diversification Index in the study area was 0.82 in 1971 and 0.84 in 2004 suggesting a slight consolidation of agricultural diversification. But the author fails to convince the reader on the factors responsible for agricultural diversification (p 106). It is also surprising to see that sugarcane and rice, not withstanding such a high score of diversification Index, dominate the total area under cultivation in the study area with rice and sugarcane being cultivated in 24.69 per cent and 41.40 per cent of the total cultivated area respectively. In so far as economic diversification is concerned, the author has concluded that only 13 per cent of respondents earn income from food grain (mainly rice) and rest 87 per cent of respondents earn income from cash crop (mainly sugarcane). Index of diversification for livestock, as calculated by the author, has declined from 0.79 in 1977-78 to 0.74 in 2004-05, but still the author treats this as an ‘indication of diversification in the livestock sector of the river basin’. Similar is the case with social diversification due to KMP. The impact of KMP on social diversification is highlighted on the basis of existing status in caste system, religion, marital status, and sex composition, age structure of household members and type and size of the family in the study area. However, the underlying logic in linking KMP to the above mentioned variables are not addressed properly. Finally, policy prescriptions: (i) calling upon sugar factories to create awareness about the use of irrigation; (ii) calling upon the government to educate the farmers about contract, corporate and organic farming; (iii) promoting horticulture in the study area; and (iv) assigning preference to cash crops - do not follow from the study.

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A Measured Approach to Ending Poverty and Boosting Shared Prosperity: Concepts, Data, and Twin Goals, Policy Research Report, by World Bank Group, The World Bank, Washington, D.C., U.S.A., 2015. Pp.xv + 280. Price not stated.

In the year 2013, the World Bank adopted two new goals to guide its work. The first is ending extreme global poverty by 2030, and the second is boosting the shared prosperity of the bottom 40 per cent of the people. The first goal aims at reducing the proportion of the people below the extreme poverty line of $ 1.25 per day per capita at 2005 Purchasing Power Parity, to only 3 per cent by 2030. It is presumed that reducing even extreme poverty to an absolute zero is an impossible goal, since there may always be a few poor somewhere or the other. Hence the target of poverty rate of 3 per cent. It is also to be noted that the target is global, and even when it is achieved, there may still be countries where the poverty rate may be higher. Even if global poverty is reduced to 3 per cent in 2030, Sub-Saharan Africa is still expected to have 19.2 per cent of its people left poor, and the developing countries as a whole would still have 3.5 per cent of its people in extreme poverty, though they would be only 1.3 per cent in South Asia (Cf. Table 1.2, p.44 of the book under review.) It is a sobering thought that poverty is so persisting, that a target of even 3 per cent poverty rate in *all* countries would seem to be too ambitious for the world to achieve in the next 15 years. Moreover, it is extreme poverty we are talking about, not moderate poverty, which makes the situation even more poignant.

While the first goal is in global terms as explained above, the second goal of boosting Shared Prosperity, is for each country specifically. While retaining the emphasis on raising overall growth rates of national income of countries, the second goal shifts attention to the growth of average income (or consumption) of the bottom 40 per cent of the people in each country, and boosting it to the targeted or maximum possible level. This target is separate from the target for the growth of the aggregate economy of a country, and is also differently measured based on household surveys and not from national income accounts. The target for shared prosperity should obviously be higher than the targeted growth of aggregate income, if any dent is to be made on inequality, or if the share of the bottom 40 per cent is to be improved in the national cake. By itself, shared prosperity (as measured by the average income or consumption of the bottom 40 per cent) is no indicator of equality, but when compared with the growth of the economy as a whole, it can throw light on whether economic growth is reaching the bottom 40 per cent. This explains the separate emphasis on boosting shared prosperity. An advantage of shared prosperity as a concept is that measurement errors are significantly more at the top end, but shraed prosperity is robust to such errors in top earners (p.194). Nevertheless, the Report wants the two goals to be viewed in unison. Looking at global poverty alone may not involve reducing poverty in *all* countries as explained above, while supplementing it by looking at shared prosperity will mean giving attention to the least well off in every country. But looking at shared prosperity alone may not necessarily indicate how far the least well off have been lifted above the poverty line. Thus both goals are needed together.

The Report under review is a valuable introduction to the many conceptual and data problems that one faces in measuring the progress in the achievement of the two goals. It also shows how measurement of poverty and shared prosperity is sensitive to changes in the underlying data. Monitoring progress inevitably needs measurement, but measurement is riddled with several difficult problems, about which both the researcher and the policy maker should be aware. While it is not possible to indicate all the intricacies involved in the course of a brief book review, it may hopefully induce scholars to go to the original Report for a fuller understanding.

The Report is produced by a World Bank Group of as many as nine experts who have already made significant research contributions in the field. Despite multiple authorship, there is complete coherence. It carries a crisp Foreword by Kaushik Basu, the then Senior Vice President and Chief Economist of the Bank, who is also credited to have given overall guidance in preparing the Report. To facilitate easy comprehension, the Report includes many figures, tables, Boxes, and coloured maps, and is elegantly produced. It is a bit weighty to handle (with thick heavy paper) and weightier to read. But it is so educative to read, one does not mind the weighty content. It is also eco-friendly, having been produced with only recycled paper.

Early in the Report (on p. 4), it quotes P C Mahalanbis to stress that data and measurement are pivotal in monitoring the achievement of the two goals. He had said in 1963: '…statistics is an applied science and … its chief object is to help in solving practical problems. Poverty is the most basic problem of the country, and statistics must help in solving this problem.' Professor Mahalanbis started the National Sample Survey as early as in the 1950s in India, and NSS rounds of household surveys of consumer expenditure were initiated in India since 1950-51 under his initiative and guidance. They have proved to be most useful in estimating poverty levels, and similar surveys have been started in most of the countries particularly after 1990 for the same purpose. These surveys would be useful in measuring shared prosperity as well. In the initial stage of the World Bank involvement in estimating global poverty in 1990, they had to be content with a single household survey in only 22 countries. The most recent estimates use the data base from well over 1000 surveys covering nearly all developing countries. What is more, to facilitate research within and outside the World Bank, the internationally comparable data are published after due scrutiny in PovcalNet. Using these data, researchers can check and even re-do calcualations tailored to their requirements (p.34).

One of the debated questions pertains to the message for defining poverty. The old and persisting favourite is either income or consumption as the measure or indicator. Consumption is more easily and reliably measured than income, but does not indicate the full measure of one's economic status since savings are ignored. The extent of inequality is expected to be much greater in incomes rather than in consumption for the same reason. In some countries as in Latin America, household surveys are in terms of income. The World Bank makes use of whatever is made available by respective countries and is not in a position to insist on uniform indicator, though of course it does try to make data comparable across countries and improve their quality. For example, Purchasing Power Parity Indexes, produced by the International Comparison Program, are needed for facilitating cross-country comparisons in poverty levels. Poverty estimates are sensitive to changes in PPP indexes. Other dimensions of poverty such as illiteracy, infant- and maternal mortality rates, and homelessness, do not involve such complications. They are assessed separately since it is not necessarily useful to collapse all dimensions into one measure of poverty for policy or research purposes. Even as regards poverty, there may be national poverty lines for different countries if the governments concerned feel that the global poverty line does not meet their specific needs. Besides a head-count measure, they are other poverty indices to capture the depth or severity of poverty within the poor, such as the poverty gap and the squared poverty gap. But the Report observes that they are broadly consistent with each other; they go broadly together. The head count has the merit of being easily understood for policy purposes. But other dimensions of human development like life expectancy and literacy rates have also to be monitored side by side.

Whether or not the target of reducing global extreme poverty to 3 per cent by 2030 would be achieved, depends much on the rate of growth of national income, according to the Report. If all countries grow at their respective average growth rate in national income during the past two decades, then by 2030, rate of extreme poverty would be reduced only to 6.8 per cent, from the present level of 14.5 per cent as in

2011. If on the other hand, the average rate of growth of national income achieved during the last 10 years is maintained, global poverty would be down to only 4.8 per cent in 2030 (1.6 per cent in South Asia). This calculation depends on the assumption that the extent of inequality remains the same and does not worsen. The target of 3.0 per cent global poverty rate is reachable only if each developing country's national income grows at the rate of 4 per cent p.a. per capita, as calculated by Ravallion. He cautions, however, that this rate of growth cannot be taken for granted for every country, since quite a few developing countries fell short of this rate (pp.43-44). Moreover, further reduction of poverty becomes more difficult or slower, when nearing success, even if the pace of growth of income remains unchanged (pp. 52-54). Even assuming unchanged inequality, the elasticity of poverty reduction to the growth of aggregate income tends to decline as lower levels of poverty are reached. This means that with progressive reduction in poverty, increasingly higher growth rates are required to achieve a given reduction in poverty rates. There is no explanation in the Report, as to why this should be so. It is clear, however, that we cannot rely only on increasing the growth of aggregate income to reduce poverty, but will have to rely on special welfare measures which channelise the benefits of growth to the least well-off.

Regarding shared prosperity as a goal, the Report tries to explain why the bottom 40 per cent are more relevant, and why not, say 20 per cent or 25 per cent (pp.79-80). Placing the threshold so low may provide little more information beyond what is provided by extreme poverty, because extreme poverty is generally concentrated below this threshold. The explanation is not very convincing since increased shared prosperity may be tried to be achieved quickly by raising the incomes of those near the threshold point of 40 per cent at the top, making no impact on the poorer. It cannot then be a very egalitarian measure. An additional justification given is that the estimation of income of the bottom 20 or 25 per cent, being at the tail end of distribution, is more difficult and not quite reliable. However, this is much less so with consumption, and the majority of household surveys in the world are on consumer expenditure, and not income. A more persuasive point in favour of 40 per cent threshold may be that if countries are arranged in an ascending order of poverty rate, the median is close to 40 per cent. The Report shows that in quite a few countries, the proportion of extreme poverty is above 40 per cent of the total population, such as in Bangladesh (2000), Pakistan (1998), Ethiopia (1999), Congo (2005), and Tajikistan (1999) in ascending order of poverty rate. (p. 84). So, it is not as if the poor are sidelined in the shared prosperity measure even in taking the bottom 40 per cent.

In evaluating shared prosperity, two criteria appear relevant: one is to see if the rate of poverty within the bottom 40 per cent is declining and how fast, and second is to see how the average income or expenditure of the bottom 40 per cent is growing relative to the rest of the population. The first criterion would require looking at distribution within the bottom 40 per cent, not stopping at having only the aggregate or average figure for the whole group. The second criterion would show if inequality in the country is declining or increasing.

A related question of interest is whether an improvement in shared prosperity tends to reduce poverty (pp. 97-105). On the basis of regression analysis, the Report says that there is a significant correlation between change in poverty rate (as head-count) on the one side and the growth of national income and the growth of the mean income of the bottom 40 per cent on the other side. Both growths tend to reduce poverty rate, but the correlation is stronger in the case of the latter growth. Boosting shared prosperity, the Report observes, is particularly relevant for poverty reduction (p.101). This is partly because of the significant overlap between those living in absolute poverty and the bottom 40 per cent of the population in the low and lower middle-income countries.

The Report points out that there are still many challenges in measuring and tracking shared prosperity. It needs both high quality *and* frequent household surveys, which are also comparable across surveys. It means that caution is needed in comparing shared prosperity over time in given countries and also across countries. Similar problems arise in the case of estimating poverty also. However, it is precisely in low income and lower middle-income countries that there is shortage of resources – human as well as financial, which makes the task more challenging. There is greater need for improving the data-base than for evolving more and more sophisticated tools of analysis. A poor quality data-base cannot be compensated by highly sophisticated analytical tools and concepts.

Poverty rates do not necessarily have a smooth tendency to decline year after year, and are subject to grave risks of sudden increase due to natural disasters, pandemics, and armed conflicts, which of course may affect the aggregate income as well. However, there could be a significant number of cases where poverty gets worsened and concentrated in local regions due to these risks, even if the national income may not decline in the bargain. Household surveys may not be able to capture all these local fluctuations unless special surveys are promptly conducted to study the impact on poverty and shared income in such affected regions. There is a whole chapter in the Report (the fourth one) which is addressed to the implications of these ‘Downside risks’. There is also a further complication caused by sharp recessions and inflations in the general economy, which have a significant impact on poverty rates, which need to be captured well on time.

The Report is an important contribution to the studies on poverty. It is clear as well as comprehensive and insightful. It is a pioneering work on the concept of shared prosperity. An important limitation of the Report is that while it emphasises the importance of the growth rates in national incomes as the major determinant of reduction in poverty rates and improvement in shared prosperity, it hardly discusses the role of special welfare measures (like employment guarantee and subsidised food distribution programmes). The Report almost gives the impression that policies for maximising national income are sufficient, because even shared prosperity improves with growth rates. The fact that that many countries with lower per capita national incomes have also been successful in attaining relatively high levels of human development and low poverty rates cannot be ignored. We cannot for policy purposes take for granted that inequality will not worsen with increasing growth though for convenience of analysis and simulation exercises such an assumption may be made. The important issue is what policy measures are necessary to boost shared prosperity. Even a simple measure like ensuring free and high quality primary and secondary education to all is a powerful egalitarian measure. In India, with rising growth rates, primary and secondary education and primary health care are being increasing pushed into the realm of the highly exploitative private sector. Even while the extreme poverty may be reduced through employment guarantee and subsidised food distribution, the system ensures that people at the bottom cannot rise much above poverty line. This amounts to hypocrisy in achieving poverty reduction.

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